# **Connecticut Comprehensive Nutrient Management Plan**

(Format v2.1)

**Prepared** For

Hytone Farm, LLC c/o Greg Peracchio 2047 Boston Turnpike Coventry, CT 06238 860-742-6745

**Plan period** October 2020 – September 2025

Plan written or revised: December 3, 2020

## **Prepared By**

Jedd Moncavage TSP#: 03-2022 TeamAg Inc. 120 Lake Street Ephrata, PA 17522 717-721-6795







The Comprehensive Nutrient Management Plan (CNMP) is an important part of the conservation management system (CMS) for your Animal Feeding Operation (AFO). This CNMP documents the planning decisions and operation and maintenance for the animal feeding operation. It includes background information and provides guidance, reference information, and Web-based sites where up-to-date information can be obtained. Refer to the Producer Activity Document (PAD) for information about day-to-day management activities and recordkeeping. Both this CNMP document and the PAD document shall remain in the possession of the producer/landowner.

## Prepared by: Jedd Moncavage, CPSS

Date: 2/4/2021

## **Title: Certified Nutrient/Conservation Planner**

TSP 03-2022

Signature:

Jedd Monung

As a Conservation Planner, I certify that I have prepared both the *Comprehensive Nutrient Management Plan* and *Producer Activity Document* for technical adequacy and that the elements of the documents are technically compatible, reasonable and can be implemented.

## **Reviewed by:**

### Signature:

USDA Natural Resources Conservation Service or TSP CT Certified Conservation Planner per CT GM-180, Part 409.9

**Certified Conservation Planner:** As a Certified Conservation Planner, I certify that I have reviewed both the *Comprehensive Nutrient Management Plan* and *Producer Activity Document* for technical adequacy and that the elements of the documents are technically compatible, reasonable and can be implemented.

## **Owner/Operator: Greg Peracchio**

Signature:

Date:

Date:

Name:

As the owner/operator of this CNMP, I, as the decision maker, have been involved in the planning process and agree that the items/practices listed in each element of the CNMP are needed. I understand that I am responsible for keeping all the necessary records associated with the implementation of this CNMP. It is my intention to implement/accomplish this CNMP in a timely manner as described in the plan.

## State of Connecticut Department of Energy and Environmental Protection (DEEP)

Approved by: (printed name)

Date:

Signature:

This Comprehensive Nutrient Management Plan was developed in accordance with the USDA, Natural Resources Conservation Service Conservation Planning Policy and the USDA NRCS Comprehensive Nutrient Management Planning Technical Guidance contained in GM-190, Part 620, Subparts A and B.

## **Reviewed by Certified CNMP Planner**

NRCS Eng	gineering Review:	
Section 2.	Manure and Wastewater Handling and Storage	

Signature:	Date:
Name:	
Title:	
Certification Credentials:	
NRCS Agronomic Review: Sections 4. Land Treatment	
Section 6. Nutrient Management: The Nutrient Manage	
Nutrient Management 590 and Waste Utilization 633 Con	servation Practice Standards.
Section 7. Feed Management (if applicable)	
Section 8. Other Utilization Options (if applicable)	
Signature:	Date:
Name:	
Title:	
Certification Credentials:	

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## Purpose of the Comprehensive Nutrient Management Plan (CNMP):

A CNMP is a conservation plan specific to your operation. The plan is a system of conservations practices and/or management activities which, when fully implemented, will work towards maintaining or enhancing the production and natural resource goals of your operation. A CNMP incorporates practices to use animal wastes and other organic by-products as a beneficial source or nutrients and soil amendment. Your CNMP addresses natural resource concerns dealing with the management of these nutrients to reduce their potential impacts on water quality.

A NMP is a conservation plan specific to your operation. Nutrient management manages the source, amount (rate), placement (method of application), and timing of plant nutrients and soil amendments. The goal is to effectively and efficiently provide nutrients, typically in the form of manures, composts, or fertilizers, to soils and crops in order to produce food, forage, fiber, and ground cover while minimizing environmental impacts from nutrient loss or over-application. This plan will develop a nutrient budget for soil nitrogen, phosphorus, and potassium based on field specific soil test results and recommendations from the University of Connecticut Soil Nutrient Analysis Laboratory or equivalent soil testing laboratory.

It is understood that compliance with this CNMP is voluntary, not mandatory. However, if nutrient management related practices (Nutrient Management and/or Waste Utilization) are funded or contracted through NRCS programs, the plan may have to be implemented and maintained according to the Nutrient Management (590) or Waste Management (633) standards as a condition for receiving those funds.



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## Section 1. Background and Site Information

## 1.1. General Description of Operation

## Farm Headquarters Latitude/Longitude: 41.798096 / -72.35933

## **Operation Description:**

This farm operates as a dairy that will house 360 Holstein milk cows with 50 dry/freshening cows and 60 calves housed at Farmstead 1 and 150 weaned calves and 150 heifers housed at Farmstead 2. The existing facilities at Farmstead 1 include the Milking Barn and New Barn which house the majority of the milking herd as well as the Old Barn, Silver Barn and Fresh Barn which house mainly dry/freshening cows and the Calf Barn which houses calves from 0-4 month of age. Manure from the majority of the herd is handled as a liquid which is stored in an existing 1 million gallon earthen manure storage lagoon (Lagoon 1). Some manure is also handled as a solid bedded pack from the Calf Barn, Fresh Barn, Old Barn and Silver Barn which is cleaned from the barns and stacked south of the bunker silos until it can be land applied. Milking wash water is currently stored in a second 344,000 gallon earthen storage lagoon (Lagoon 2). Runoff from the paved areas around the main barns and bunker silo area is directed to a lot collection system that directs the runoff to a vegetated treatment area south of the wash water storage lagoon. Farmstead 2 is rented, Hytone Farm houses weaned calves and heifers in the Lean To, Silver Shed and Morton Barn. Manure generated at this facility is scraped and stored in an existing 526,000 gallon concrete lined manure storage lagoon (Heifer Lagoon).

The operators intend to install an anaerobic methane digester system. The manure stream, including milkhouse waste, will first pass through a separator unit where sand will be separated to be recycled as bedding. Separated sand will be stored on a 50ft x 50ft stacking pad. The manure stream will then be directed to a set of mixing tanks where food waste will be received and blended with the manure stream prior to entering a 90ft x 20ft (904,000gal) circular concrete digester tank. Food waste (18,000gal/day) will consist of a mixture of roughly 50% source separated organic material (SSOM) and 50% fats, oils and grease (FOG). Post digested liquid will then be stored in a new 260ft x 16ft (5,957,000gal) circular concrete manure storage. The existing earthen storages will be decommissioned and replaced by the new system. There will be provisions in place for the manure stream to bypass the separator and digester and be sent directly to the new manure storage. Lot runoff was previously directed to a vegetated treatment area. Lot Runoff will be managed long term with a new free-stall barn and the old barns, with outside yards, will be decommissioned. Manure handling and storage at Farmstead 2 will remain the same. Silage storage at Farmstead 2 will be re-located to Farmstead 1 as part of a bigger pad with leachate collection and stormwater management for 25-yr/24-hr storm events.

The farm consists of 318.09 acres of corn silage with cover crop (312.40 spreadable acres) and 448.24 acres of grass hay (437.15 spreadable acres). This provides a total of 766.33 acres of cropland (749.55 spreadable acres) for the land application of manure.

## County(s): Tolland

<u>Name of Receiving Stream(s)/Watershed(s)</u>: Ash Brook, Baker Brook, Blackledge River, Bolton Pond Brook, Conantville Brook, Coventry Brook, French Brook, Hemlock Brook, Hop River, Knowlton Brook, Lipps Brook, Lowry Brook, Massinger Brook, Mitterholtzer Brook, Olsons Brook, Post Brook, Reed Brook, Skungamaug River, Straddle Brook, Tankerhoosen River, Tunnel Brook, Willimantic River, Fenton River

## 1.2. Sampling, Calibration, and Other Statements

## **Soil Testing Procedure**

# Soil tests should be kept current within 3 years to monitor pH, Organic Matter, Phosphorus and Potassium levels

- □ Late October or early November (after crop harvest) is usually the best time to sample, but samples may be taken at any time during the year when temperature (lack of frost) and moisture conditions permit.
- □ Areas differing in topography, drainage, soil texture, manure additions, or intended crop usage should be sampled and tested separately.
- □ Combined samples (fields) should not represent more than 20 acres.
- Avoid sampling unusual spots such as former sites of manure piles and areas where lime or fertilizer has been spilled in previous years.

To obtain a representative sample, take a uniform core or thin slice of soil from 15-20 evenly distributed places within a given fields at a depth of 8-10 inches. Put the subsamples in a clean container and thoroughly mix them. One cup of this soil mixture constitutes the soil sample.

## Manure and Wastewater Testing/Analysis Plan

Manure shall be analyzed on an annual basis from each storage structure for: % Solids, Total N, Organic N, NH<sub>4</sub> or NH<sub>3</sub>, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O, and pH.

## Solid Manure

Collect a composite sample by following one of the procedures listed below. A method for mixing a composite sample is to pile the manure and then shovel from the outside to the inside of the pile until well mixed. Fill a one-gallon plastic heavy-duty zip lock bag approximately one-half full with the composite sample, squeeze out excess air, close, and seal. Store sample in freezer if not delivered to the laboratory immediately.

**Procedure 1**. Sampling while loading - *Recommended method for sampling from a stack or bedded pack*. Take at least ten samples while loading several spreader loads and combine to form one composite sample. Thoroughly mix the composite sample and take an approximately one pound sub sample using a one-gallon plastic bag. *Sampling directly from a stack or bedded pack is not recommended.* 

**Procedure 2**. Sampling during spreading - Spread a tarp in field and catch the manure from one pass. Sample from several locations and create a composite sample. Thoroughly mix the composite sample together and take a one-pound sub sample using a one-gallon plastic bag.

## <u>Liquid Manure</u>

To obtain the best possible results, the sample should be taken while you are hauling manure. The manure storage should be agitated thoroughly. As you take loads out of the manure storage, take a sub-sample of about 2-4 cups from each load and place them in a bucket. Do not use a metal bucket because it may alter the results of the analysis. Once manure hauling has been completed for the day, mix the contents of the sample bucket thoroughly and take a sample of this composite. Fill the sample bottle but leave approximately a <sup>3</sup>/<sub>4</sub> inch air space. Place the sample bottle, place the bottle in the zip-lock bag and seal the bag. Store sample in freezer if not delivered to the laboratory immediately.

## **Manure Sample Identification and Delivery**

Identify the sample container with information regarding the farm, animal species and date. This information should also be included on the sample information sheet along with application method, which is important in determining first year availability of nitrogen.

Keep all manure samples frozen until shipped or delivered to a laboratory. Ship early in the week (Mon.-Wed.) and avoid holidays and weekends.

## Manure and/or Commercial Fertilizer Application Equipment Calibration

## Manure Spreader/Tanker Calibration

There are several methods that can be used to calibrate the application rate of a manure spreader. The two best methods are the load-area method and the plastic sheet method. It is desirable to repeat the calibration procedure 2 to 3 times and average the results to establish a more accurate calibration. Before calibrating a manure spreader, the spreader settings such as splash plates should be adjusted so that the spread is uniform. Most spreaders tend to deposit more manure near the spreader than at the edge of the spread pattern. Overlapping can make the overall application more uniform. Calibrating application rates when overlapping is involved requires measuring the width of two spreads and dividing by two to get the effective spread width.

Calibration should take place annually or whenever manure is being applied from a different source or consistency.

## Load-Area Method

The load-area method is the most accurate and can be used for most types of manure handling. This method consists of determining the amount (volume or weight) of manure in a spreader and the total area over which it is applied. The most accurate method to determine the amount of manure in a spreader is to weigh the spreader when it is full of manure and again when it is empty (portable pad scales work well for this). The difference is the quantity of manure applied over the area covered. Spreader capacities listed by the manufacturers can be used to determine the amount of manure in the spreader. However care must be taken when using manufactures spreader capacities. Heaped loads, loading methods and manure type may vary considerably from what is listed by manufacturers of box and side delivery manure spreaders. Spreader capacities for liquid tankers are accurate provided the tanker is filled to the manufactures recommended levels, and no foam is present in the tank.

The area of spread is determined from measuring the length and width of the spread pattern. Measuring can be done with a measuring wheel, measuring tape or by pacing.

The application rate is calculated using the following formula:

Spreader capacity (tons or gallons) X 43560 sq. ft/acre = Application Rate tons or Gallons/Acre Distance traveled X Spreading width

## Plastic Sheet Method

The plastic sheet method can only be used with solid or semi-solid manure. This method of calibrating spreader application rates involves 1) cutting a plastic sheet to the specified dimensions (56 inches X 56 inches), 2) weighing the clean plastic sheet, 3) laying out the plastic sheet on the ground and driving the manure spreader (applying manure at a recorded speed and spreader setting) over the sheet, 4) weighing the plastic sheet with the manure on it, and 4) determine the net weight of the manure on the sheet (weight of manure and sheet - weight of the clean sheet), and 5) the net pounds of manure equals tons per acre applied.

When calibrating manure spreaders, all details regarding tractor speed and manure spreader settings and date(s) of each calibration should be recorded with manure application information, and directly on the equipment. Mark equipment to ensure a known application rate is applied each time the referenced tractor speed and spreader settings are used. Manure spreader settings can include such things as: fast and slow settings on some box spreaders, gate position on side delivery spreaders and splash plate position and fill levels on liquid tankers

## **Commercial Fertilizer Application Equipment Calibration**

Nitrogen applicators, commercial broadcast spreaders, and planters will be set per the manufacturers recommendations then filled with a known amount and checked over known acreage. Adjustments will be made to achieve the planned rates.

## **1.3. Natural Resource Concerns**

<u>General Concerns</u>: Potential contaminants of surface water and ground water include nutrients (especially nitrogen and phosphorus), free ammonia, sediments, oxygen demanding substances, pathogens and other infectious organisms, heavy metals, hormones, antibiotics, and other potentially toxic compounds such as cleaning agents.

## Specific Concerns

- 1. Existing Manure Storage (Farmstead 1): The existing manure storage facilities have reached the end of their useable lifespan. These structures are earthen storages designed and installed according to NRCS specifications at the time. Earthen structures are not ideal as they clay liners tend to get disturbed and leaching or groundwater intrusions can occur. This resource concern will be addressed by decommissioning these structure and installing a new methane digester / manure handling system as described earlier in this plan.
- 2. Existing Barnyard and Bunker Silo Runoff and Collection System: Currently runoff from the paved areas around the barns as well as the bunker silo area at Farmstead 1 is directed to lot collection boxes that then discharges liquid to a vegetated treatment area. Likewise this system has reached the end of its useable lifespan and the planned anaerobic digester system will be installed in the location of these existing structures. Resource concerns with lot runoff at Farmstead 1 will be addressed with the construction of a new free-stall barn for full manure capture and the decommissioning of the older barns and lots. Resource concerns for silage runoff at both Farmstead 1 and 2 will be addressed by decommissioning silage storage at Farmstead 2 and expanding silage storage at Farmstead 1 as well as installing a low-flow leachate collection system that will direct the low-flow volume to the new manure storage syste and also include a high-flow stormwater diversion system to a permeable detention basin, or equivalent management design, sized to manage storm events up to and including 25-year/24-hr storm volumes (est. 51,000 cu ft or 195,000 gal). The milkhouse waste earthen pit will also be decommissioned and all milkhouse waste will be piped to the new manure collection system.
- 3. **Mortality Management**: mortalities are currently composted in open piles at an un-improved location. A properly designed mortality composting area shall be installed with appropriate run-on and runoff controls and should be located in a convenient location with all-weather access and taking into account bio-security concerns. Any solid manure from the farmstead not sent to the digester (i.e. freshening pen pack) will be used in the covered compost process.

Soil Erosion Concerns	Fields
Gully Erosion	Fields 22 and 144: existing waterways should be monitored regularly
Sheet and Rill Erosion	Fields 1024, 52, 53, 55, 61, 31, 159, 164

Water Quality Concerns	Fields
Nutrients in Groundwater	Existing Facility Farmstead 1 & 2
Facility Wastewater Runoff	Existing Facility Farmstead 1 & 2

Other Concerns	Fields
Soil Compaction	All Fields
Biosecurity	Proposed Facility Mortality Management

## **Activities to Address Resource Concerns**

Concern	Fields	Activities to Address Concerns
Water Quality	Existing Facility Farmstead 1 & 2	Decommission existing lagoons and replace with new methane digester / manure handling system. Replace existing barnyard and bunker silo runoff collection and distribution system with low flow / high flow system and move all silage storage to Farmstead 1. Milkhouse waste will be captured in the manure collection system and any manure solids not sent to the manure collection system will be managed under the roofed compost system.
Water Quality	Proposed Facility	Install proper mortality management/ composting facility, install silage leachate high flow/ low flow collection system
Soil Quality	1024, 52, 53, 55, 61, 31, 159, 164	Contour farming required to meet "T"
Soil Quality	All	Monitor all other fields for soil nutrient levels and adjust management according to avoid elevated soil nutrient levels for N-P-K
Soil Quality	All	Monitor penitential soil compaction from multiple manure hauling events and adjust management and equipment if necessary

## 1.4. CNMP Statement, Alternatives, and Summary

## **Comprehensive Nutrient Management Plan**

This Comprehensive Nutrient Management Plan (CNMP) addresses the production, collection, transfer, storage, and utilization of manure and barnyard runoff to minimize the risk of pollution to the groundwater and the Ash Brook, Baker Brook, Blackledge River, Bolton Pond Brook, Conantville Brook, Coventry Brook, French Brook, Hemlock Brook, Hop River, Knowlton Brook, Lipps Brook, Lowry Brook, Massinger Brook, Mitterholtzer Brook, Olsons Brook, Post Brook, Reed Brook, Skungamaug River, Straddle Brook, Tankerhoosen River, Tunnel

Brook, Willimantic River with bacteria, solids, dissolved organic matter (BOD), and nutrients. The CNMP addresses the following as outlined below:

- Manure and Wastewater Collection, Handling, Storage, Treatment, and Transfer (from all sources)
- Management of Dead Animals
- Evaluation and Treatment of Sites Proposed for Land Application
- Land Application of Manure
- Waste Utilization (633)
- Nutrient Management (590)
- Record of CNMP Implementation
- Other Utilization Options or Activities

The following planning practices are recommended for this comprehensive nutrient management plan (CNMP) to address existing resource concerns.

- 1. Decommission the existing manure storage lagoons at Farmstead 1 and install new manure handling system as described earlier in the plan. Note that the proposed 5.9 million gallon circular concrete tanks will be a stand alone structure capable of functioning without the sand separator or methane digester. The proposed round tank will have a ramp installed in order to remove sand and solids that settle to the bottom
- 2. Replace the existing barnyard at Farmstead 1 with new free-stall barn for full manure capture. Expand silage storage at Farmstead 1 and install low flow/ high flow system and decomssion silage storage at Farmstead 2. Redirect milkhouse waste to the manure collection system
- 3. Maintain all existing supporting practices such as Heavy Use Area Protection (paved barnyards), Roof Runoff Structures (getters, downspouts, etc...), Structures for Water Control (drop boxes), Underground Outlets and Subsurface Drain Systems.

The following planning practices are recommended for this comprehensive nutrient management plan (CNMP) to document new practices planned for this dairy facility

- 1. Utilize the nutrient management developed plan in accordance with NRCS standards to adequately address nitrogen and phosphorus loading for the soils. A record keeping system shall be used to document that wastes are being used in a sound manner. Field records shall be kept to document plan implementation. As a minimum, these include records for manure application rates and dates, soil tests, crop yield, dates of planting, dates of harvest and dates of cover crop application.
- 2. Install an anaerobic methane digester system consisting of sand separator, manure/food waste mixing tanks, circular anaerobic digester tank and generator building. Combustion of methane gas through the generator will help manage odor to allow for additional spreading acres in the populated areas, and improve greenhouse gas capture from the manure system.
- 3. Install a manure handling and storage system comprised of a sand separation unit and 5.957 million gallon circular concrete manure storage structure.
- 4. Install supporting practices such as access roads, storm water runoff controls and stabilized loading and unloading pads to facilitate the movement of farm equipment, feed delivery and food waste delivery vehicles. Install an improved feed storage area sized for Farmstead 1 and Farmstead 2 and manages leachate capture and stormwater runoff for 25-yr/24-hr storm volume. Install a mortality compost facility to manage estimated annual numbers, with the potential to expand if manure solid separation is wanted or needed in the future farm plans.

These recommendations have been presented for landowner decision and completion of the Comprehensive Nutrient Management Plan. Design considerations and time frames as well as cost estimates of the selected alternatives should be discussed with a qualified engineer and/or contractor.

## **Practice Implementation Schedule**

Item - All items shall be developed in accordance with current NRCS standards. All permits to be obtained by the operator.	Planned Year
<b>Heavy Use Area Protection (561)</b> – Maintain the existing paved barnyards and scrape alleys at the existing dairy facility (Farmstead	2022
1) to collect manure and direct runoff to the proposed manure	
handling system until the new free-stall can be constructed. There is	
approximately 20,433sqft of existing HUA.	
<b>Roof Runoff Structure (558)</b> – Maintain the existing roof gutters	2022
and downspouts on any roof that allows water access to the heavy	
use area to convey clean water to a safe outlet.	
Structure For Water Control (587) – Maintain the existing drop	2022
boxes to further collect clean runoff to be directed to the	
underground outlet system	
Underground Outlets (620) – Maintain the existing underground	2022
outlet system to convey storm water away from the production	
facility to a clean and stabilized outlet	
Waste Utilization/Nutrient Management - Develop and	2022
implement a Nutrient Management Plan (633, 590) and a record	
keeping system with the technical and educational assistance of the	
Cooperative Extension System. Ensure that the nutrient	
management plan adequately addresses nitrogen and phosphorus	
loading for the soils. A record keeping system shall be used to	
document that wastes are being used in an environmentally sound	
manner. Field records should be kept for manure application dates	
and rates, soil tests for phosphorus and potassium, crop yield, date	
of planting, date of harvest and date of cover crop application.	
<b>Waste Facility Closure (360)</b> – Decommission the manure storage lagoons at the main dairy facility (Farmstead 1)	2024
Waste Transfer (634) – install a reception pit and piping at the	2024
main dairy facility to allow the transfer of manure from the existing	
facility to the proposed manure handling system. A method of	
bypassing the sand separator and digester tank shall be in place to	
directly transfer manure from the barns to the new manure storage	
during times when the separator and digester are down for repairs.	
Install a system to transfer milkhouse waste water and low-flow	
silage leachate to sand separator	
Anaerobic Digester (366) – install a methane digester tank in order	2024
to generate methane gas	
Waste Separation (632) – install a sand separation unit and storage	2024
pad to separate sand to be recycle as bedding for the dairy cattle	

Item - All items shall be developed in accordance with current NRCS standards. All permits to be obtained by the operator.	Planned Year
<b>Waste Storage Facility (313)</b> – Install a 5.9 million gallon circular concrete manure storage facility in order to store post digested	2024
liquid, milk house waste and low flow silage leachate for land application as a soil amendment in accordance with this nutrient management plan	
Heavy Use Area Protection (561) – install loading and unloading pads at the Mixing Tanks, Solids Separator Building, Digester Tank	2024
and Manure Storage Structure and any other area where needed. Approximately34,600sqft will be needed.	
Access Road (560) – install an access road to the proposed mixing tanks, separator building, digester tank and manure storage structure.	2024
<b>Roofs &amp; Covers (367)</b> - Construct a new barn to house livestock previously kept on the open lots	2025
Waste Transfer (634) – install a reception pit and piping at the new barn to transfer manure to the digester/waste storage system	2025
<b>Stormwater Management (570)</b> – install a high flow/low flow runoff management system at the expanded and improved bunker	2026
silo area. High flow runoff will be directed to a proposed infiltration basin.	
Animal Mortality Facility (316) - install a properly designed facility to properly compost mortalities.	2027

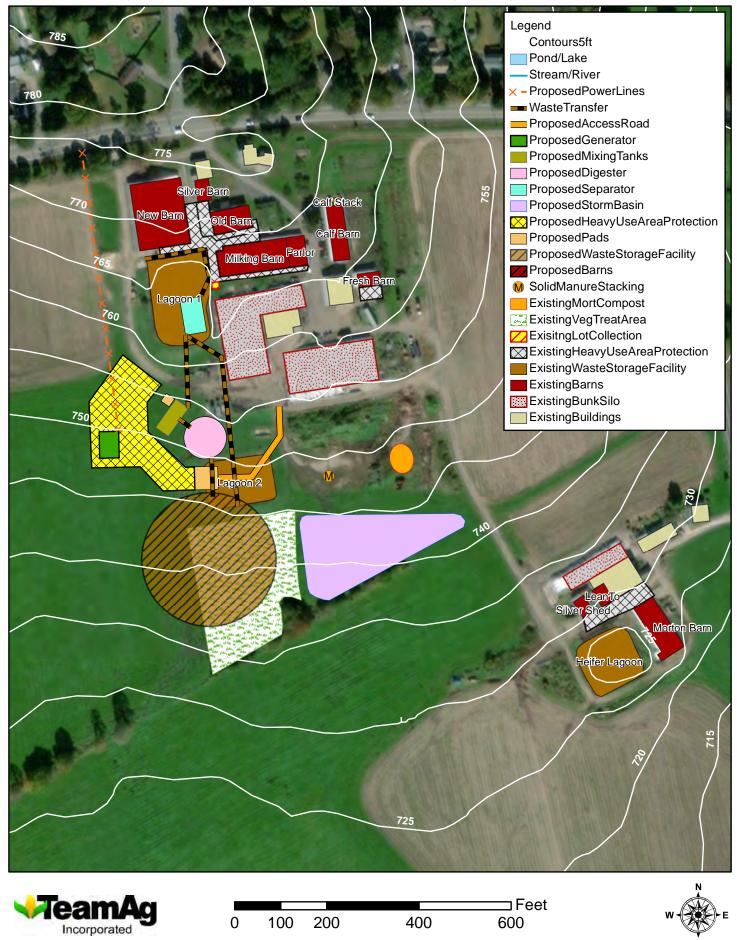
## Section 2. Manure and Wastewater Handling and Storage

2.1. Map(s) of Production Area(s) and Map Key (all fields)

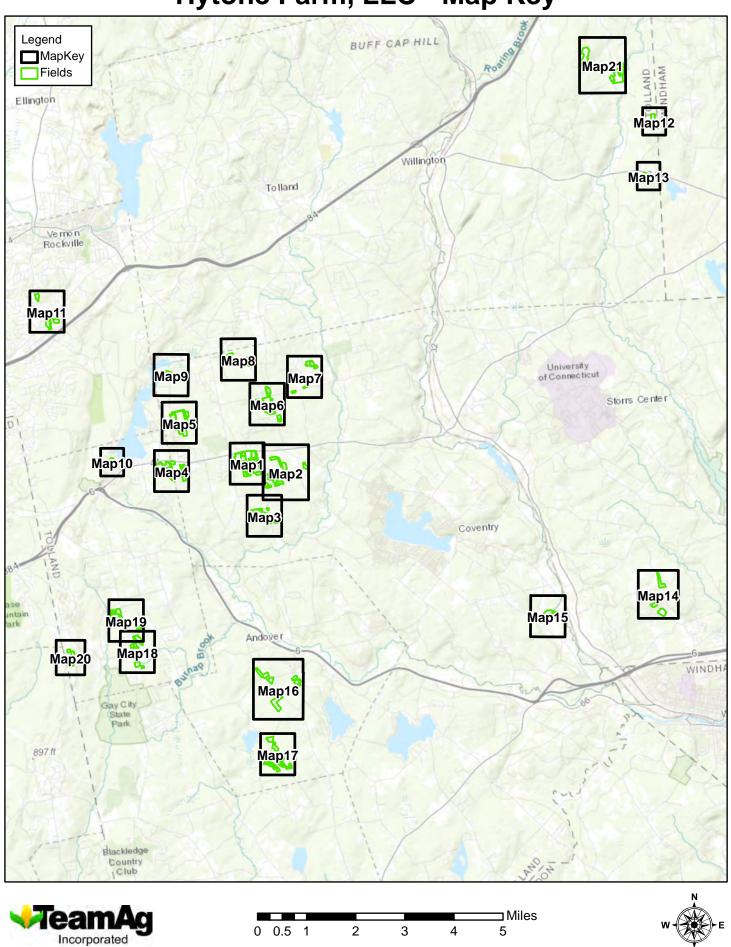




# Hytone Farm, LLC - Facility Layout Map



# Hytone Farm, LLC - Map Key



## 2.2. Production Area Conservation Practices

List and describe the planned treatment to address the resource concerns and producer goals. One can also use the NRCS Planning Record of Decisions to document the planned treatment and management in place of this narrative description. The following list of Operation & Maintenance (O & M) Plans shall be used when the Production Area Conservation Practices have been installed:

## **Operation & Management (O&M) Plan**

	Year of
Planned Practices	Installation
Heavy Use Area Protection (561) – Structure should be checked after major storms and at least	2022
semi-annually and any necessary maintenance should be performed. Refer to the final engineered	
design of the best management practices for specific operation and maintenance details.	
Roof Runoff Structure (558) – Gutters & Downspouts shall be periodically checked for: (1)	2022
Blockages/debris - Material shall be removed, (2) Loose/unconnected hangers - Shall be made	
secure, (3) Leakage – Patching or replacement made, (4) Downspouts shall be shielded from	
livestock access. Downspouts shall be periodically checked for: (1) Damage - Crushed sections	
shall be removed and replaced, (2) Guards/shields shall be maintained, (3) Outlets – Water from	
gutters and downspouts shall be directed away from feedlots and animal holding areas, (4) Outlets	
shall be maintained to prevent pooling of water or the occurrence of excessive erosion. Refer to	
the final engineered design of the best management practices for specific operation and	
maintenance details.	
Structure For Water Control (587) - Structure should be checked and necessary maintenance,	2022
including removal of debris, should be performed after major storms and at least semi-annually.	
Refer to the final engineered design of the best management practices for specific operation and	
maintenance details.	
Underground Outlets (620) – Check outlet and animal guard to ensure proper functioning. Keep	2022
adequate backfill over pipe. Repair any leaks, broken or crushed pipes, and/or eroded areas at	
outlet as necessary. Refer to the final engineered design of the best management practices for	
specific operation and maintenance details.	
Waste Utilization/Nutrient Management (590) - ALL FIELDS - Manage the amount, source,	2022 &
placement, form, and timing of the application of nutrients and soil amendments to minimize	ongoing
agricultural non-point source pollution to surface and ground water resources. Lime and fertilize	years
all fields to soil tests, taking into account the nutrient value of manure and leguminous crops when	-
figuring the amount of fertilizer to be applied. Nitrogen and phosphorous should be managed to	
meet crop nutrient needs, as well as to prevent excess nutrient loading in the soil. Nutrient	
management plan recommendations will integrate phosphorus considerations using the current	
phosphorous index.	
Any manure applied to this operation should be done so following state recommended guidelines,	
setbacks and restrictions. All commercial fertilizers, pesticides and herbicides shall be applied	
according to proper label instructions. Nutrient application should be calculated and monitored in	
order to prevent the over application of nutrients. Records shall be kept on all material applied to	
the fields. Yield records shall be recorded to guide fertilizer applications. Soil samples shall be	
taken every three years.	
Waste Facility Closure (360) – The proper decommissioning and rehabilitation of a waste facility	2024
should require little or no operation and maintenance. However, if it is converted to another use,	
such as a fresh water facility, operation and maintenance shall be in accordance with the needs as	
set forth in the appropriate NRCS conservation practice standard for the intended purpose. Refer to	

maintenance details.	
<b>Waste Transfer (634)</b> – Refer to the final engineered design of the best management practices for specific operation and maintenance details.	2024
Anaerobic Digester (366) – An operation and maintenance (O&M) plan shall be developed and	2024
reviewed with the owner prior to construction. The operation and maintenance plan shall be	2024
consistent with the purposes of the practice, its intended life, safety requirements, and the criteria	
For its design. Refer to the final engineered design of the best management practices for specific	
operation and maintenance details.	
<b>Waste Separation (632)</b> – Refer to the final engineered design of the best management practices	2024
for specific operation and maintenance details.	2024
Waste Storage Facility - Waste Storage Facilities experience some biological activity and can	2024
generate extremely toxic gases. Extreme care should be exercised when working around a waste	2021
storage facility that contains animal wastes. Signs should be posted and adequate ventilation is	
mandatory, particularly when the facility is being emptied. Prior to emptying the storage, it should	
be adequately agitated. Additional agitation may be needed during the emptying process. The	
viewable portions of the storage shall be periodically checked for deterioration and the need for	
any repairs. Monitor the manure elevation in the pit at least weekly. Immediately investigate any	
unexpected level changes which could indicate leakage. Keep pumping ports gated and locked	
when not in use to prevent accidental or unauthorized access. All pumping ports shall be gated	
and locked to keep animals and humans from entering the pit. Refer to the final engineered design	
of the best management practices for specific operation and maintenance details.	2024
Heavy Use Area Protection (561) – Structure should be checked after major storms and at least	2024
semi-annually and any necessary maintenance should be performed. Refer to the final engineered	
design of the best management practices for specific operation and maintenance details.	2024
Access Road (560) – Access roads should be inspected, as a minimum, once per year and after	2024
major storms. Items to be checked should include: obstructions in the road and road ditches, and	
excessive erosion or degradation of the road surface, road ditches, and side slopes. Remove	
obstructions and repair damage as needed. Remove undesirable trees and shrubs from the side	
slopes. Mow and maintain a good vegetative stand on berms, ditches, and the side slopes. Repair	
and maintain wearing surface as needed. Refer to the final engineered design of the best	
management practices for specific operation and maintenance details.	
Roofs & Covers (367) - Refer to the final engineered design of the best management practices for	2025
specific operation and maintenance details.	
Waste Transfer (634) – Refer to the final engineered design of the best management practices for	2025
specific operation and maintenance details.	
Stormwater Management (570) – Periodic inspections, especially immediately following	2026
significant rainfall events. Prompt repair or replacement of damaged components especially	
surfaces that are subjected to wear or erosion. Regular inspection of settling basins, trash guards	
and other practices to collect and remove accumulated sediment and debris. Where vegetation is	
specified, periodic mowing, fertilization and control of vegetation.	
Animal Mortality Facility (316) - Inspect the facility regularly when it is empty. Replace or	2027
repair any damaged structural components. Refer to the final engineered design of the best	
nanagement practices for specific operation and maintenance details	1

All NRCS conservation practices shall be installed, operated and maintained according to NRCS conservation practice standards and associated technical specifications.

## 2.3. Manure Storage

Storage ID	Type of Storage	Pumpable or Spreadable	Annual Manure Collected	Maximum Days of
		Capacity		Storage
Heifer Lagoon	Earthen storage	526,779 gal	835,000 gal	230
Proposed Digester	Outside prefab liquid storage	904,000 gal	0 gal	
Proposed Separator	Dry stack	450 tons	0 tons	
Proposed Mix Tanks	Outside prefab liquid storage	117,000 gal	0 gal	
Proposed Round Tank	Outside prefab liquid storage	5,957,000 gal	11,104,000 gal	196

Note: the Digester, Separatror and Mixing Tanks show no annual manure collected because all material passed through those system will be store in the Round Tank.

The Round Tank annual manure volume includes all manure generated at Farmstead 1 as well as the following:

1000gpd milkhouse wash water 1500gpd sand separator water 18,000gpd food waste

## 2.4. Animal Inventory

Animal Group	Type or Production	Numbe	er Average	Confinement Period	Manure	Manure Storage
	Phase	of	Weight		Collected	
		Animal	s <sup>a.</sup> (lbs)		(%) <sup>b</sup>	
Milking Cows	Milk cow (dairy)	3	60 1,400	Jan Early - Dec Late	100	Proposed Round Tank
DrCows&Replacmnts	Dry cow (dairy)		50 1,400	Jan Early - Dec Late	100	Proposed Round Tank
Calves 0-4mo	Calf (dairy)		60 300	Jan Early - Dec Late	100	Proposed Round Tank
Calves 4-12mo	Weaned heifer/steer (dairy)	1	50 650	Jan Early - Dec Late	100	Heifer Lagoon
Heifers	Growing heifer/steer (dairy)	1	50 900	Jan Early - Dec Late	100	Heifer Lagoon

a. The average number of animals present in the production facility at any one time.

b. If manure collected is less than 100%, this indicates that the animals spend a portion of the day outside of the production facility or the production facility is unoccupied one or more times during the confinement period.

## 2.5. Normal Animal Mortality Management

To decrease non-point source pollution of surface and ground water resources, reduce the impact of odors that result from improperly handled animal mortality, and decrease the likelihood of the spread of disease or other pathogens, approved handling and utilization methods shall be implemented in the handling of normal mortality losses. If on-farm storage or handling of animal mortality is done, NRCS Standard 316, Animal Mortality Facility, will be followed for proper management of dead animals.

### **Plan for Proper Animal Mortality Management**

The following narrative describes how normal animal mortality will be managed in a manner that protects surface and ground water quality.

## Static Pile Composting Management

Carcass composting at the farm will use a new roofed building and adhere to the guidelines for static composting detailed in the DACF Best Management Practices for Animal Carcass Composting (2011). Specifically, the composting media will be made of a combination of spent hay/silage and heavily bedded manure from the calf greenhouse and calf hutches. A combination of approximately 2 parts spent hay/silage and 1 part bedded manure by volume should provide a good carbon to nitrogen ratio and adequate porosity to provide readily available food, oxygen and water for the microbes driving the composting process. As compost piles are completed, some finished compost will be left on site to provide inoculum for new piles and to provide a 6" cover of the top of new piles. Blending will be accomplished using a skid steer or front-end loader. Mortalities will be hauled to the composting location using a skid steer or front-end loader.

Underneath each carcass, a bed of the compost blend will be placed approximately 18" thick. The carcasses will be placed on their side, at least 2' from the outside edge of the blend. If more than one carcass is started in the composting process at one time, the carcasses will be placed feet to back, again on their sides. An additional 18" of the blend of feedstocks will be placed over the top of the carcasses, and approximately 6" of finished compost over the top of the pile.

The piles will then remain undisturbed for a minimum of 21 days. The piles will be left to cure for a minimum of six months prior to using the finished compost as a soil amendment on the fields of the farm.

## 2.6. Planned Manure Exports

This plan has been developed to apply all of the projected liquid manure to the land currently farmed by Hytone Farms. This will result in a farmwide mass balance which slightly over applies phosphorus. Once soil test levels reach optimum the operator will need to export manure or farm additional lands, import less food waste, or change the ratio of the food waste so as to reduce the total amount phosphrous in the resulting post digested liquids (increase FOG/decreas SSOM). Any solids from the compost operation are expected to be relatively low volumes (60 tons/yr, est.) and are planned for export from their established community retail sales. If land application is needed, the corn fields do have additional capacity using the crop removal rates to land apply solids at a moderate rate of 10 - 15 ton/ac/yr (assuming 3 lbs P/ton compost).

## 2.7. Planned Manure Imports

There are no plans to import manure at this time. Approximately 18,000gal/day of food waste (50%SSOM / 50%FOG) from various sources will be imported and blended with the manure prior to entering the methane digester

## 2.8. Planned Internal Manure Transfers

There are no internal manure transfers planned at this time. In the future the operator may consider transferring the manure generated at Farmstead 2 to the methane digester and manure storage system planned at Farmstead 1.

## Section 3. Farmstead Safety and Security

## **3.1. Emergency Response Plan**

#### In Case of an Emergency Storage Facility Spill, Leak or Failure

## Implement the following first containment steps:

- a. Stop all other activities to address the spill.
- b. Stop the flow. For example, use skid loader or tractor with blade to contain or divert spill or leak.
- c. Call for help and excavator if needed.
- d. Complete the clean-up and repair the necessary components.
- e. Assess the extent of the emergency and request additional help if needed.

In Case of an Emergency Spill, Leak or Failure during Transport or Land Application

### Implement the following first containment steps:

- a. Stop all other activities to address the spill and stop the flow.
- b. Call for help if needed.
- c. If the spill posed a hazard to local traffic, call for local traffic control assistance and clear the road and roadside of spilled material.
- d. Contain the spill or runoff from entering surface waters using straw bales, saw dust, soil or other appropriate materials.
- e. If flow is coming from a tile, plug the tile with a tile plug immediately.
- f. Assess the extent of the emergency and request additional help if needed.

### **Emergency Contacts**

Department / Agency	Phone Number
Fire	911 or (local non emergency number)
Rescue services	911 or (local non emergency number)
State veterinarian	860-713-2505
Local or State police	911 or (local non emergency number)

## Nearest available excavation equipment/supplies for responding to emergency

Equipment Type	Contact Person	Phone Number	
Backhoe/Trackhoe	Ed Toth Excavating	(860) 875-8056	
Backhoe/Trackhoe	BCL Excavating	(860) 742-2399	

### Contacts to be made by the owner or operator within 24 hours

Organization	Phone Number
DEEP Emergency Spill Hotline	1-866-337-7745 or
	860-424-3338
Local Health Department	(860) 872-1501

### Be prepared to provide the following information:

- a. Your name and contact information.
- b. Farm location (driving directions) and other pertinent information.
- c. Description of emergency.

- d. Estimate of the amounts, area covered, and distance traveled.
- e. Whether manure has reached surface waters or major field drains.
- f. Whether there is any obvious damage: employee injury, fish kill, or property damage.
- g. Current status of containment efforts.

## 3.2. Biosecurity Measures

Biosecurity is critical to protecting livestock and poultry operations. Visitors must contact and check in with the producer before visiting the operation or entering any production or storage facility.

The following narrative describes how animal veterinary wastes (including medical equipment, empty containers, sharps and expired medications) will be managed at the operation.

### **Biosecurity: Protecting Your Livestock and Poultry\***

Biosecurity means doing everything you can to reduce the chances of an infectious disease being carried onto your farm by people, animals, equipment, or vehicles. It also means doing everything you can to reduce the chance of disease leaving your farm. Healthy herds and flocks contribute to the health of U.S. animal agriculture as a whole.

## Common Sense Biosecurity Measures You Can Follow

The following do's and don'ts provide some basic tips for you to help prevent foreign animal disease outbreaks.

- 1. **Keep Your Distance** Restrict access to your property and your livestock or poultry, and post a sign. Have one area where visitors can enter. Do not allow visitors near livestock or poultry unless absolutely necessary, and then make sure visitors have clean footwear (disposable boots work well) and clothes (supply these for them). Have an area where visitors can change clothes and provide shower-in, shower-out facilities if possible. Discourage handling of animals by all visitors. Require and teach biosecurity to family, employees, and all visitors coming into, or involved with, your livestock or poultry production area.
- Keep It Clean You, your staff, and your family should follow bio-security procedures for cleanliness. Wear clean clothes, scrub your shoes/boots with disinfectant, and wash hands thoroughly. Keep equipment and vehicles clean and insist that all machinery and vehicles must be cleaned before entering your property. Maintain programs to control birds and rodents that can carry and spread diseases.
- 3. **Don't Haul Disease Home** If you, your family, or employees have been on other farms, at feed lots, petting zoos, auctions, or other places where there is livestock and poultry, clean and disinfect your truck or car tires and equipment before going home. If you have shown livestock or birds at a fair or exhibition, or are bringing in new animals, keep them separated from the rest of your herd or flock for 30 days after the event. Always change clothes and wash your hands before returning to your animals.
- 4. **Don't Borrow Disease From Your Neighbor** Do not share equipment, tools, or other supplies with your neighbors or other livestock or poultry owners. If you do share these items be sure to clean and disinfect them before they reach your property.
- 5. Look for Signs of Infectious Diseases You should know what diseases are of concern for your herd or flock and be on the lookout for unusual signs or behavior, severe illness and/or sudden deaths. When possible, assess the health of your animals daily. Early detection is important to pre-vent the spread of disease.
- 6. **Report Sick Animals** Don't wait. Report serious or unusual animal health problems to your veterinarian, local extension office, or State or Federal animal health officials. USDA operates a toll-free hotline (1–866–536–7593) with veterinarians to help you. There is no charge for this service.

\*excerpted from Biosecurity: Protecting Your Livestock and Poultry, USDA APHIS Veterinary Services Factsheet, March 2007

## 3.3. Catastrophic Animal Mortality Management

Refer to NRCS standards, or state guidance, regarding appropriate catastrophic animal mortality handling methods.

## Plan for Catastrophic Animal Mortality Management

Surface composting is acceptable with appropriate bedding materials (high carbon such as woodchips, sawdust, leaves) for leachate management and erosion controls. See previous description in Mortality Management and consult with emergency contacts listed below (CT State Vet and DEEP).

*Important!* In the event of catastrophic animal mortality, contact the following authority before beginning carcass disposal:

Authority name: Connecticut Department of Agriculture, State Veterinarian Contact name: Dr. Mary Jane Lis Phone number: 860-713-2505

Connecticut Department of Energy and Environmental Protection (DEEP) Water Permitting and Enforcement Division Phone number: 860-424-3018

## **3.4.** Chemical Handling

If checked, the indicated measures will be taken to prevent chemicals and other contaminants from contaminating process waste water or storm water storage and treatment systems. Typical best management practices for basic chemical handling include keeping the chemical storage area free of clutter and debris, stored off the ground and away from contact with water, in the chemicals original containers with properly marked labels and safety information, a spill containment kit, ready access to a means of fresh water or eye wash, or similar safety equipment.

Measure
All chemicals are stored in proper containers. Expired chemicals and empty containers are properly disposed of in accordance with state and federal regulations. Pesticides and associated refuse are disposed of in accordance with the FIFRA label.
Chemical storage areas are self-contained with no drains or other pathways that will allow spilled chemicals to exit the storage area.
Chemical storage areas are covered to prevent chemical contact with rain or snow.
Emergency procedures and equipment are in place to contain and clean up chemical spills.
Chemical handling and equipment wash areas are designed and constructed to prevent contamination of surface waters and waste water and storm water storage and treatment systems.
All chemicals are custom applied and no chemicals are stored at the operation. Equipment wash areas are designed and constructed to prevent contamination of surface waters and waste water and storm water storage and treatment systems.

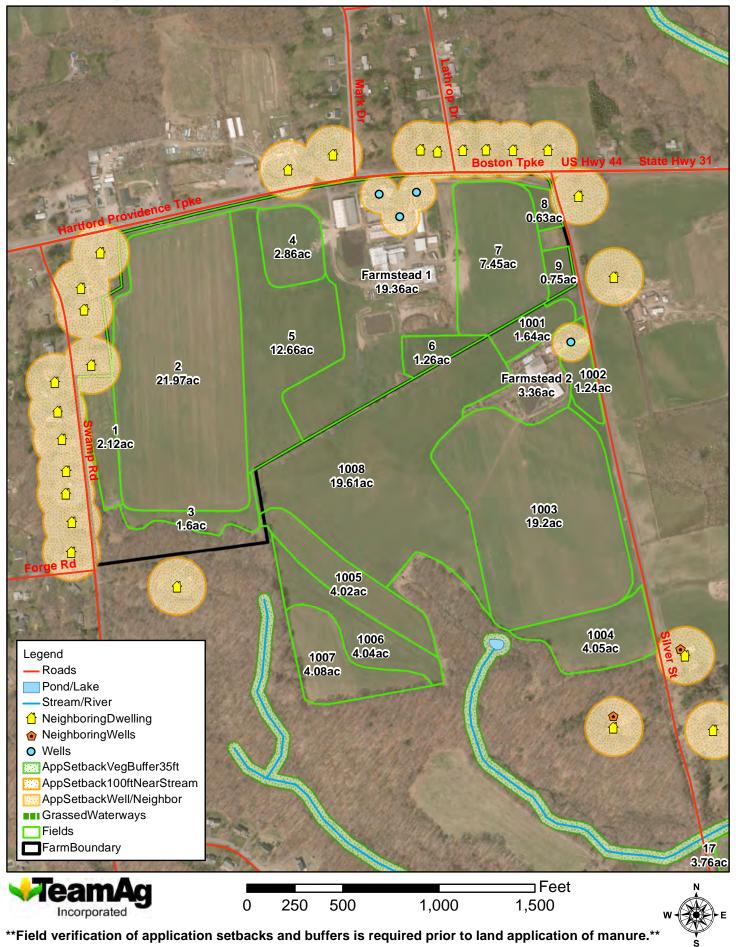
## Section 4. Land Treatment

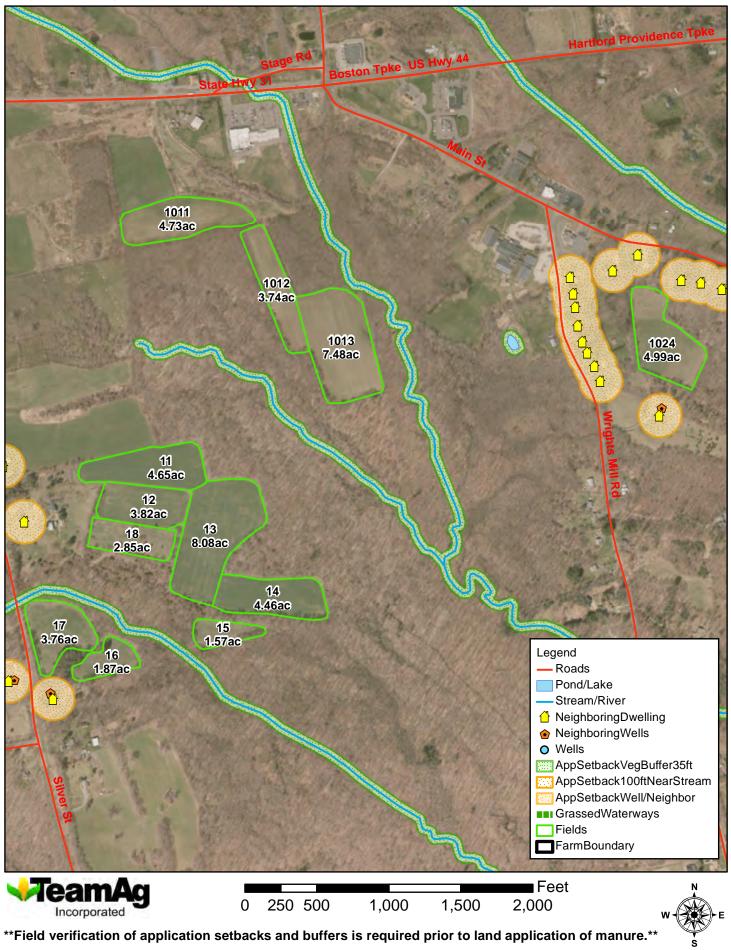
4.1. Map(s) of Fields and Conservation Practices

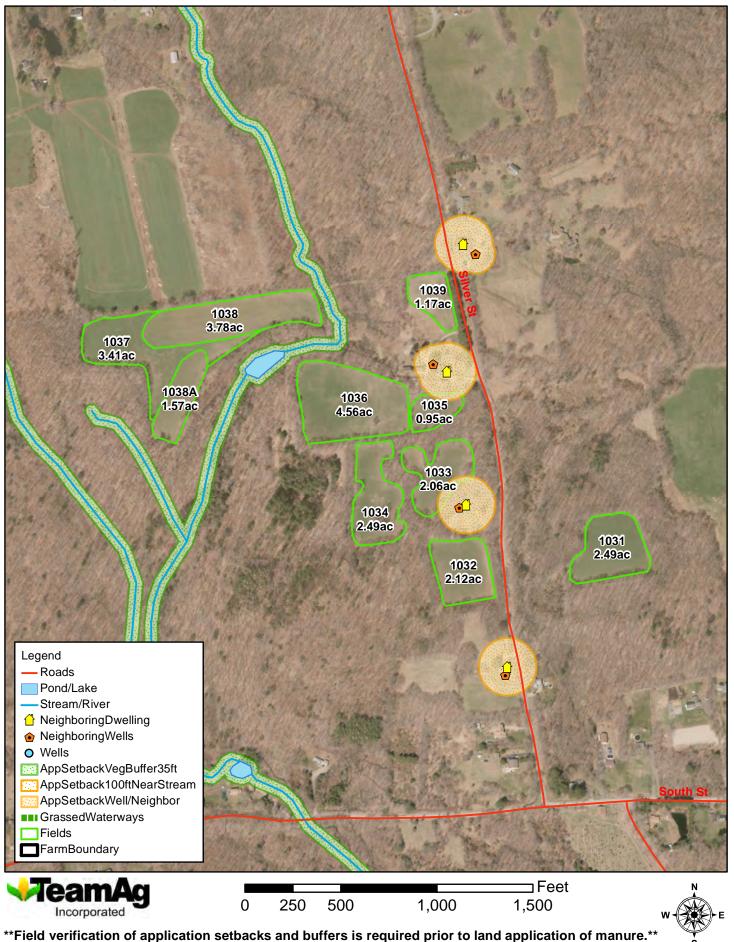
## **Field Maps**



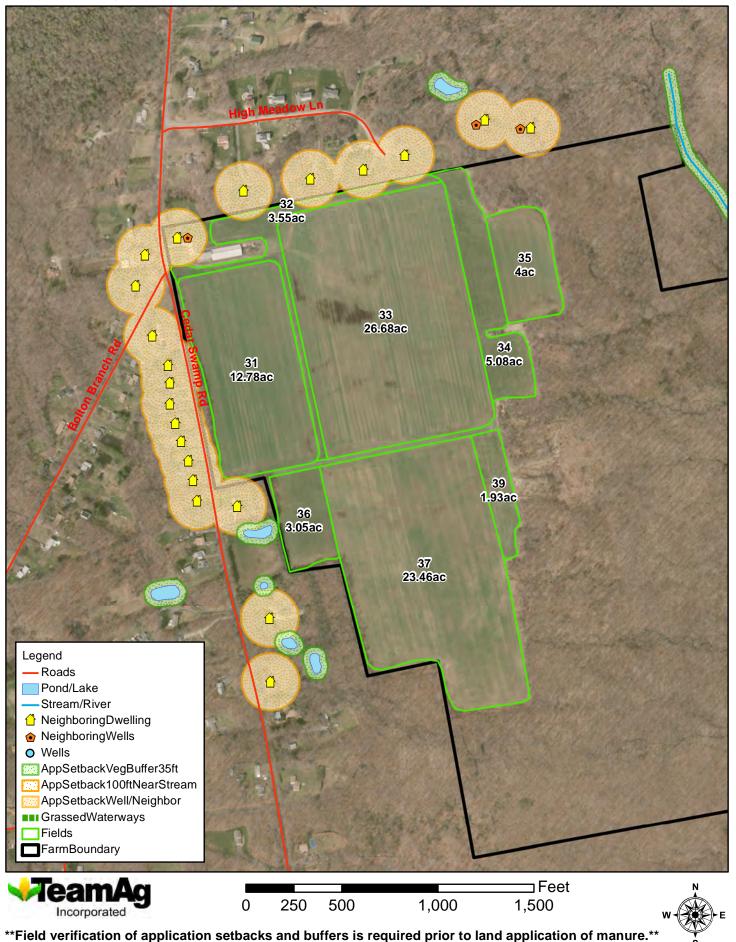


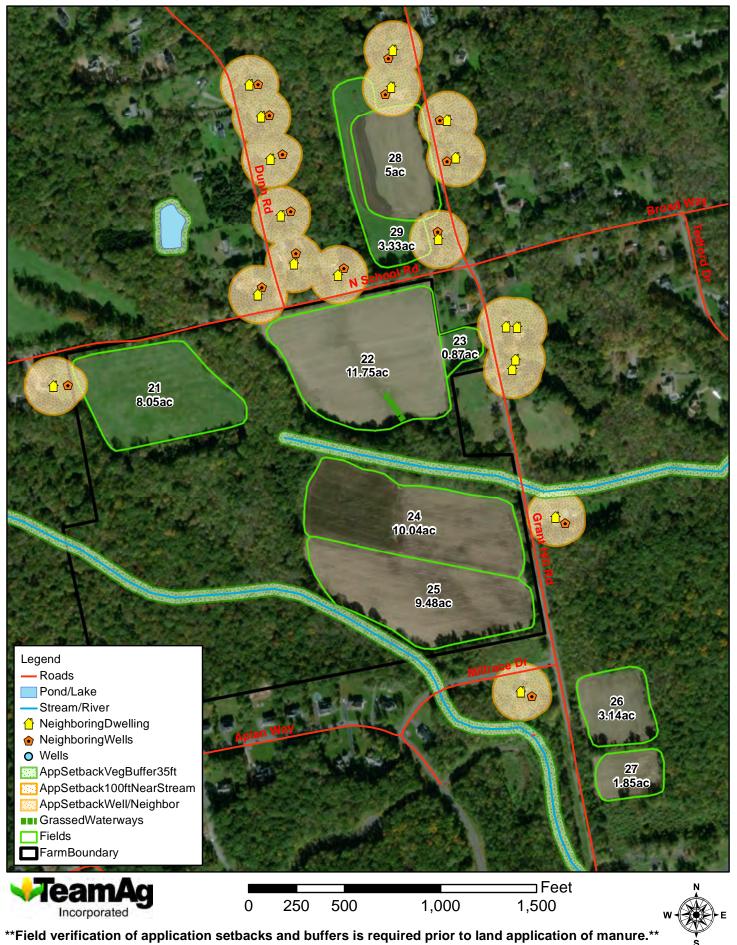


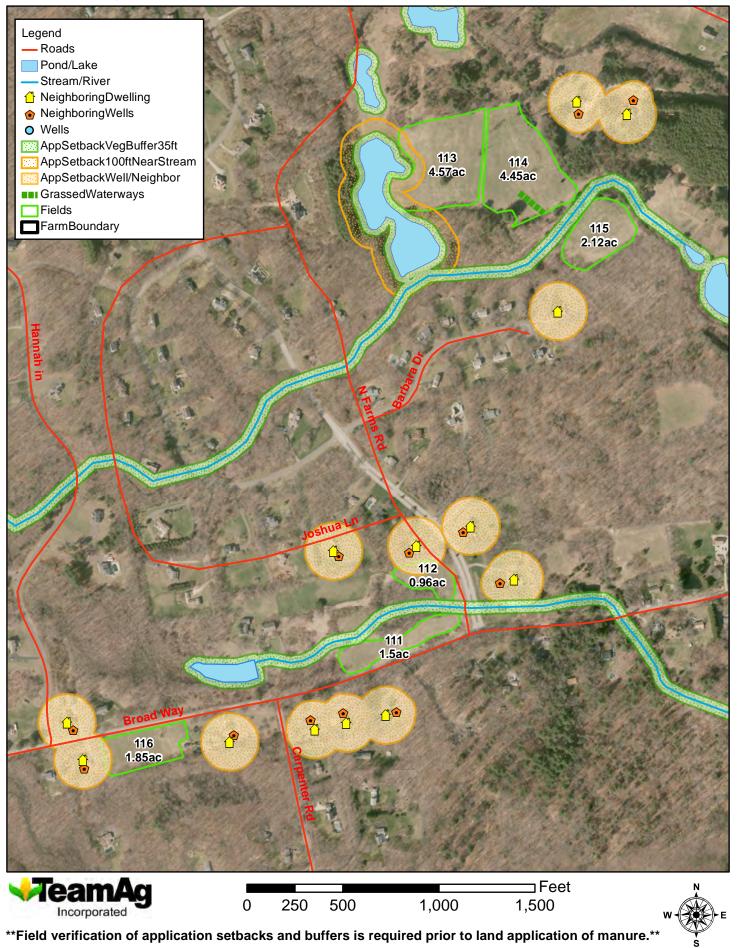


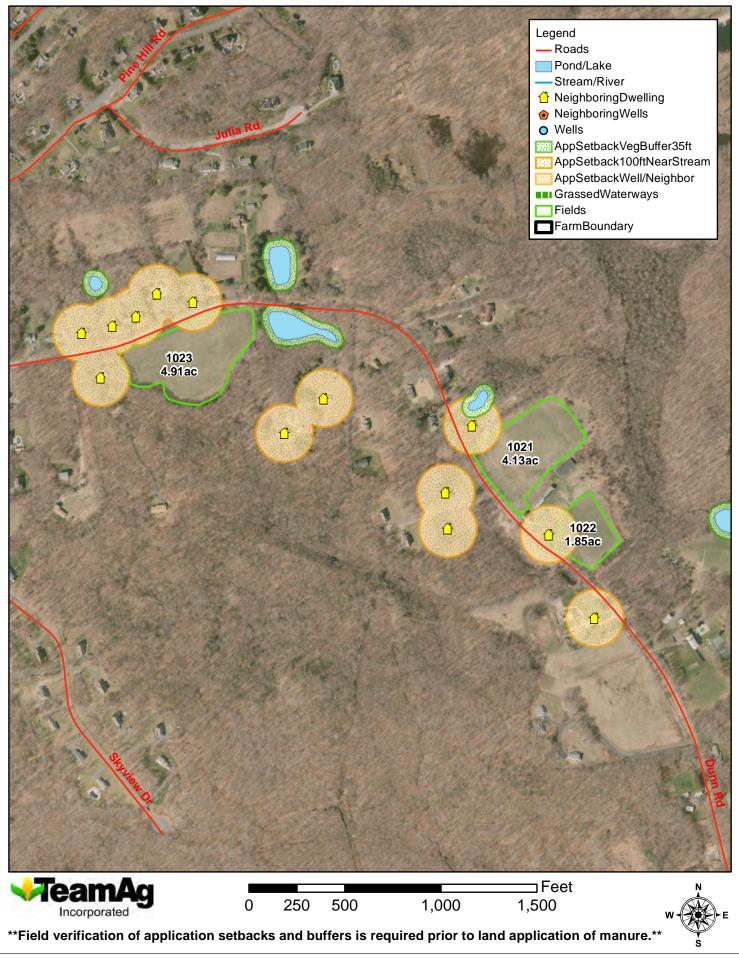


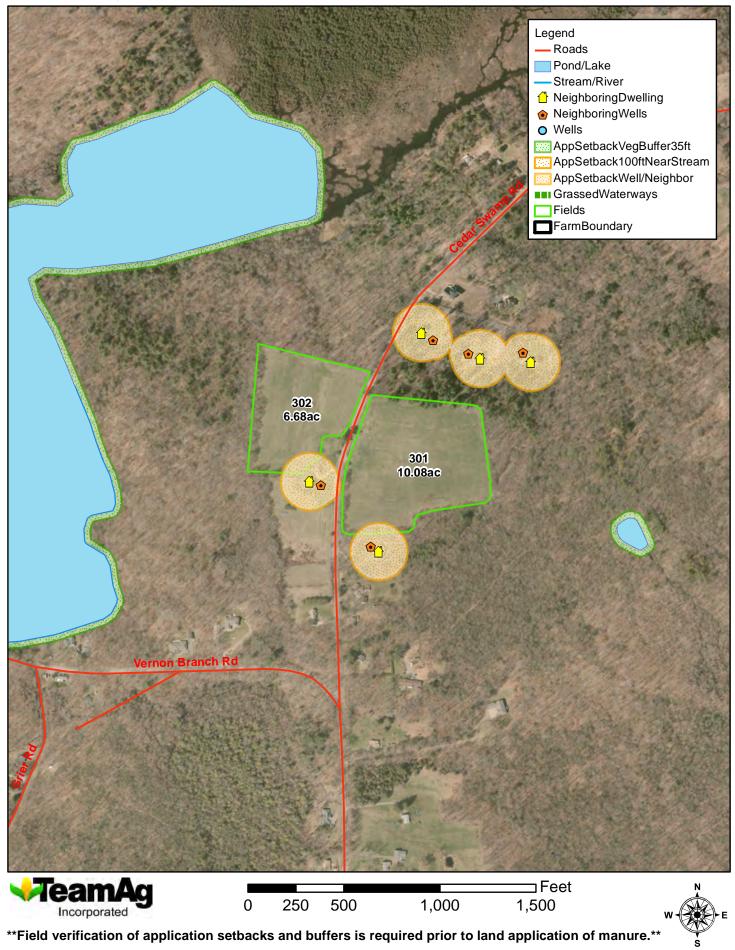


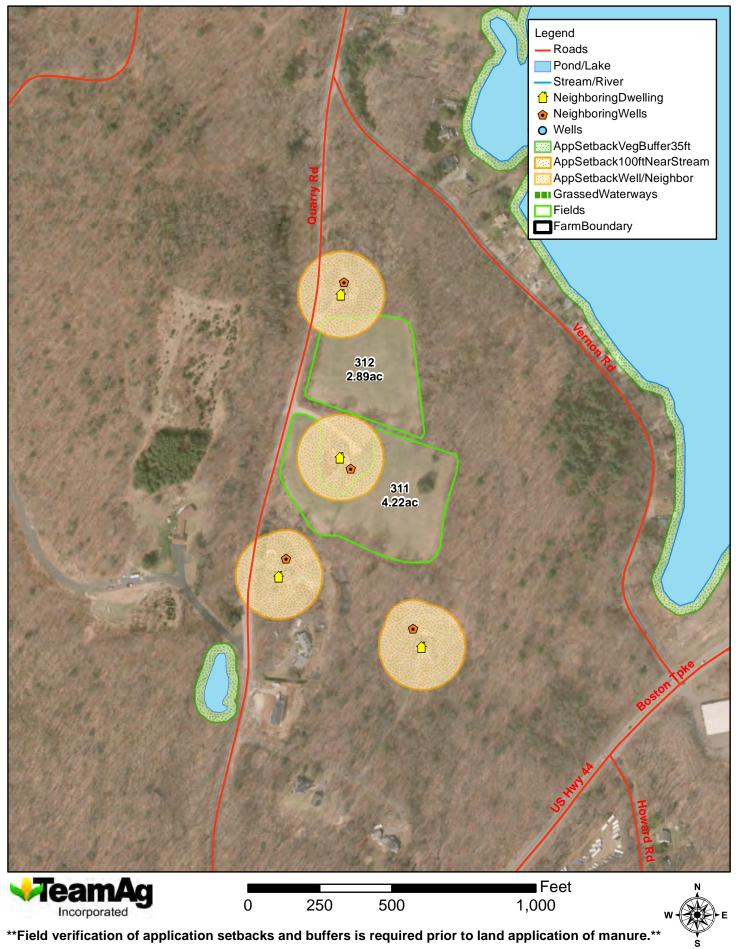


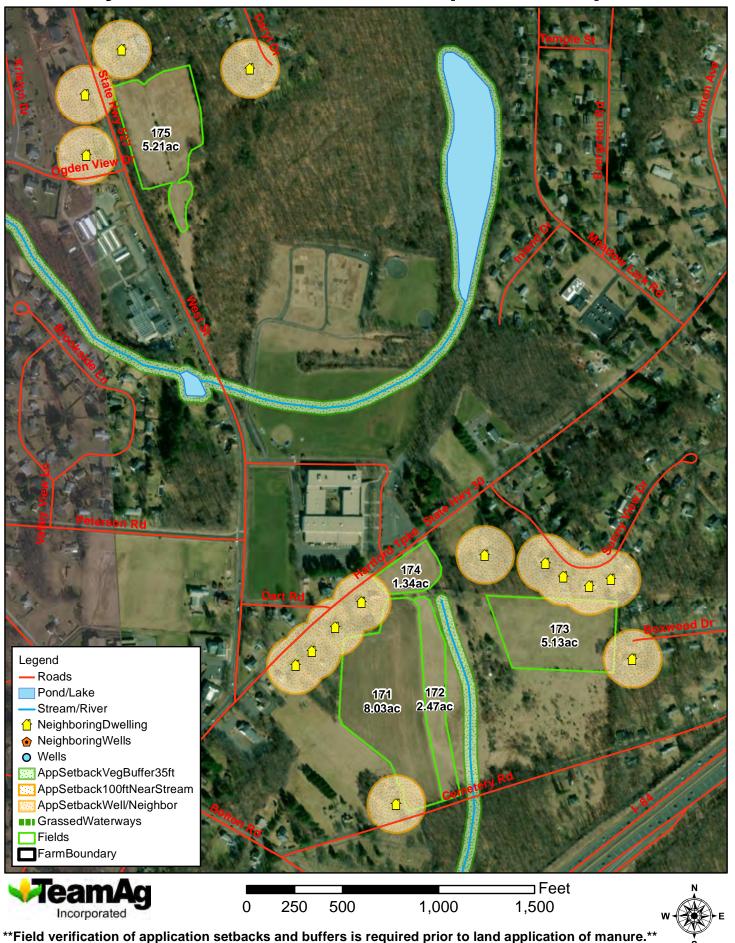


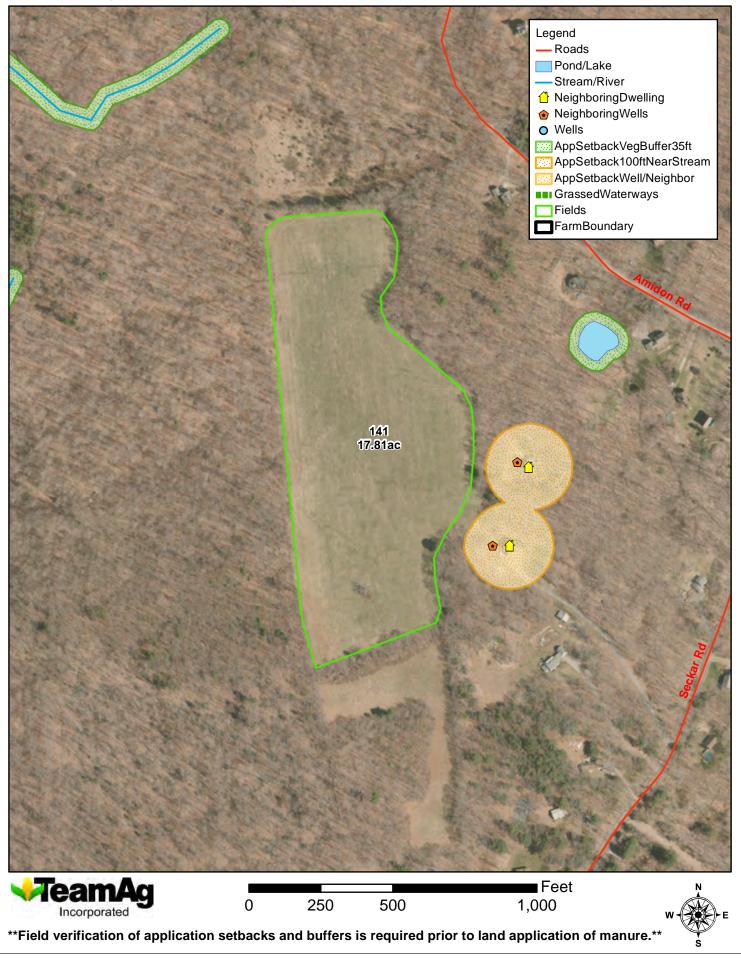


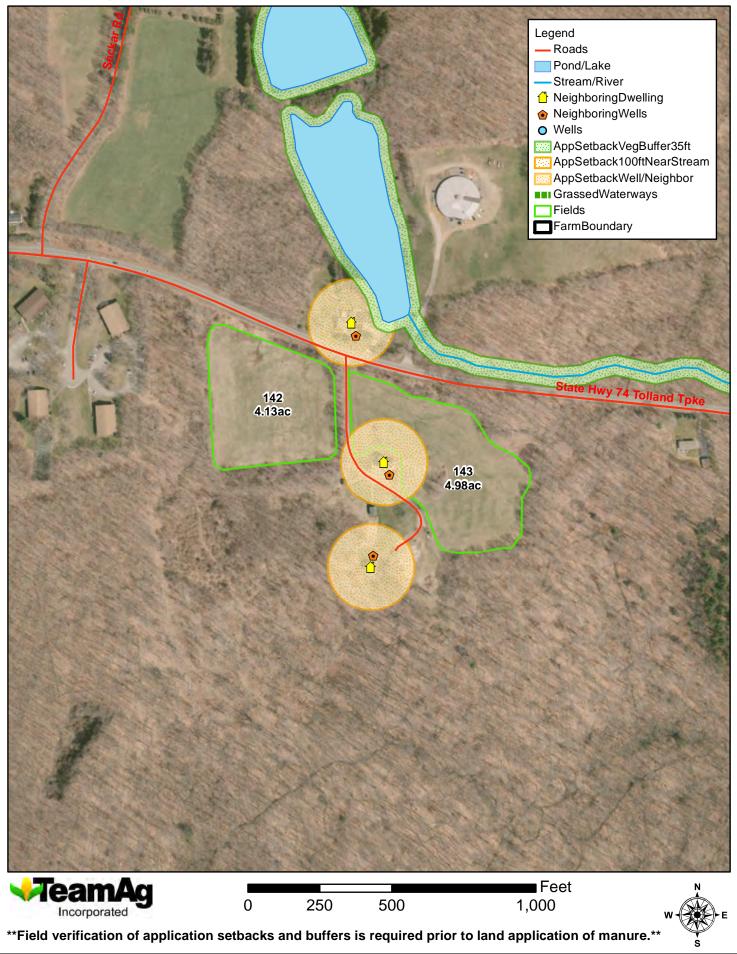


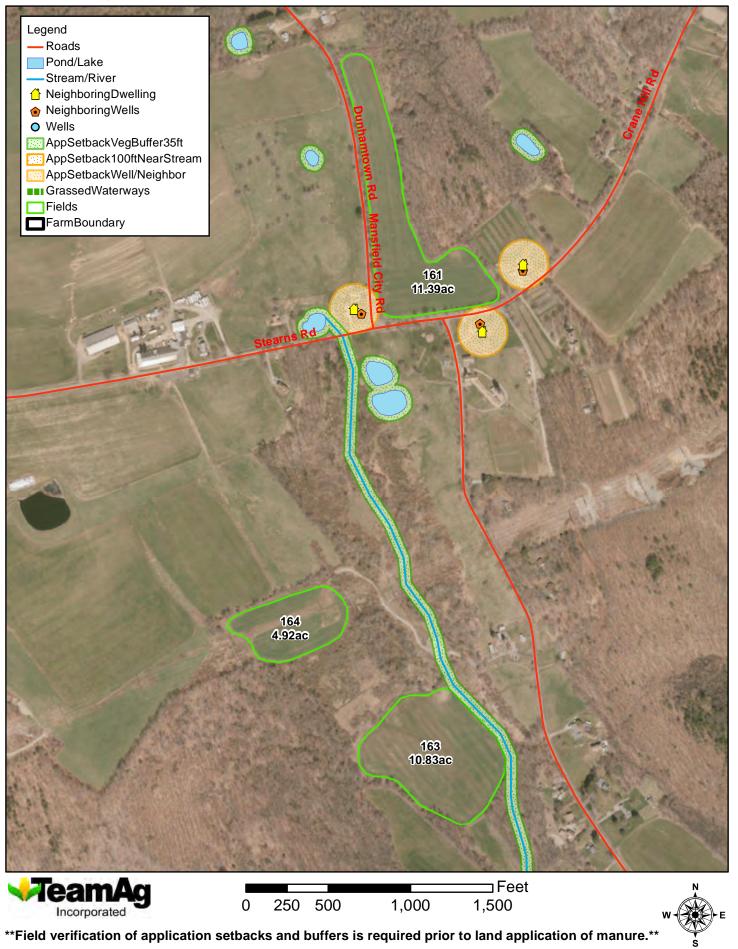


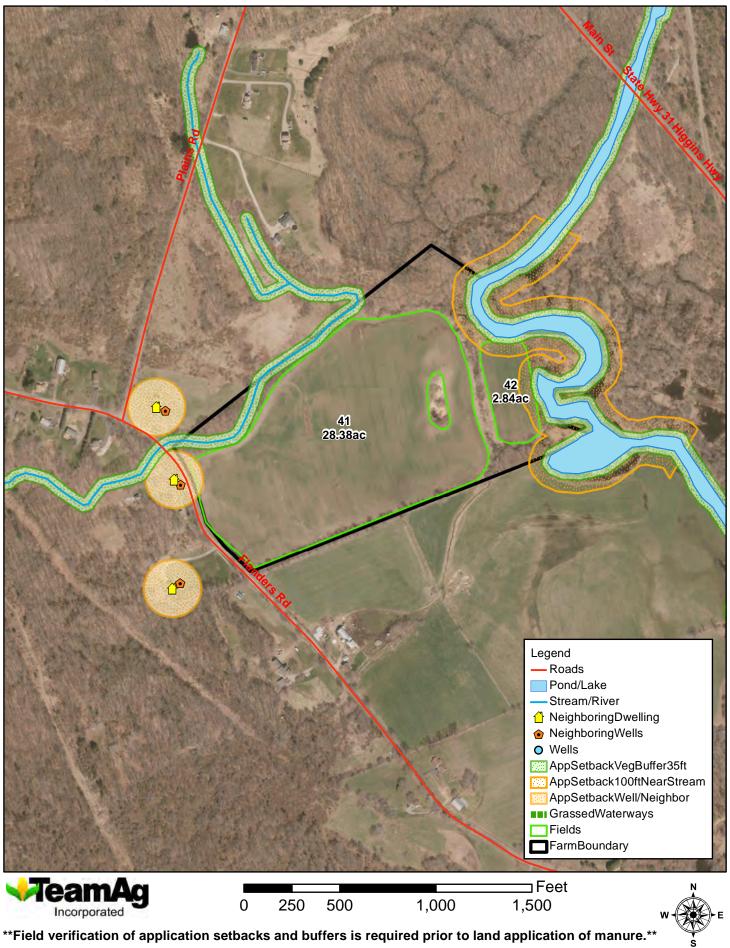


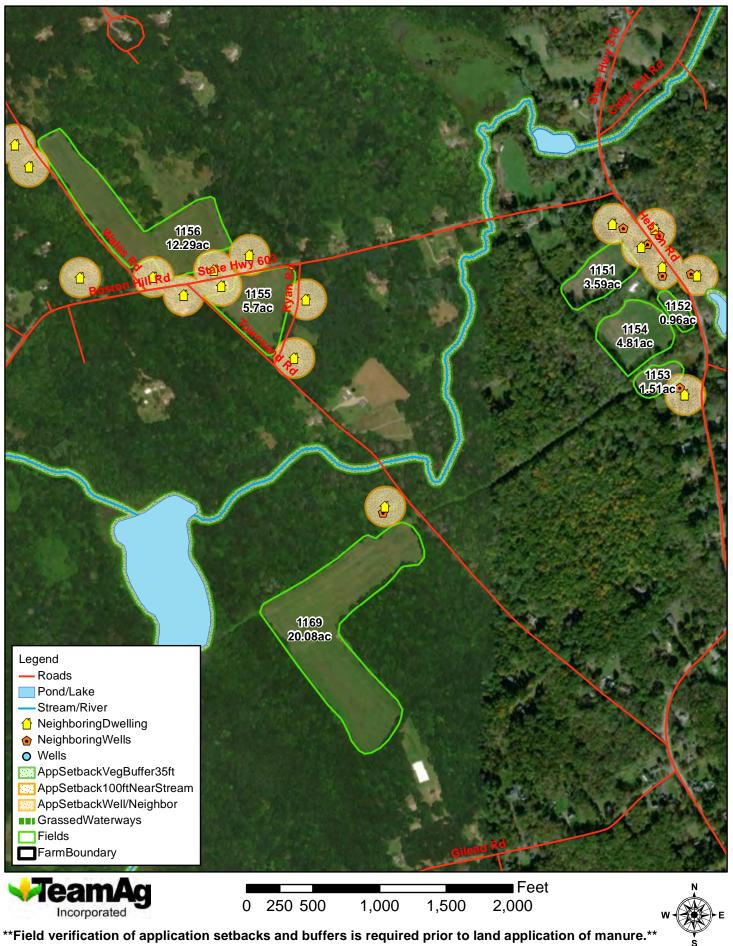


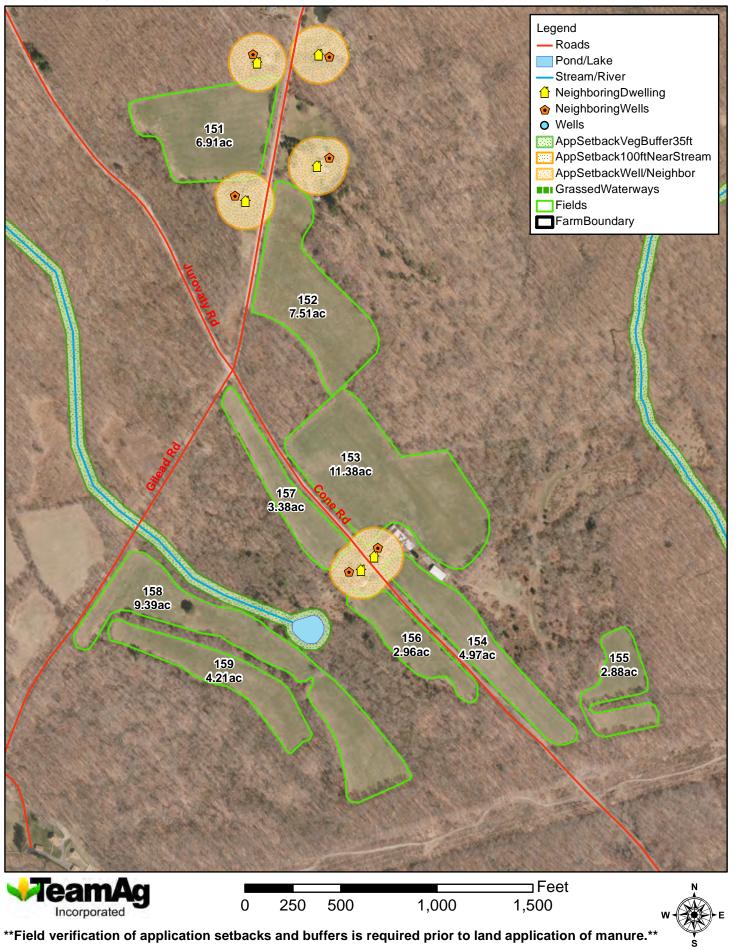


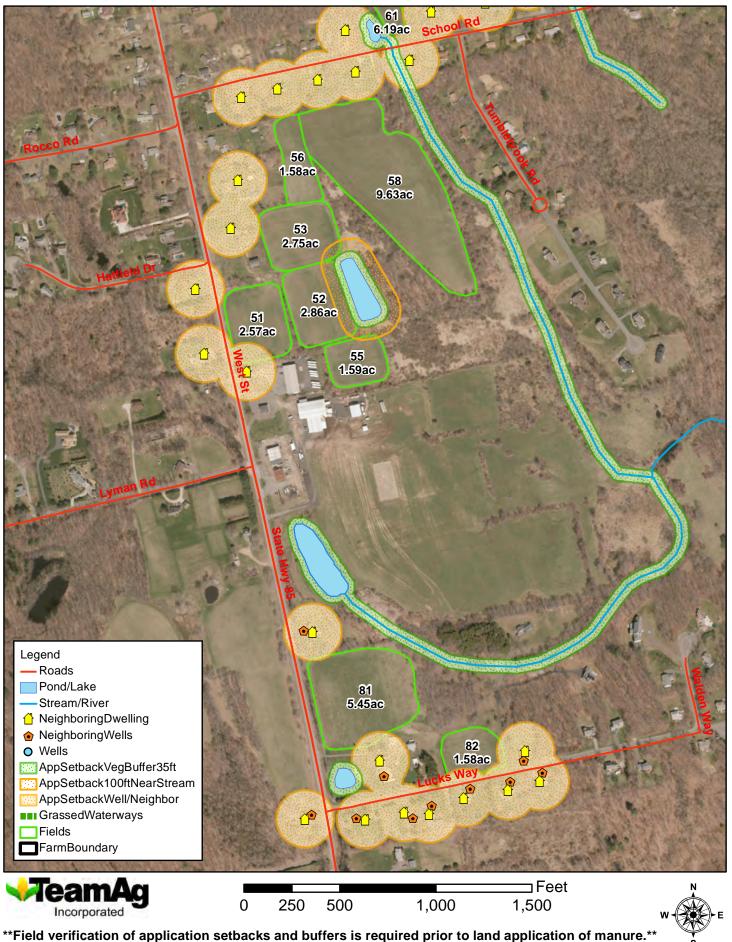


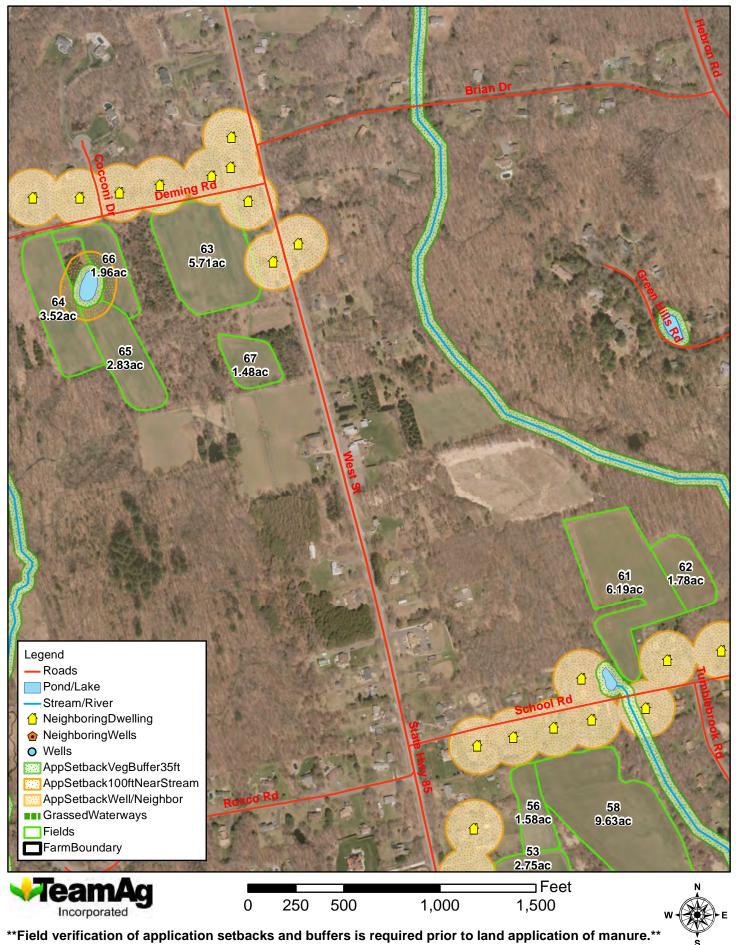


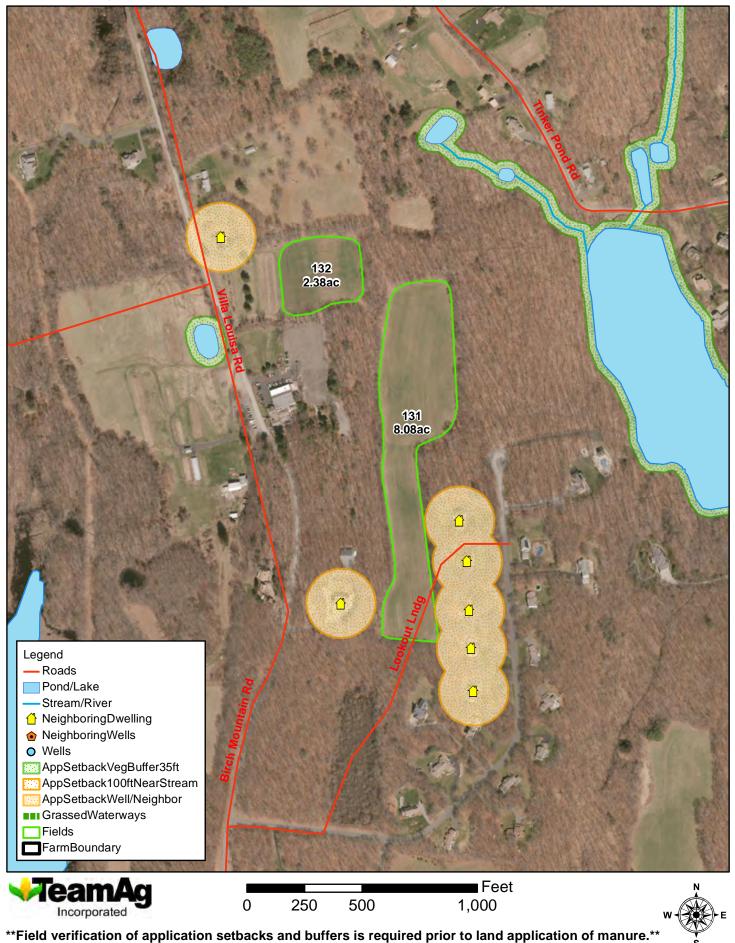


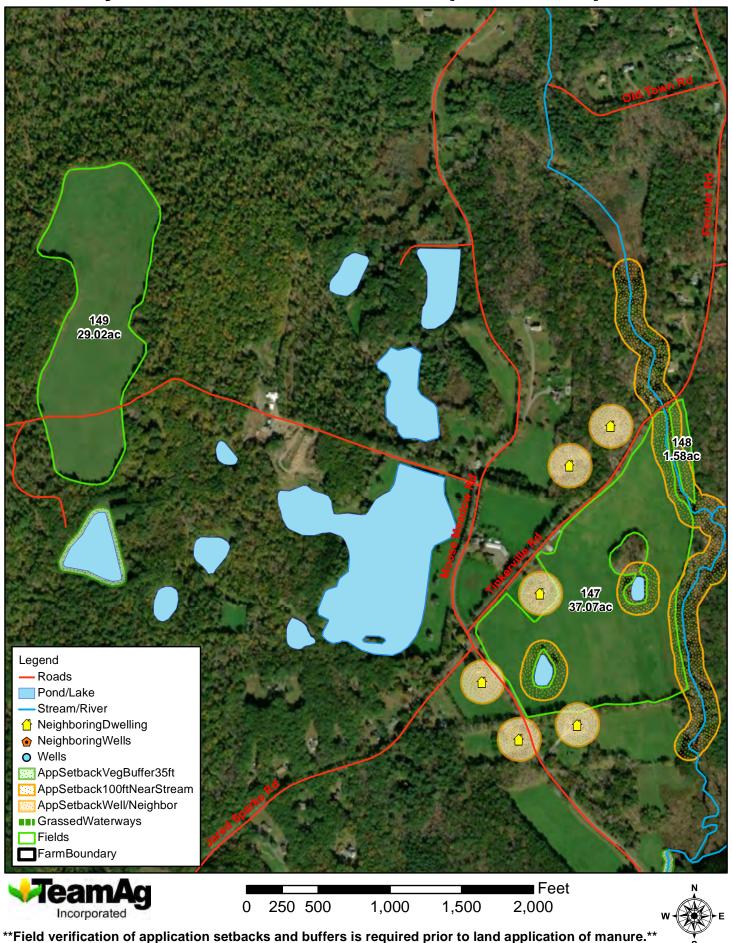










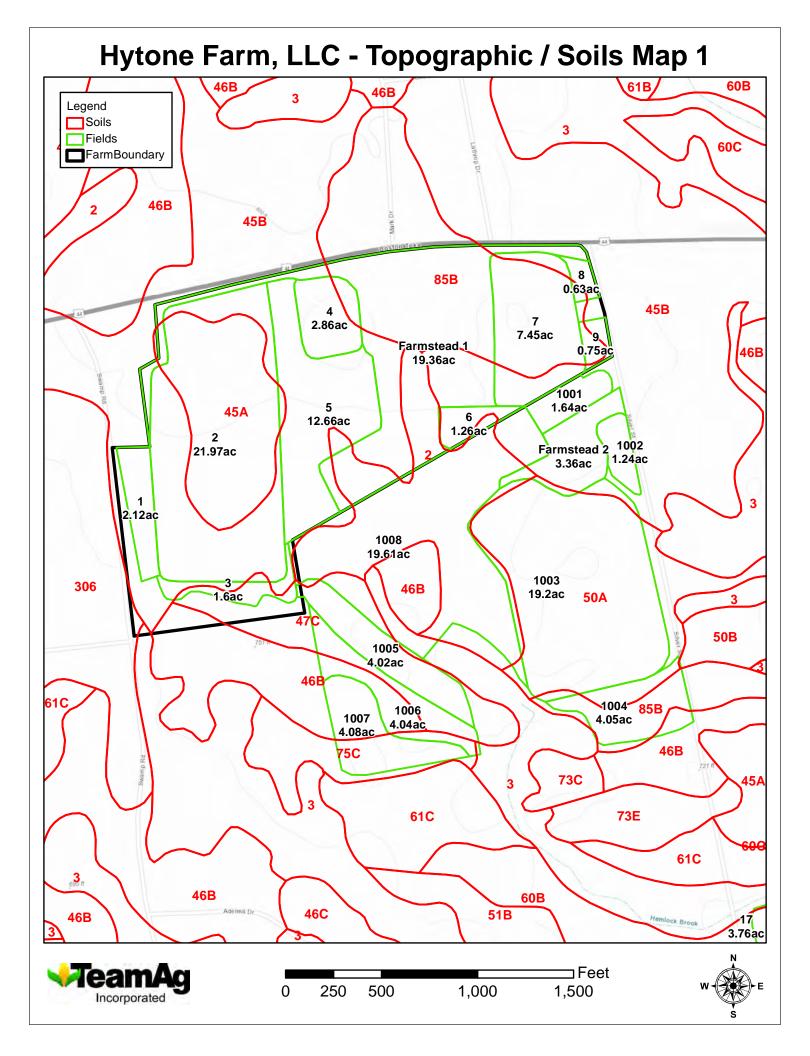




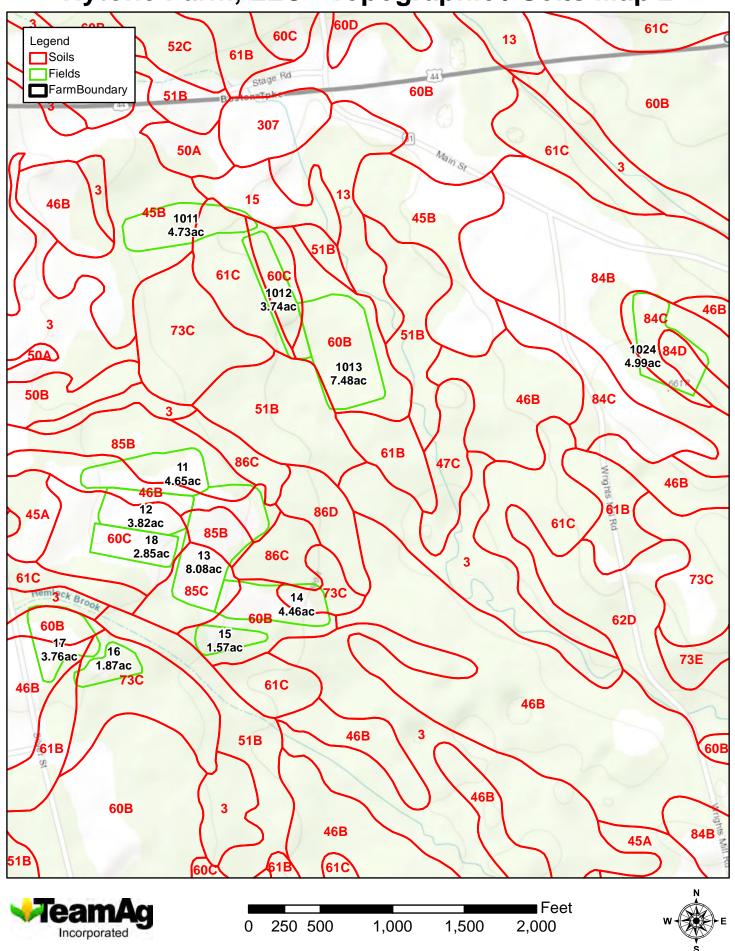
#### Soils & Topographic Maps

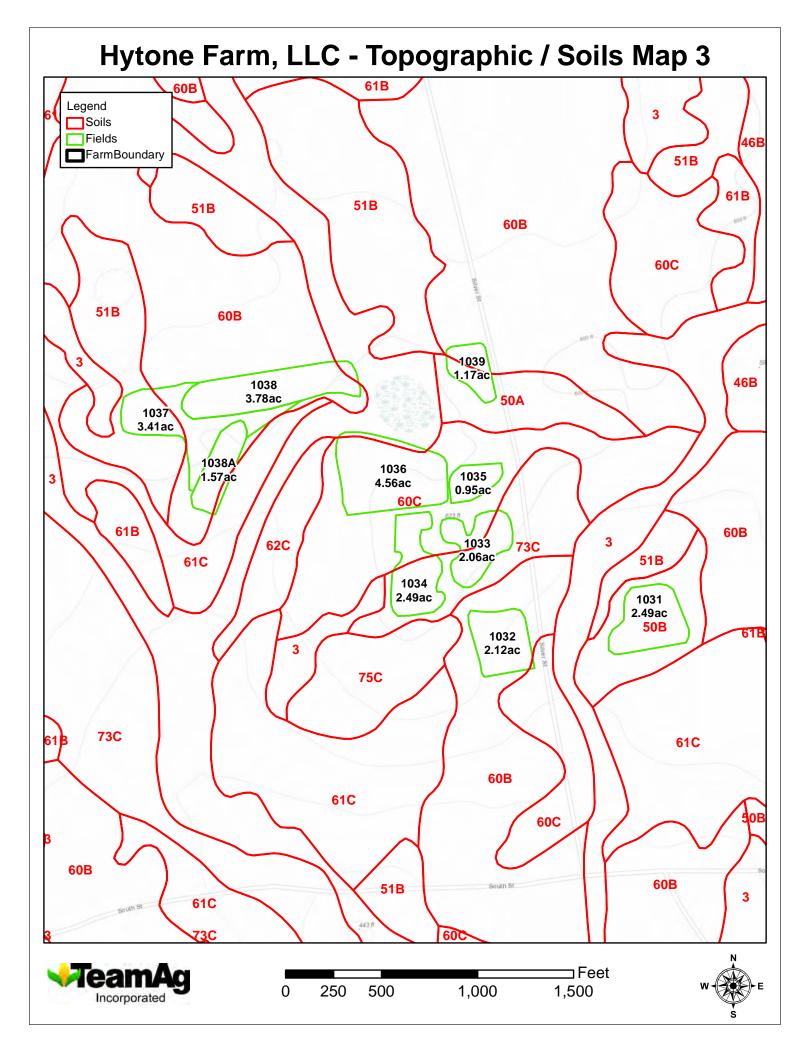




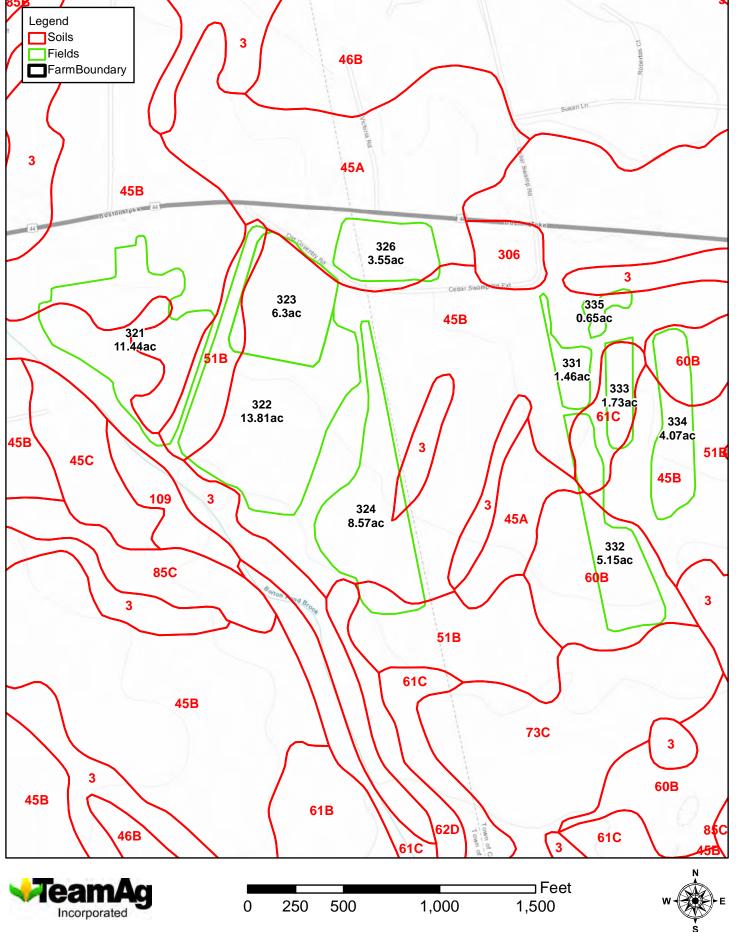


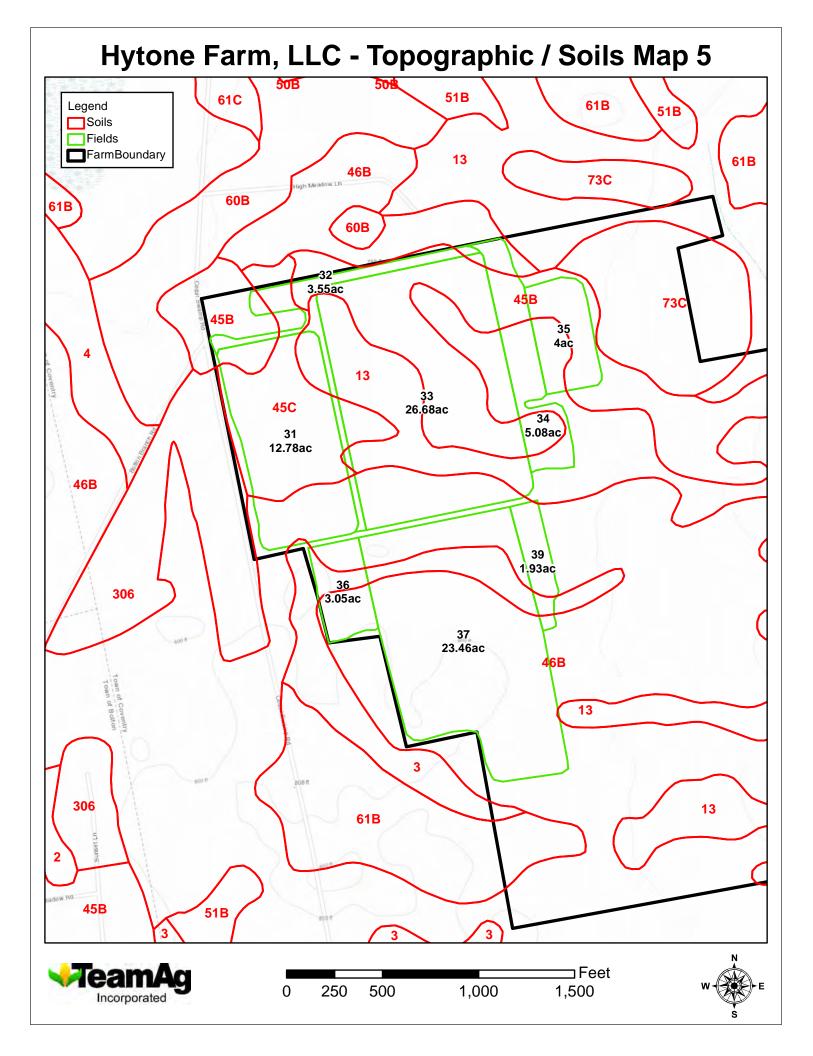
# Hytone Farm, LLC - Topographic / Soils Map 2



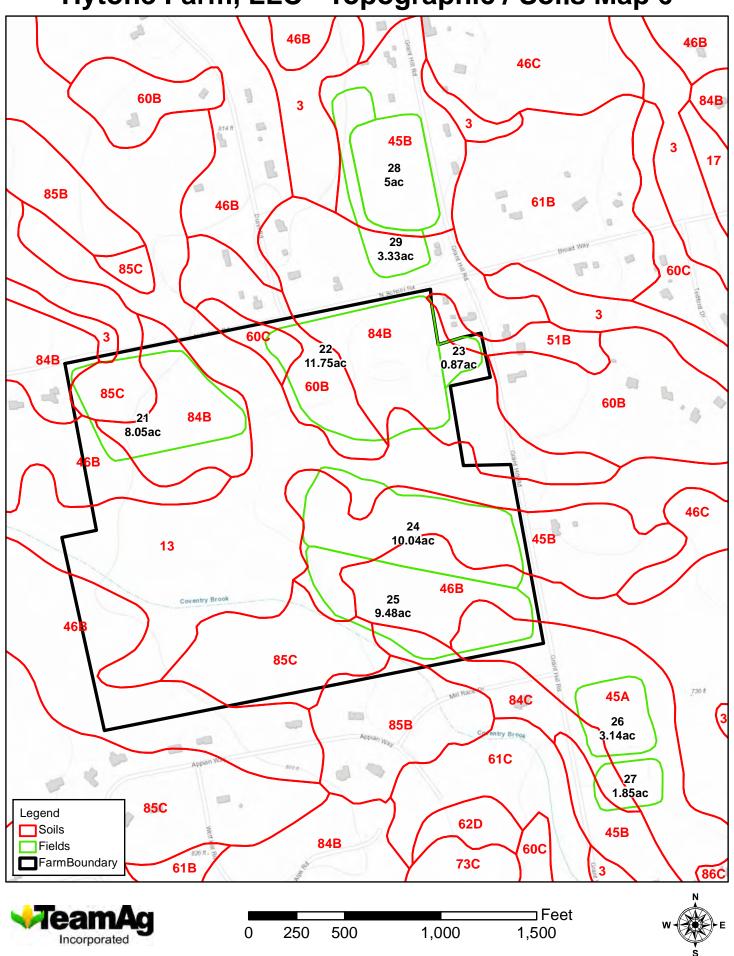


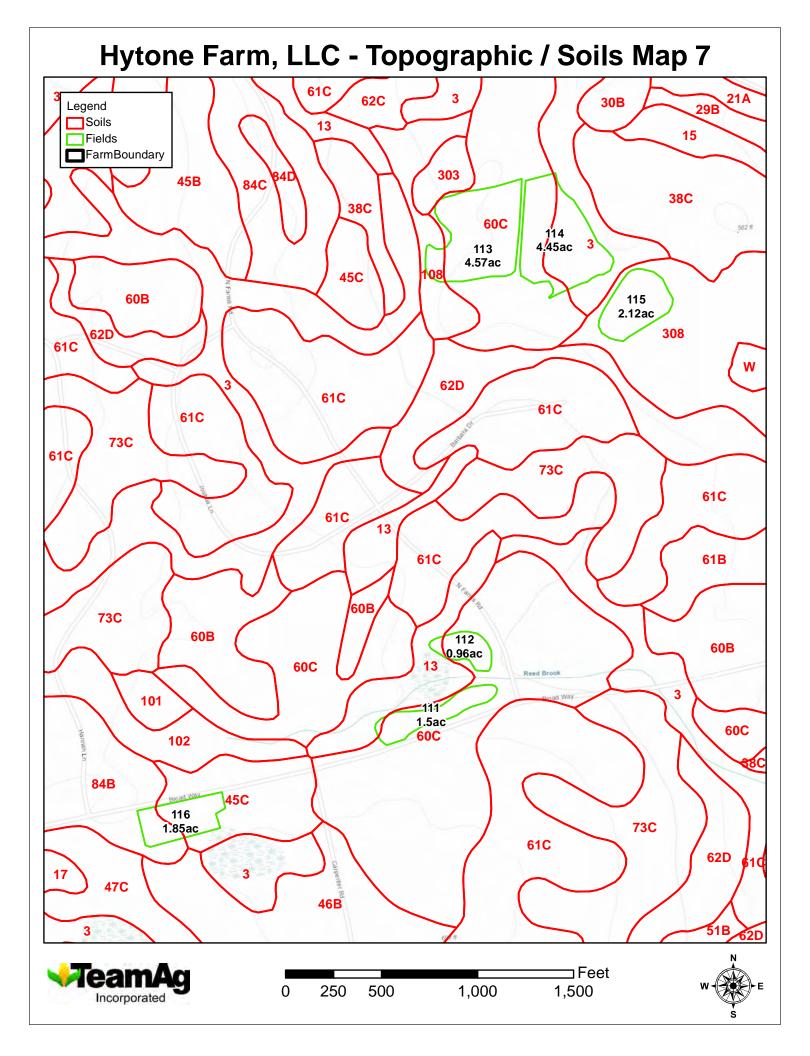
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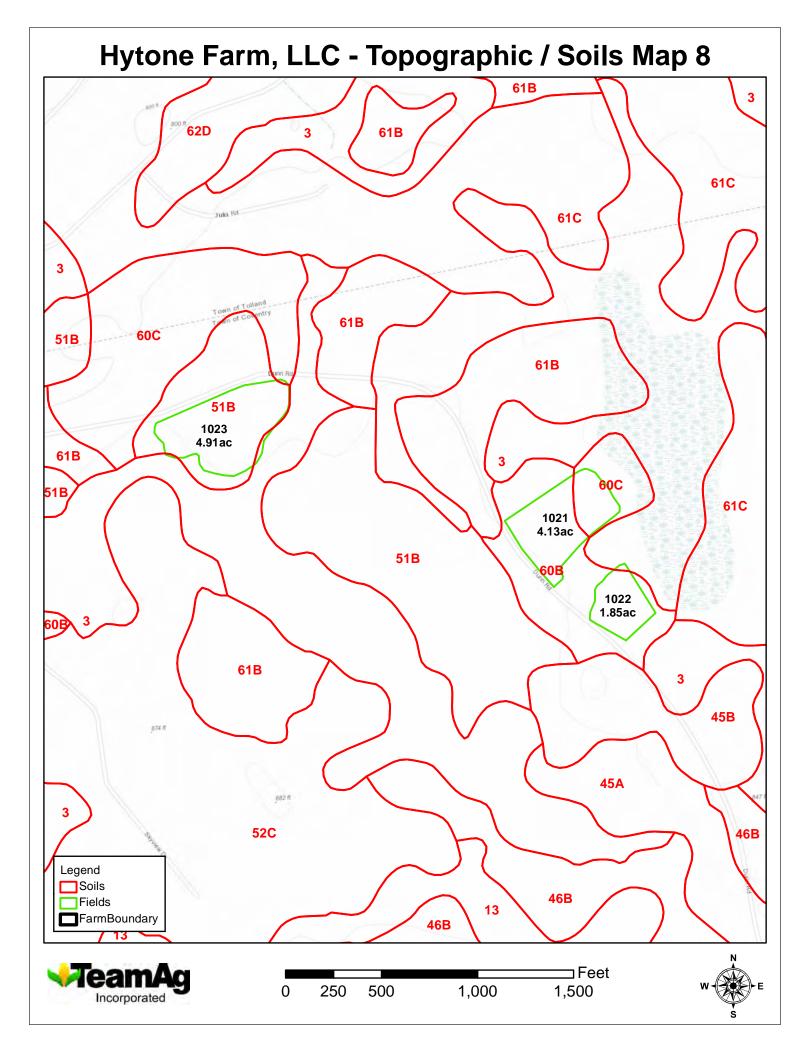


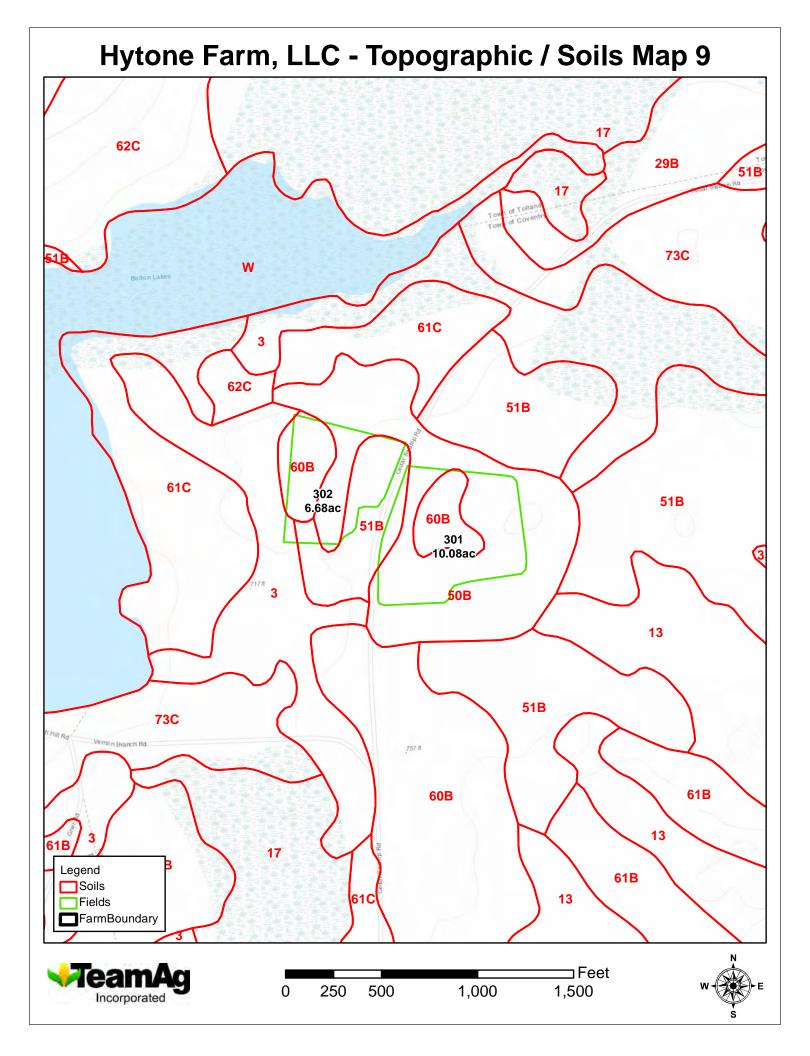


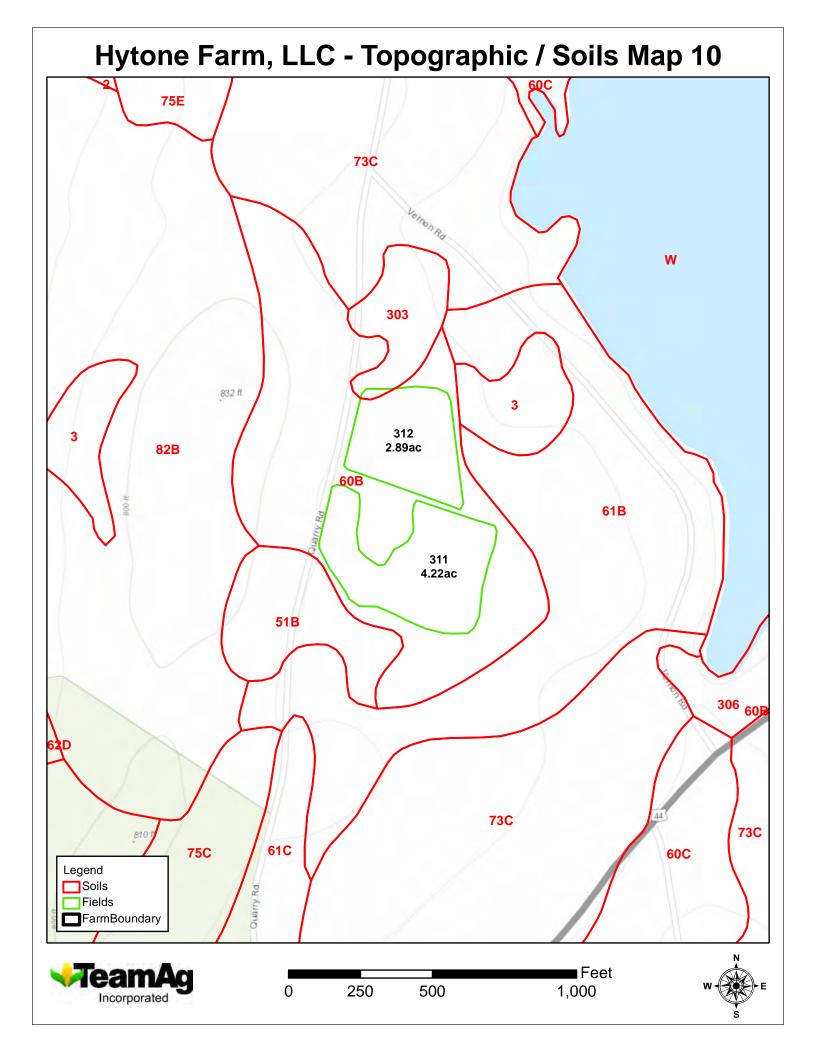
# Hytone Farm, LLC - Topographic / Soils Map 6

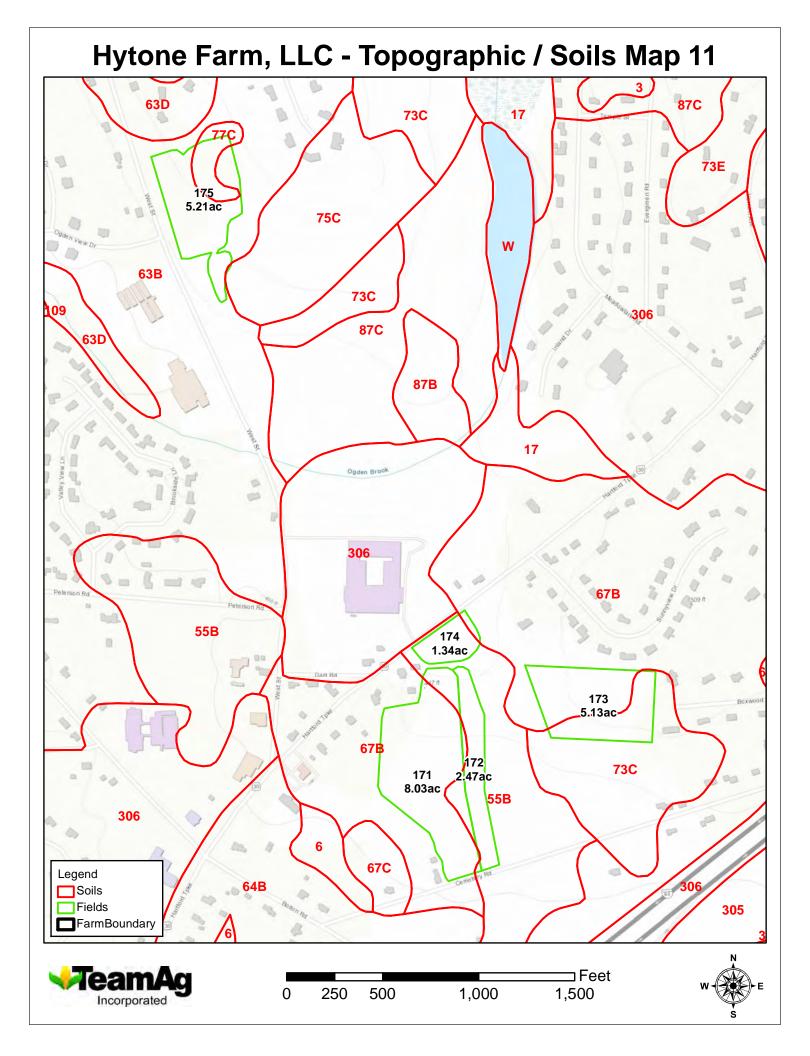


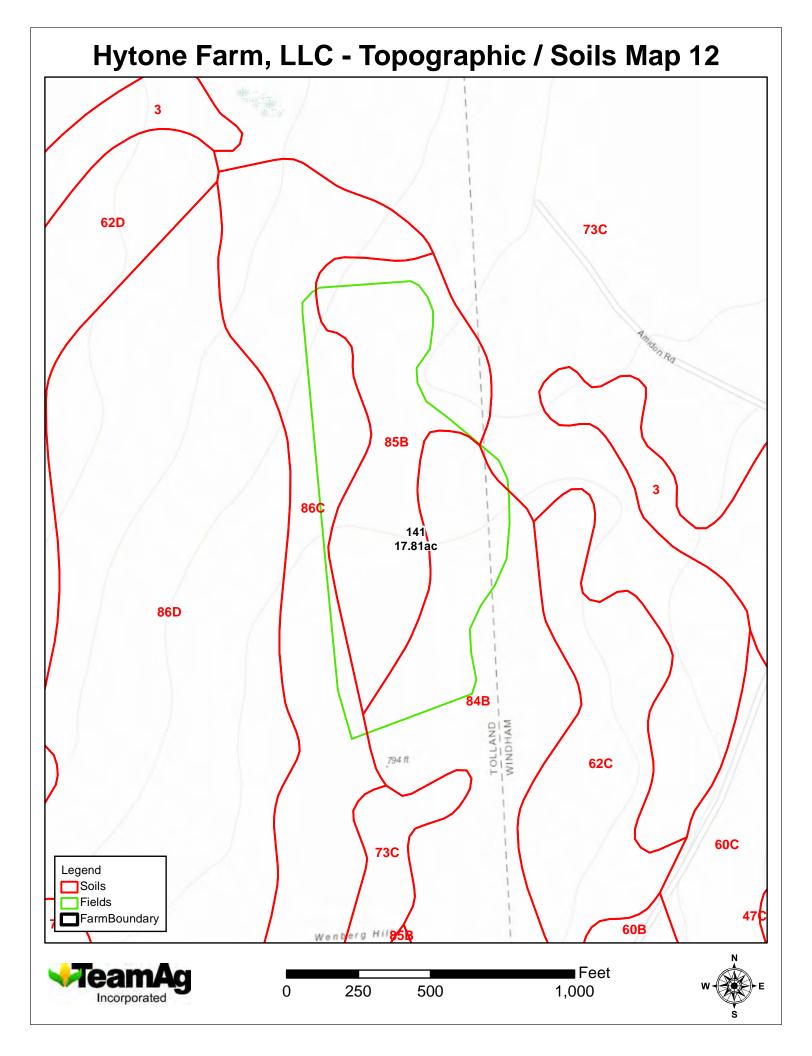


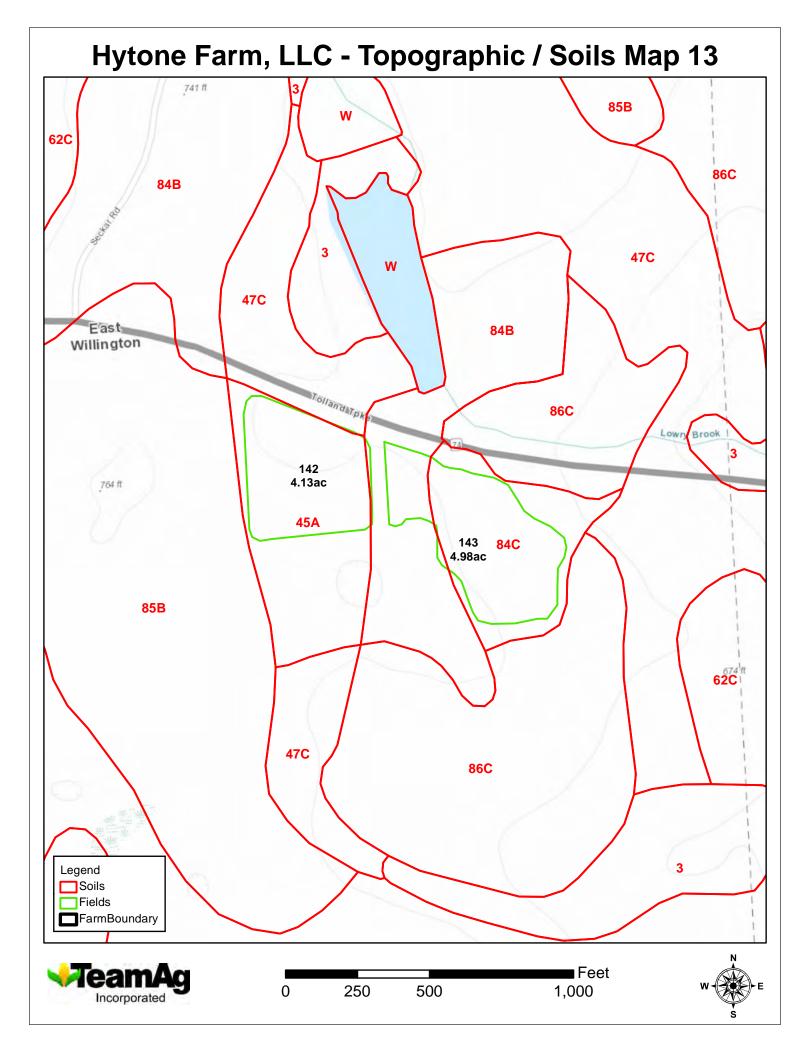


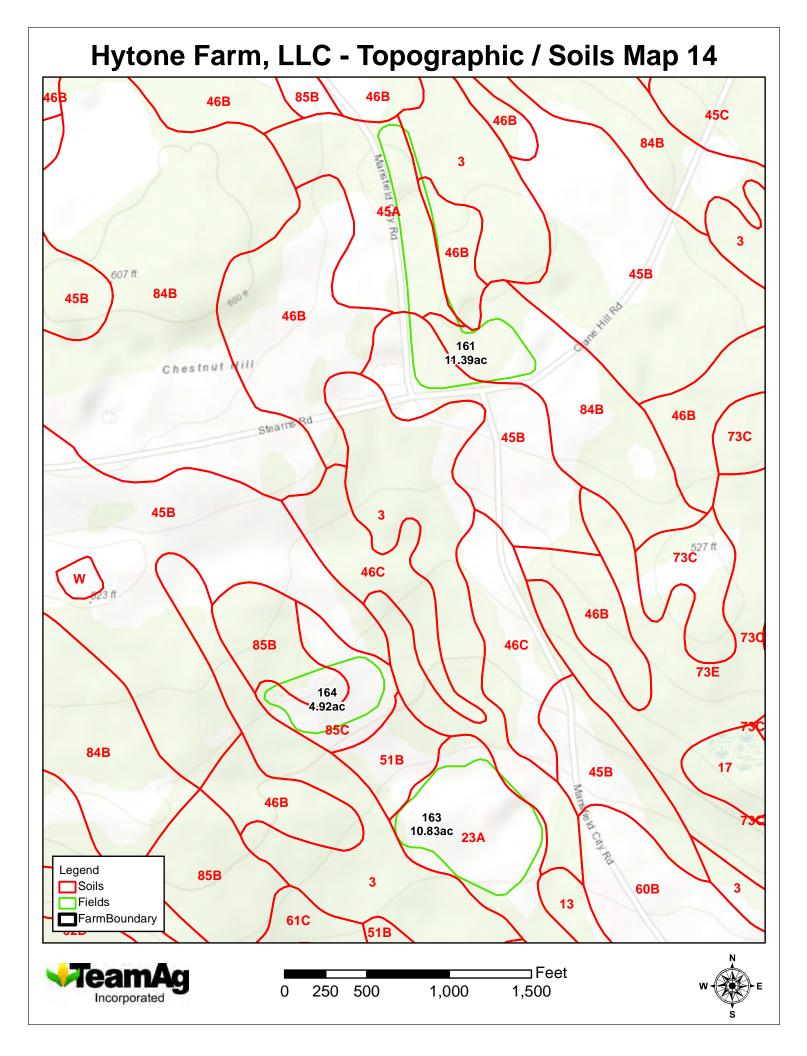


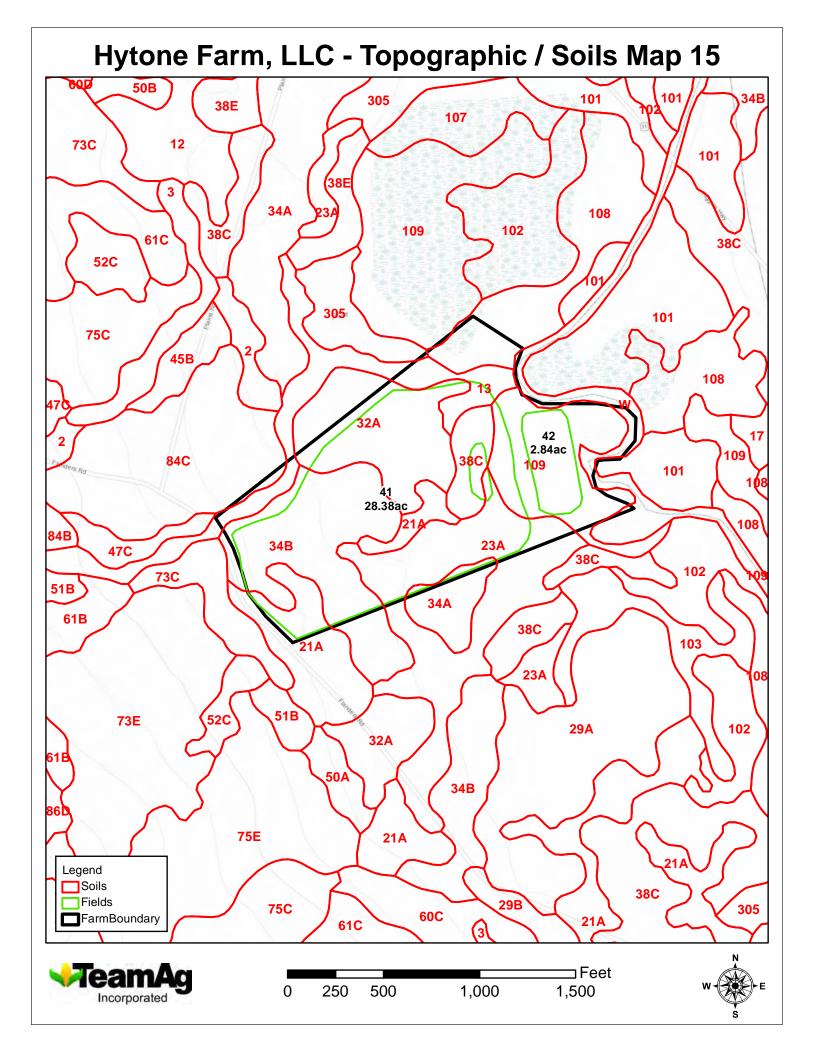


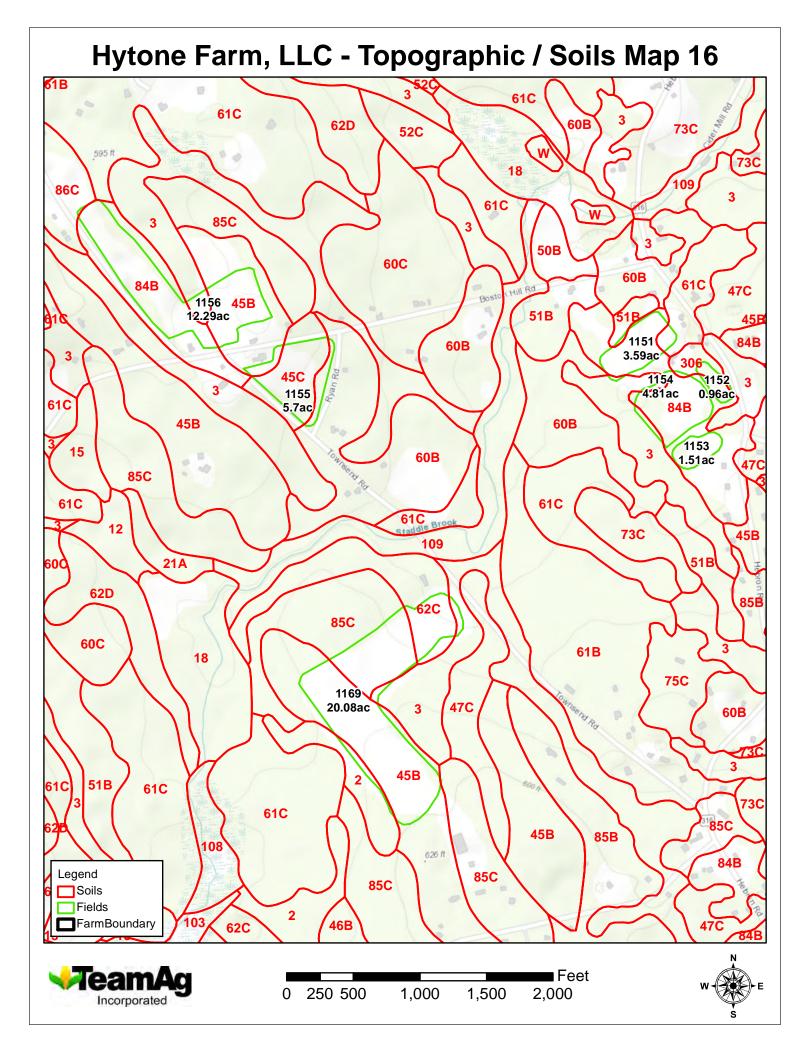


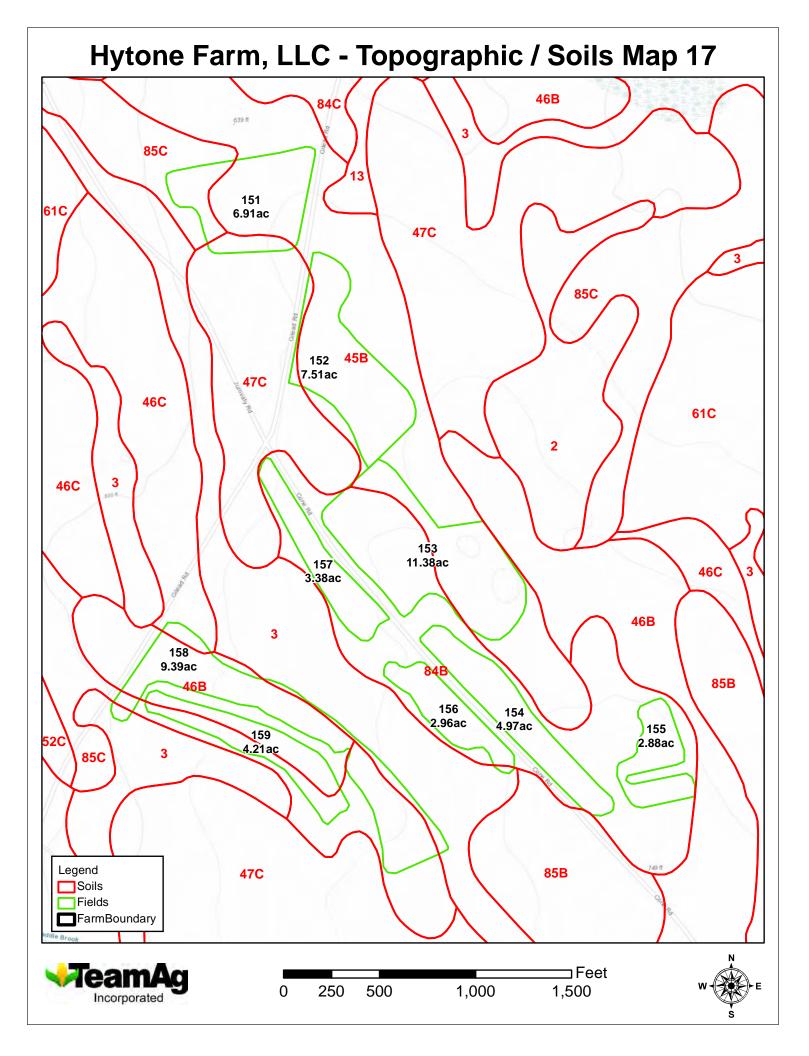


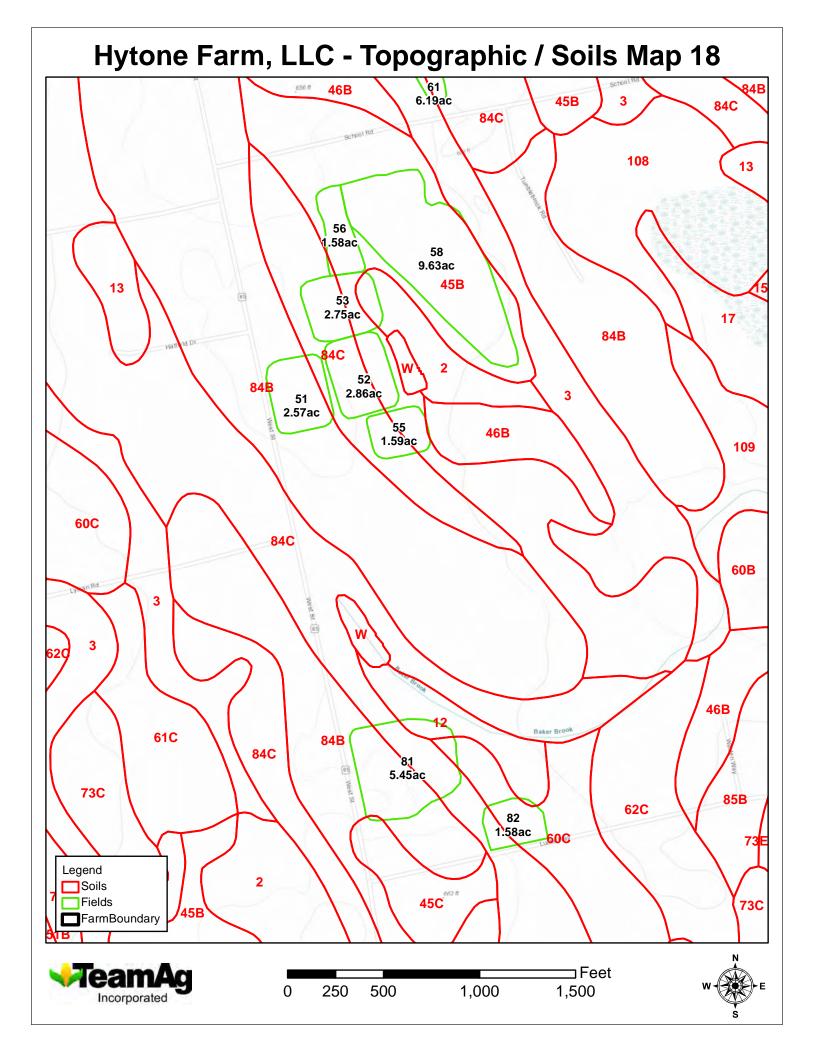


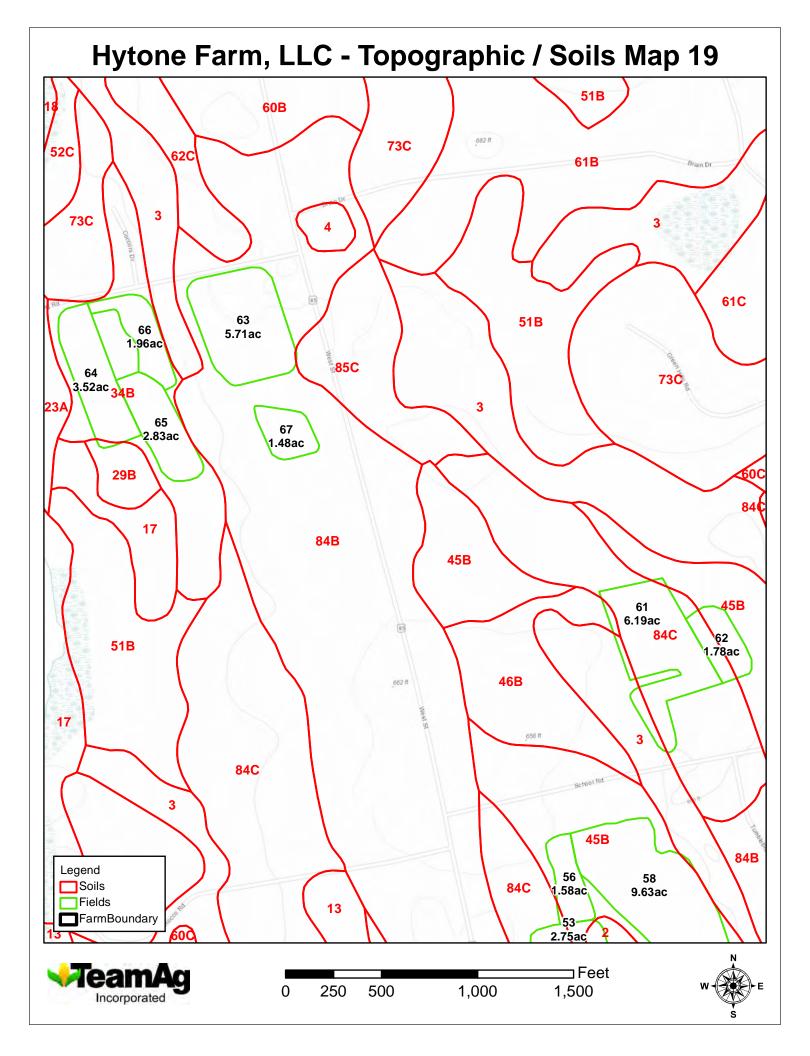


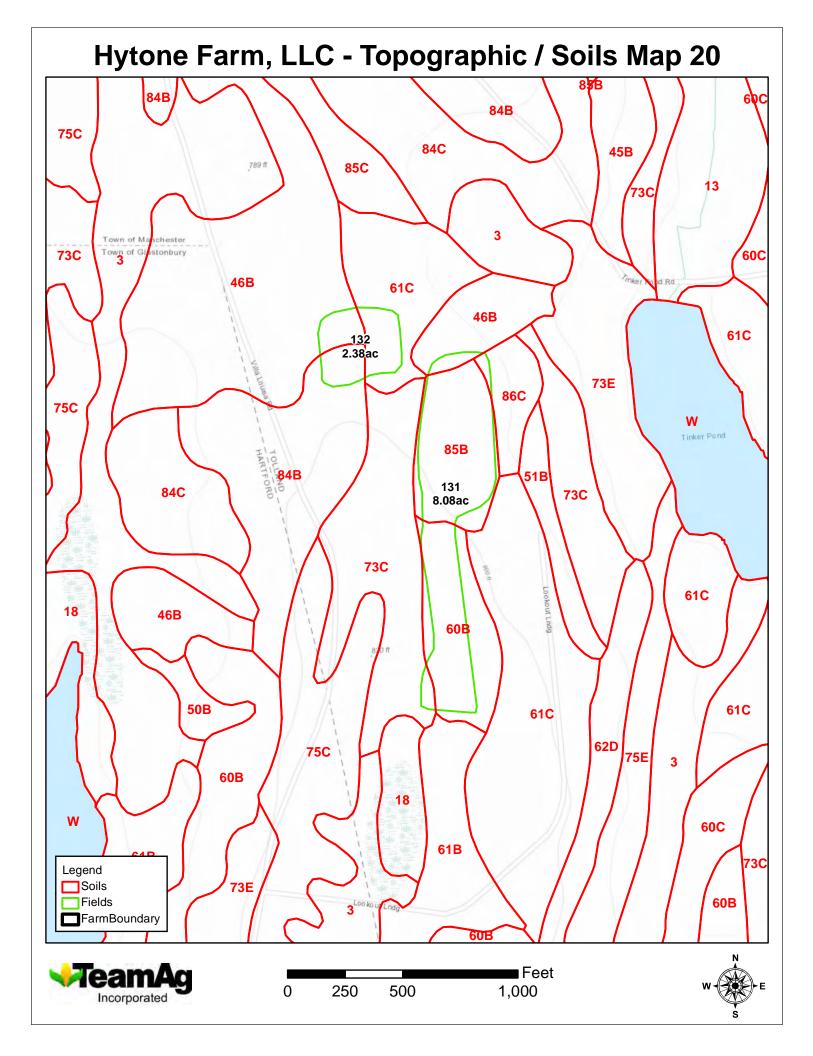


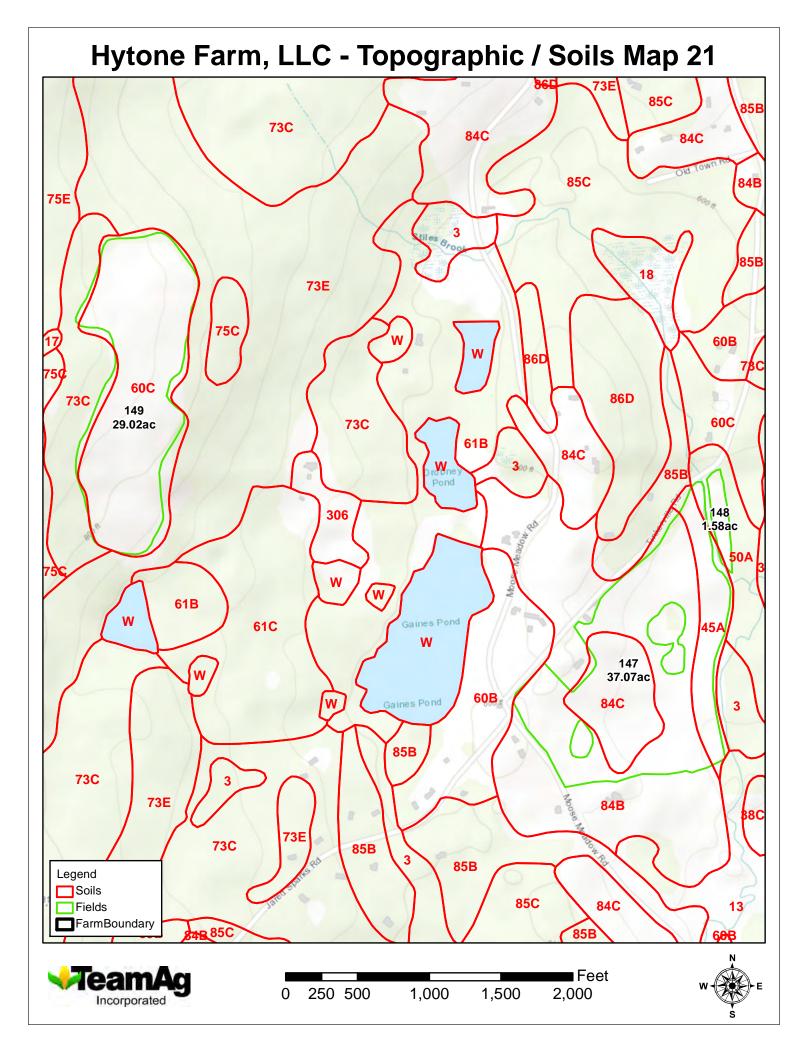














### 4.2. Land Treatment Conservation Practices

List and describe the planned treatment to address the resource concerns and producer goals. All NRCS conservation practices shall be installed, operated, and maintained according to NRCS conservation practice standards and associated technical specifications.. The following list of Operation & Maintenance (O & M) Plans shall be used when the Land Treatment Conservation Practices have been installed:

### **Operation & Management (O&M) Plan**

		Year of
Planned Practices	Tract # / Field #	Installation
Existing Waterways (412)	Fields 22 and 144	Unknown
Contour Farming (330) – fields shall be farmed	Fields 1024, 52, 53,	2022
within 1% absolute row grade in order to meet	55, 61, 31, 159, 164	
allowable soil loss tolerances		

All NRCS conservation practices shall be installed, operated, and maintained according to NRCS conservation practice standards and associated technical specifications.

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# Section 5. Soil and Risk Assessment Analyses

5.1. Soils Table

Field	Soil Survey	Map Unit	Soil Component Name	Surface Texture	Slope Range (%)	OM Range (%)	Bedrock Depth (in)	Drainage	Annual Flooding
1	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
1001	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
1002	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
1003	600	50A	Sutton	FSL	0-3%	2-6%	K	MWell	None
1004	600	85B	Paxton	MPM	3-8%	75-99.5%		Well	None
1005	600	47C	Woodbridge	MPM	3-15%	75-99.5%		MWell	None
1006	600	46B	Woodbridge	MPM	0-8%	75-99.5%		MWell	None
1007	600	75C	Hollis	HPM	3-15%	20-60%	15	SEWell	None
1008	600	2	Ridgebury	MPM	0-3%	75-99.5%		Poor	None
1011	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
1012	600	60C	Canton	FSL	8-15%	2-12%		Well	None
1013	600	60B	Canton	FSL	3-8%	2-12%		Well	None
1021	600	60B	Canton	FSL	3-8%	2-12%		Well	None
1022	600	60B	Canton	FSL	3-8%	2-12%		Well	None
1023	600	51B	Sutton	FSL	2-8%	2-6%		MWell	None
1024	600	84C	Paxton	FSL	8-15%	2-15%		Well	None
1031	600	50B	Sutton	FSL	3-8%	2-6%		MWell	None
1032	600	60B	Canton	FSL	3-8%	2-12%		Well	None
1033	600	73C	Charlton	MPM	3-15%	75-99.5%		Well	None
1034	600	73C	Charlton	MPM	3-15%	75-99.5%		Well	None
1035	600	60C	Canton	FSL	8-15%	2-12%		Well	None
1036	600	60C	Canton	FSL	8-15%	2-12%		Well	None
1037	600	60B	Canton	FSL	3-8%	2-12%		Well	None
1038	600	60B	Canton	FSL	3-8%	2-12%		Well	None
1038A	600	60B	Canton	FSL	3-8%	2-12%		Well	None
1039	600	50A	Sutton	FSL	0-3%	2-6%	1	MWell	None

Field	Soil Survey	Map Unit	Soil Component Name	Surface Texture	Slope Range (%)	OM Range (%)	Bedrock Depth (in)	Drainage	Annual Flooding
11	600	85B	Paxton	MPM	3-8%	75-99.5%		Well	None
111	600	60C	Canton	FSL	8-15%	2-12%		Well	None
112	600	60C	Canton	FSL	8-15%	2-12%		Well	None
113	600	60C	Canton	FSL	8-15%	2-12%		Well	None
114	600	3	Ridgebury	MPM	0-8%	75-99.5%		Poor	None
115	600	308	Udorthents	L	0-35%	2-6%		MWell	None
1151	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
1152	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
1153	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
1154	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
116	600	45C	Woodbridge	FSL	8-15%	2-15%		MWell	None
1169	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
12	600	60C	Canton	FSL	8-15%	2-12%		Well	None
13	600	85B	Paxton	MPM	3-8%	75-99.5%		Well	None
131	600	85B	Paxton	MPM	3-8%	75-99.5%		Well	None
132	600	61C	Canton	SPM	8-15%	75-99.5%		Well	None
14	600	60B	Canton	FSL	3-8%	2-12%		Well	None
141	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
142	600	45A	Woodbridge	FSL	0-3%	2-15%		MWell	None
143	600	84C	Paxton	FSL	8-15%	2-15%		Well	None
15	600	60B	Canton	FSL	3-8%	2-12%		Well	None
151	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
152	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
153	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
154	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
155	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
156	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
157	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
158	600	46B	Woodbridge	MPM	0-8%	75-99.5%		MWell	None
159	600	85C	Paxton	MPM	8-15%	75-99.5%		Well	None

Field	Soil Survey	Map Unit	Soil Component Name	Surface Texture	Slope Range (%)	OM Range (%)	Bedrock Depth (in)	Drainage	Annual Flooding
16	600	73C	Charlton	MPM	3-15%	75-99.5%		Well	None
161	600	45A	Woodbridge	FSL	0-3%	2-15%		MWell	None
163	600	23A	Sudbury	MPM	0-5%	45-95%		MWell	None
164	600	85C	Paxton	MPM	8-15%	75-99.5%		Well	None
17	600	60B	Canton	FSL	3-8%	2-12%		Well	None
171	600	67B	Narragansett	SIL	3-8%	2-6%		Well	None
18	600	60C	Canton	FSL	8-15%	2-12%		Well	None
2	600	45A	Woodbridge	FSL	0-3%	2-15%	K	MWell	None
21	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
22	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
23	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
24	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
25	600	46B	Woodbridge	MPM	0-8%	75-99.5%		MWell	None
26	600	45A	Woodbridge	FSL	0-3%	2-15%		MWell	None
27	600	45A	Woodbridge	FSL	0-3%	2-15%		MWell	None
28	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
29	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
3	600	47C	Woodbridge	MPM	3-15%	75-99.5%		MWell	None
301	600	50B	Sutton	FSL	3-8%	2-6%		MWell	None
302	600	51B	Sutton	FSL	2-8%	2-6%		MWell	None
31	600	45C	Woodbridge	FSL	8-15%	2-15%		MWell	None
311	600	60B	Canton	FSL	3-8%	2-12%		Well	None
312	600	60B	Canton	FSL	3-8%	2-12%		Well	None
32	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
321	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
322	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
323	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
324	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
326	600	45A	Woodbridge	FSL	0-3%	2-15%		MWell	None
33	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None

Field	Soil Survey	Map Unit	Soil Component Name	Surface Texture	Slope Range (%)	OM Range (%)	Bedrock Depth (in)	Drainage	Annual Flooding
331	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
332	600	60B	Canton	FSL	3-8%	2-12%		Well	None
333	600	61C	Canton	SPM	8-15%	75-99.5%		Well	None
334	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
335	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
34	600	13	Walpole	MPT	0-3%	55-99.5%		Poor	None
35	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
36	600	46B	Woodbridge	MPM	0-8%	75-99.5%	K	MWell	None
37	600	46B	Woodbridge	MPM	0-8%	75-99.5%		MWell	None
39	600	46B	Woodbridge	MPM	0-8%	75-99.5%		MWell	None
4	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
41	600	34B	Merrimac	FSL	3-8%	1.78-5.86%		SEWell	None
42	600	109	Fluvaquents	SIL	0-3%	2-6%		Poor	Freq
5	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
51	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
52	600	84C	Paxton	FSL	8-15%	2-15%		Well	None
53	600	84C	Paxton	FSL	8-15%	2-15%		Well	None
55	600	84C	Paxton	FSL	8-15%	2-15%		Well	None
56	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
58	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
6	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
61	600	84C	Paxton	FSL	8-15%	2-15%		Well	None
62	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None
63	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
64	600	34B	Merrimac	FSL	3-8%	1.78-5.86%		SEWell	None
65	600	34B	Merrimac	FSL	3-8%	1.78-5.86%		SEWell	None
66	600	34B	Merrimac	FSL	3-8%	1.78-5.86%		SEWell	None
67	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
7	600	85B	Paxton	MPM	3-8%	75-99.5%		Well	None
8	600	45B	Woodbridge	FSL	3-8%	3.34-9.72%		MWell	None

Field	Soil Survey	Map Unit	Soil Component Name	Surface Texture	Slope Range	OM Range	Bedrock Depth	Drainage	Annual Flooding
					(%)	(%)	(in)		
81	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
82	600	60C	Canton	FSL	8-15%	2-12%		Well	None
9	600	85B	Paxton	MPM	3-8%	75-99.5%		Well	None
147	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None
148	600	50A	Sutton	FSL	0-3%	2-6%		MWell	None
149	600	60C	Canton	FSL	8-15%	2-12%		Well	None
172	600	55B	Watchaug	FSL	3-8%	2-7%		MWell	None
173	600	67B	Narragansett	SIL	3-8%	2-6%	K	Well	None
174	600	55B	Watchaug	FSL	3-8%	2-7%		MWell	None
175	600	63B	Cheshire	FSL	3-8%	2-5%		Ŵell	None
1155	600	45C	Woodbridge	FSL	8-15%	2-15%		MWell	None
1156	600	84B	Paxton	FSL	3-8%	3.34-6.57%		Well	None



## 5.2. Soil Loss Calculations (RUSLE 2)

<u>File:</u> plans\Hytone Farm, LLC <u>Access Group:</u> R2\_NRCS\_Fld\_Office

Inputs:

Owner name	Location	Info
Hytone Farm	USA\Connecticut\Tolland County	



Field name	Soil	Slope T Value	Slope length, ft	Slope steepness, %
1001,1011,24,28,32 3,33,35,4,62	soils\State of Connecticut\45B Woodbridge fine sandy loam, 3 to 8 percent slopes\Woodbridge Fine sandy loam fine sandy loam 82%	3.0	150	5.50
1,1002,1169,151,15 2,153,29,32,321,322 ,324,331,334,335,5, 56,58,6,8	soils\State of Connecticut\45B Woodbridge fine sandy loam, 3 to 8 percent slopes\Woodbridge Fine sandy loam fine sandy loam 82%	3.0	150	5.50
1003	soils\State of Connecticut\50A Sutton fine sandy loam, 0 to 3 percent slopes\Sutton Fine sandy loam 80%	5.0	150	1.50
1039	soils\State of Connecticut\50A Sutton fine sandy loam, 0 to 3 percent slopes\Sutton Fine sandy loam 80%	5.0	150	1.50
131, 7	soils\State of Connecticut\85B Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony\Paxton Fine sandy loam 55%	3.0	150	5.50
1004,11,13,141,9	soils\State of Connecticut\85B Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony\Paxton Fine sandy loam 55%	3.0	150	5.50
1005	soils\State of Connecticut\47C Woodbridge fine sandy loam, 2 to 15 percent slopes, extremely stony\Woodbridge Fine sandy loam 80%	3.0	150	9.00
3	soils\State of Connecticut\47C Woodbridge fine sandy loam, 2 to 15 percent slopes, extremely stony\Woodbridge Fine sandy loam 80%	3.0	150	9.00
25,37	soils\State of Connecticut\46B Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony\Woodbridge Fine sandy loam very stony 82%	3.0	200	4.00
1006, 158,36,39	soils\State of Connecticut\46B Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony\Woodbridge Fine sandy loam very stony 82%	3.0	200	4.00
1007	soils\State of Connecticut\75C Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes\Chatfield Gravelly fine sandy loam 30%	2.0	120	9.00
1008	soils\State of Connecticut\2 Ridgebury fine sandy loam\Ridgebury Fine sandy loam 80%	3.0	150	1.50
149, 1012	soils\State of Connecticut\60C Canton and Charlton soils, 8 to 15 percent slopes\Charlton Fine sandy loam 35%	5.0	120	11.5
1035,1036,111,112, 113,12,18,82	soils\State of Connecticut\60C Canton and Charlton soils, 8 to 15 percent slopes\Charlton Fine sandy loam 35%	5.0	120	11.5
1013, 1038,1038A	soils\State of Connecticut\60B Canton and Charlton soils, 3 to 8 percent slopes\Canton Gravelly fine sandy loam 45%	3.0	150	5.50
1021,1022,1032,103 7,14,15,17,311,312, 332	soils\State of Connecticut\60B Canton and Charlton soils, 3 to 8 percent slopes\Canton Gravelly fine sandy loam 45%	3.0	150	5.50
1023, 302	soils\State of Connecticut\51B Sutton fine sandy loam, 2 to 8 percent slopes, very stony\Sutton Fine sandy loam 80%	5.0	170	5.00

1024,52,53,55,61	soils\State of Connecticut\84C Paxton and Montauk fine sandy loams, 8 to 15 percent slopes\Paxton Fine sandy loam 55%	3.0	120	11.5
143	soils\State of Connecticut\84C Paxton and Montauk fine sandy loams, 8 to 15 percent slopes\Paxton Fine sandy loam 55%	3.0	120	11.5
1031	soils\State of Connecticut\50B Sutton fine sandy loam, 3 to 8 percent slopes\Sutton Fine sandy loam 80%	5.0	150	5.50
301	soils\State of Connecticut\50B Sutton fine sandy loam, 3 to 8 percent slopes\Sutton Fine sandy loam 80%	5.0	150	5.50
1033,1034,16	soils\State of Connecticut\73C Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky\Charlton Fine sandy loam 45%	5.0	120	9.00
114	soils\State of Connecticut\3 Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony\Ridgebury Fine sandy loam extremely stony 40%	2.0	200	4.00
115	soils\State of Connecticut\308 Udorthents, smoothed\Udorthents Loam 80%	5.0	200	4.00
22,51,63,67	soils\State of Connecticut\84B Paxton and Montauk fine sandy loams, 3 to 8 percent slopes\Paxton Fine sandy loam 55%	3.0	150	5.50
1151,1152,1153,115 4,154,155,156,157,2 1,23,81, 147, 1156	soils\State of Connecticut\84B Paxton and Montauk fine sandy loams, 3 to 8 percent slopes\Paxton Fine sandy loam 55%	3.0	150	5.50
31	soils\State of Connecticut\45C Woodbridge fine sandy loam, 8 to 15 percent slopes\Woodbridge Fine sandy loam 80%	3.0	120	11.5
116, 1155	soils\State of Connecticut\45C Woodbridge fine sandy loam, 8 to 15 percent slopes\Woodbridge Fine sandy loam 80%	3.0	120	11.5
132	soils\State of Connecticut\61C Canton and Charlton soils, 8 to 15 percent slopes, very stony\Charlton Fine sandy loam 35%	5.0	120	11.5
333	soils\State of Connecticut\61C Canton and Charlton soils, 8 to 15 percent slopes, very stony\Charlton Fine sandy loam 35%	5.0	120	11.5
161,2,26,27,326	soils\State of Connecticut\61C Canton and Charlton soils, 8 to 15 percent slopes, very stony\Charlton Fine sandy loam 35%	5.0	120	11.5
142	soils\State of Connecticut\45A Woodbridge fine sandy loam, 0 to 3 percent slopes\Woodbridge Fine sandy loam 80%	3.0	150	1.50
164	soils\State of Connecticut\85C Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony\Montauk Fine sandy loam 30%	3.0	120	11.5
159	soils\State of Connecticut\85C Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony\Montauk Fine sandy loam 30%	3.0	120	11.5
41,64,65,66	soils\State of Connecticut\34B Merrimac sandy loam, 3 to 8 percent slopes\Merrimac Sandy loam 80%	3.0	150	5.50
163	soils\State of Connecticut\23A Sudbury sandy loam, 0 to 5 percent slopes\Sudbury Sandy loam 80%	3.0	250	2.50

171,172,173,174	soils\State of Connecticut\67B Narragansett silt loam, 3 to 8 percent slopes, very stony\Narragansett Silt loam 80%	3.0	150	5.00
34	soils\State of Connecticut\13 Walpole sandy loam, 0 to 3 percent slopes\Walpole Sandy loam 80%	4.0	150	1.50
42	soils\State of Connecticut\109 Fluvaquents-Udifluvents complex, frequently flooded\Fluvaquents Silt loam Frequently Flooded 50%	5.0	150	1.50

**Results:** 



Field name	Description	Contouring system	Support practices	Terrace/ diversion system	Cons. plan. soil loss, t/ac/yr	Sed. delivery, t/ac/yr	Soil conditioning index (SCI)	STIR value	Wind & irrigation- induced erosion for SCI
1001,1011,24,28,32 3,33,35,4,62		contour-systems∖a. rows up-and-down hill	none	none	2.1	2.1	0.38	11	0
1,1002,1169,151,15 2,153,29,32,321,322 ,324,331,334,335,5, 56,58,6,8		contour-systems∖a. rows up-and-down hill	none	none	0.087	0.087	0.83	1.2	0
1003		contour-systems\a. rows up-and-down hill	none	none	0.50	0.50	0.50	11	0
1039		contour-systems\a. rows up-and-down hill	none	none	0.030	0.030	0.84	1.2	0
131, 7		contour-systems\a. rows up-and-down hill	none	none	2.1	2.1	0.38	11	0
1004,11,13,141,9		contour-systems\a. rows up-and-down hill	none	none	0.087	0.087	0.83	1.2	0
1005		contour-systems\a. rows up-and-down hill	none	none	2.9	2.9	0.31	11	0
3		contour-systems\a. rows up-and-down hill	none	none	0.11	0.11	0.83	1.2	0
25,37		contour-systems\a. rows up-and-down hill	none	none	1.7	1.7	0.41	11	0
1006, 158,36,39		contour-systems\a. rows up-and-down hill	none	none	0.073	0.073	0.83	1.2	0
1007		contour-systems\a. rows up-and-down hill	none	none	1.8	1.8	0.40	11	0
1008		contour-systems\a. rows up-and-down hill	none	none	0.030	0.030	0.84	1.2	0
149, 1012		contour-systems\a. rows up-and-down hill	none	none	4.6	4.6	0.18	11	0
1035,1036,111,112, 113,12,18,82		contour-systems\a. rows up-and-down hill	none	none	0.17	0.17	0.82	1.2	0
1013, 1038,1038A		contour-systems\a. rows up-and-down hill	none	none	1.8	1.8	0.40	11	0

1021,1022,1032,103 7,14,15,17,311,312, 332	contour-systems∖a. rows up-and-down hill	none	none	0.074	0.074	0.83	1.2	0
1023, 302	contour-systems\a. rows up-and-down hill	none	none	0.059	0.059	0.83	1.2	0
1024,52,53,55,61	contour-systems\b. absolute row grade 1 percent	none	none	3.0	3.0	0.31	11	0
143	contour-systems\a. rows up-and-down hill	none	none	0.17	0.17	0.82	1.2	0
1031	contour-systems\a. rows up-and-down hill	none	none	1.5	1.5	0.42	11	0
301	contour-systems\a. rows up-and-down hill	none	none	0.063	0.063	0.83	1.2	0
1033,1034,16	contour-systems\a. rows up-and-down hill	none	none	0.12	0.12	0.83	1.2	0
114	contour-systems\a. rows up-and-down hill	none	none	0.096	0.096	0.83	1.2	0
115	contour-systems\a. rows up-and-down hill	none	none	0.082	0.082	0.83	1.2	0
22,51,63,67	contour-systems\a. rows up-and-down hill	none	none	2.1	2.1	0.38	11	0
1151,1152,1153,115 4,154,155,156,157,2 1,23,81, 147, 1156	contour-systems <sup>\</sup> a. rows up-and-down hill	none	none	0.087	0.087	0.83	1.2	0
31	contour-systems\b. absolute row grade 1 percent	none	none	2.6	2.6	0.34	11	0
116, 1155	contour-systems\a. rows up-and-down hill	none	none	0.14	0.14	0.83	1.2	0
132	contour-systems\a. rows up-and-down hill	none	none	4.6	4.6	0.18	11	0
333	contour-systems\a. rows up-and-down hill	none	none	1.5	1.5	0.61	17	0
161,2,26,27,326	contour-systems\a. rows up-and-down hill	none	none	4.6	4.6	0.18	11	0
142	contour-systems\a. rows up-and-down hill	none	none	0.21	0.21	0.72	17	0

164	contour-systems\b. absolute row grade 1 percent	none	none	2.6	2.6	0.34	11	0
159	contour-systems\b. absolute row grade 1 percent	none	none	0.12	0.12	0.83	1.2	0
41,64,65,66	contour-systems\a. rows up-and-down hill	none	none	2.1	2.1	0.38	11	0
163	contour-systems\a. rows up-and-down hill	none	none	1.1	1.1	0.45	11	0
171,172,173,174	contour-systems\a. rows up-and-down hill	none	none	2.8	2.8	0.32	11	0
34	contour-systems\a. rows up-and-down hill	none	none	0.030	0.030	0.84	1.2	0
42	contour-systems\a. rows up-and-down hill	none	none	0.78	0.78	0.48	11	0

The **SCI** is the **Soil Conditioning Index** rating. If the calculated index is a negative value, soil organic matter levels are predicted to decline under that production system. If the index is a positive value, soil organic matter levels are predicted to increase under that system.

The **STIR** value is the **Soil Tillage Intensity Rating**. It utilizes the speed, depth, surface disturbance percent and tillage type parameters to calculate a tillage intensity rating for the system used in growing a crop or a rotation. STIR ratings tend to show the differences in the degree of soil disturbance between systems. The kind, severity and number of ground disturbing passes are evaluated for the entire cropping rotation as shown in the management description.



### 5.3. Nitrogen and Phosphorus Risk Analyses

Nitrogen leaching Risk Index values indicate the potential for Nitrogen to leach below the root zone, unavailable for plant growth:

0.0 - 2.0: Low Risk

2.1 - 10.0: Medium Risk

10.1 & Above: High Risk

All of the fields managed by Hytone Farm have a medium or high nitrogen leaching index rating. For corn ground, which has a higher nitrogen uptake rate than grass, it is recommended that a pre-sidedress nitrate test be used to determine nitrogen needs mid-season which eliminates applying all nitrogen fertilizer at the beginning of the growing season. This helps to minimize potential nitrate leaching. It is also recommended that nitrogen fertilizers be treating with some type of nitrogen stabilizer

### Criteria for Nitrogen Application via Commercial Fertilizer Sources:

On fields with a "High Nitrogen Leaching Potential" apply the recommended nitrogen for spring planted crops prior to planting spring crops or split applications between pre-plant and a side-dress application. For perennial crops split the recommended application between two or three periods including early spring, early summer, or late summer. For fall planted crops apply a portion of the recommended amount in the fall and the remainder in the spring. Nitrogen may be fall applied for spring planted crops following NRCS guidance.

### Criteria for Nitrogen Application via Manure (during summer and Fall Periods):

On fields with a "High Nitrogen Leaching Potential" (rating more than 10) and with no growing crop, manure and other organic by-products application is to be limited to 50 Lbs/ac of PAN (Ammonium N + 1/3 of the Organic N) calculated at the time of application from June to October 1st to limit nitrogen leaching. When a grass or legume cover crop is growing or established immediately after waste application, manure or other organic by-products can be applied prior to October 1st at the recommended Nitrogen rate for the next non-legume crop or the nitrogen removal rate for the next legume (maximum 150 Lbs/ac) crop.

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Field	ID	Distance to Water (ft)	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	N Leaching Index	Watershed Code
	1	10	2.1	1.7	Tolland	45B (Woodbridge FSL)	High	011000020106
	1001	1483	1.6	1.6	Tolland	45B (Woodbridge FSL)	High	011000020105
	1002	1230	1.2	1.2	Tolland	45B (Woodbridge FSL)	High	011000020105
	1003	60	19.2	19.2	Tolland	50A (Sutton FSL)	High	011000020105
	1004	60	4.1	4.1	Tolland	85B (Paxton MPM)	High	011000020105
	1005	220	4.0	4.0	Tolland	47C (Woodbridge MPM)	High	011000020105
	1006	90	4.0	4.0	Tolland	46B (Woodbridge MPM)	High	011000020105
	1007	90	4.1	4.1	Tolland	75C (Hollis HPM)	High	011000020105
	1008	230	19.6	19.6	Tolland	2 (Ridgebury MPM)	High	011000020105
	1011	445	4.7	4.7	Tolland	45B (Woodbridge FSL)	High	011000020105
	1012	245	3.7	3.7	Tolland	60C (Canton FSL)	High	011000020105
	1013	65	7.5	7.5	Tolland	60B (Canton FSL)	High	011000020105
	1021	140	4.1	3.9	Tolland	60B (Canton FSL)	High	011000020105
	1022	500	1.9	1.6	Tolland	60B (Canton FSL)	High	011000020105
	1023	75	4.9	4.5	Tolland	51B (Sutton FSL)	High	011000020106
	1024	590	5.0	5.0	Tolland	84C (Paxton FSL)	High	011000020105
	1031	1850	2.5	2.5	Tolland	50B (Sutton FSL)	High	011000020105
	1032	1280	2.1	2.1	Tolland	60B (Canton FSL)	High	011000020105
	1033	650	2.1	2.0	Tolland	73C (Charlton MPM)	High	011000020105
	1034	530	2.5	2.5	Tolland	73C (Charlton MPM)	High	011000020105
	1035	510	0.9	0.6	Tolland	60C (Canton FSL)	High	011000020105
	1036	60	4.6	4.6	Tolland	60C (Canton FSL)	High	011000020105
	1037	100	3.4	3.4	Tolland	60B (Canton FSL)	High	011000020105
	1038	60	3.8	3.8	Tolland	60B (Canton FSL)	High	011000020105
	1038A	110	1.6	1.6	Tolland	60B (Canton FSL)	High	011000020105
	1039	380	1.2	1.2	Tolland	50A (Sutton FSL)	High	011000020105
	11	580	4.7	4.7	Tolland	85B (Paxton MPM)	High	011000020105
	111	35	1.5	1.5	Tolland	60C (Canton FSL)	High	011000020105
	112	35	1.0	0.5	Tolland	60C (Canton FSL)	High	011000020105

# 5.4.1 Field Risk Assessment: RUSLE 2, Phosphorus Index and Nitrogen Leaching Index Parameters

Field ID	Distance to Water (ft)	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	N Leaching Index	Watershed Code
113	15	4.6	3.7	Tolland	60C (Canton FSL)	High	011000020105
114	40	4.4	4.4	Tolland	3 (Ridgebury MPM)	High	011000020105
115	35	2.1	2.1	Tolland	308 (Udorthents L)	High	011000020105
1151	630	3.6	3.3	Tolland	84B (Paxton FSL)	High	011000020106
1152	200	1.0	1.0	Tolland	84B (Paxton FSL)	High	011000020106
1153	390	1.5	1.4	Tolland	84B (Paxton FSL)	High	011000020106
1154	341	4.8	4.8	Tolland	84B (Paxton FSL)	High	011000020106
116	260	1.9	1.9	Tolland	45C (Woodbridge FSL)	High	011000020105
1169	360	20.1	20.0	Tolland	45B (Woodbridge FSL)	High	011000020106
12	560	3.8	3.8	Tolland	60C (Canton FSL)	High	011000020105
13	325	8.1	8.1	Tolland	85B (Paxton MPM)	High	011000020105
131	600	8.1	8.1	Tolland	85B (Paxton MPM)	High	010802050801
132	310	2.4	2.4	Tolland	61C (Canton SPM)	High	010802050801
14	390	4.5	4.5	Tolland	60B (Canton FSL)	High	011000020105
141	420	17.8	17.8	Tolland	84B (Paxton FSL)	High	011000020204
142	250	4.1	4.1	Tolland	45A (Woodbridge FSL)	High	011000020205
143	150	5.0	4.4	Tolland	84C (Paxton FSL)	High	011000020205
15	95	1.6	1.6	Tolland	60B (Canton FSL)	High	011000020105
151	760	6.9	6.6	Tolland	45B (Woodbridge FSL)	High	011000020106
152	930	7.5	7.5	Tolland	45B (Woodbridge FSL)	High	011000020106
153	440	11.4	11.2	Tolland	45B (Woodbridge FSL)	High	011000020106
154	430	5.0	4.8	Tolland	84B (Paxton FSL)	High	011000020106
155	700	2.9	2.9	Tolland	84B (Paxton FSL)	High	011000020106
156	150	3.0	2.9	Tolland	84B (Paxton FSL)	High	011000020106
157	240	3.4	3.3	Tolland	84B (Paxton FSL)	High	011000020106
158	40	9.4	9.4	Tolland	46B (Woodbridge MPM)	High	011000020106
159	220	4.2	4.2	Tolland	85C (Paxton MPM)	High	011000020106
16	80	1.9	1.9	Tolland	73C (Charlton MPM)	High	011000020105
161	280	11.4	11.4	Tolland	45A (Woodbridge FSL)	High	011000020206
163	35	10.8	10.8	Tolland	23A (Sudbury MPM)	High	011000020206

Field ID	Distance to Water (ft)	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	N Leaching Index	Watershed Code
164	390	4.9	4.9	Tolland	85C (Paxton MPM)	High	011000020206
17	40	3.8	3.8	Tolland	60B (Canton FSL)	High	011000020105
171	120	8.0	7.6	Tolland	67B (Narragansett SIL)	High	010802050402
18	350	2.8	2.8	Tolland	60C (Canton FSL)	High	011000020105
2	460	22.0	21.8	Tolland	45A (Woodbridge FSL)	High	011000020106
21	220	8.1	7.9	Tolland	84B (Paxton FSL)	High	011000020105
22	115	11.8	11.5	Tolland	84B (Paxton FSL)	High	011000020105
23	460	0.9	0.9	Tolland	84B (Paxton FSL)	High	011000020105
24	120	10.0	10.0	Tolland	45B (Woodbridge FSL)	High	011000020105
25	35	9.5	9.5	Tolland	46B (Woodbridge MPM)	High	011000020105
26	240	3.1	3.1	Tolland	45A (Woodbridge FSL)	High	011000020105
27	220	1.9	1.9	Tolland	45A (Woodbridge FSL)	High	011000020105
28	950	5.0	4.7	Tolland	45B (Woodbridge FSL)	High	011000020105
29	860	3.3	3.1	Tolland	45B (Woodbridge FSL)	High	011000020105
3	360	1.6	1.6	Tolland	47C (Woodbridge MPM)	High	011000020106
301	675	10.1	9.9	Tolland	50B (Sutton FSL)	High	011000020106
302	560	6.7	6.4	Tolland	51B (Sutton FSL)	High	011000020106
31	270	12.8	12.8	Tolland	45C (Woodbridge FSL)	Medium	011000020106
311	520	4.2	3.6	Tolland	60B (Canton FSL)	High	011000020106
312	530	2.9	2.7	Tolland	60B (Canton FSL)	High	011000020106
32	1300	3.5	2.8	Tolland	45B (Woodbridge FSL)	Medium	011000020106
321	40	11.4	11.2	Tolland	45B (Woodbridge FSL)	High	011000020106
322	40	13.8	13.7	Tolland	45B (Woodbridge FSL)	High	011000020106
323	665	6.3	6.1	Tolland	45B (Woodbridge FSL)	High	011000020106
324	200	8.6	8.5	Tolland	45B (Woodbridge FSL)	High	011000020106
326	1340	3.5	3.4	Tolland	45A (Woodbridge FSL)	Medium	011000020106
33	450	26.7	26.5	Tolland	45B (Woodbridge FSL)	Medium	011000020106
331	1285	1.5	1.3	Tolland	45B (Woodbridge FSL)	High	011000020106
332	1650	5.2	5.0	Tolland	60B (Canton FSL)	High	011000020106
333	990	1.7	1.7	Tolland	61C (Canton SPM)	High	011000020106

Field ID	Distance to Water (ft)	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	N Leaching Index	Watershed Code
334	560	4.1	4.1	Tolland	45B (Woodbridge FSL)	High	011000020106
335	1520	0.6	0.6	Tolland	45B (Woodbridge FSL)	High	011000020106
34	1060	5.1	5.1	Tolland	13 (Walpole MPT)	Medium	011000020106
35	800	4.0	4.0	Tolland	45B (Woodbridge FSL)	Medium	011000020106
36	35	3.0	3.0	Tolland	46B (Woodbridge MPM)	Medium	011000020106
37	240	23.5	23.5	Tolland	46B (Woodbridge MPM)	Medium	011000020106
39	1120	1.9	1.9	Tolland	46B (Woodbridge MPM)	Medium	011000020106
4	1630	2.9	2.8	Tolland	45B (Woodbridge FSL)	High	011000020105
41	35	28.4	28.4	Tolland	34B (Merrimac FSL)	High	011000020108
42	20	2.8	2.0	Tolland	109 (Fluvaquents SIL)	High	011000020108
5	660	12.7	12.7	Tolland	45B (Woodbridge FSL)	High	011000020105
51	320	2.6	2.3	Tolland	84B (Paxton FSL)	High	011000020106
52	15	2.9	2.2	Tolland	84C (Paxton FSL)	High	011000020106
53	40	2.8	2.6	Tolland	84C (Paxton FSL)	High	011000020106
55	80	1.6	1.5	Tolland	84C (Paxton FSL)	High	011000020106
56	330	1.6	1.6	Tolland	45B (Woodbridge FSL)	High	011000020106
58	70	9.6	9.6	Tolland	45B (Woodbridge FSL)	High	011000020106
6	1390	1.3	1.3	Tolland	45B (Woodbridge FSL)	High	011000020105
61	40	6.2	6.2	Tolland	84C (Paxton FSL)	High	011000020106
62	500	1.8	1.8	Tolland	45B (Woodbridge FSL)	High	011000020106
63	350	5.7	5.0	Tolland	84B (Paxton FSL)	High	010802050801
64	20	3.5	3.2	Tolland	34B (Merrimac FSL)	High	010802050801
65	20	2.8	2.6	Tolland	34B (Merrimac FSL)	High	010802050801
66	20	2.0	1.5	Tolland	34B (Merrimac FSL)	High	010802050801
67	680	1.5	1.5	Tolland	84B (Paxton FSL)	High	010802050801
7	1120	7.4	7.4	Tolland	85B (Paxton MPM)	High	011000020105
8	1040	0.6		Tolland	45B (Woodbridge FSL)	High	011000020105
81	75	5.4	5.3	Tolland	84B (Paxton FSL)	High	011000020106
82	320	1.6	1.4	Tolland	60C (Canton FSL)	High	011000020106
9	1240	0.8	0.8	Tolland	85B (Paxton MPM)	High	011000020105

Field ID	Distance to Water (ft)	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	N Leaching Index	Watershed Code
147	15	37.1	31.5	Tolland	84B (Paxton FSL)	High	011000020204
148	15	1.6	0.5	Tolland	50A (Sutton FSL)	High	011000020204
149	198	29.0	29.0	Tolland	60C (Canton FSL)	High	011000020204
172	40	2.5	2.5	Tolland	55B (Watchaug FSL)	High	010802050402
173	240	5.1	4.7	Tolland	67B (Narragansett SIL)	High	010802050402
174	90	1.3	1.3	Tolland	55B (Watchaug FSL)	High	010802050402
175	680	5.2	5.2	Tolland	63B (Cheshire FSL)	High	010802050401
1155	755	5.7	4.8	Tolland	45C (Woodbridge FSL)	High	011000020106
1156	1,567	12.3	11.9	Tolland	84B (Paxton FSL)	High	011000020106

# 5.4.2 Connecticut Phosphorus Runoff Index





CT NRCS Phosphoru The CT NRCS Phosphorus Runoff Index was adapt Phosphorus Runoff Index, Version 2 (January 201) and K. Czymmek from the "NY P Index Working G	2) from the original work of Q.M. I	(modifi	<sup>.</sup> Uconn Soil Test P ed Morgan in Ib/ac)		
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	1	1001	1002	1003	1004
Soil test P (UConn modified Morgan P in lb/ac)	8	32	32	13	14
Select Field's Dominant Soil Series	Woodbridge	Woodbridge	Woodbridge	Sutton	Paxton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied				
Fertilizer P application method	None applied				
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days				
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Moderately well drained	Moderately well drained	Moderately well drained	Well drained
Flooding frequency	Rare (>100 years) or never				
		1483	1230		
Flow distance to blue line stream or equivalent (feet) Stream type	890 Perennial	Perennial	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	60 Perennial	60 Perennial
Stream type	Fereninia	Fereninai	Internittent	Ferenina	Fereninai
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never				
Flow distance to blue line stream or equivalent (feet)	890	1483	1230	60	60
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Intermittent	Perennial	Perennial
Concentrated flow?	No (not present)				
	27	26	26	29	20
DISSOLVED P INDEX	27 Low	36 Low	36 Low	Low	30 Low
	LOW	LOW	LOW	LOW	LOW
	27	36	36	29	30
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management				
TOTAL SOURCE SCORE	91	121	121	97	99
Soil test P contribution	10	40	40	16	18
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	1005	1006	1007	1008	1011
Soil test P (UConn modified Morgan P in Ib/ac)	13	9	13	18	13
Select Field's Dominant Soil Series	Woodbridge	Woodbridge	Hollis	-	Woodbridge
Fertilizer P application rate (lbs $P_2O_5/acre$ )	0 Woodbridge	0	0	Ridgebury 0	0 Woodbridge
Fertilizer P application rate (lbs P205/acre)	None Applied				
Fertilizer P application unling Fertilizer P application method	None applied				
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
	104 October	October	October	October	October
Organic P application #1 timing					
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days				
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days
DISSOLVED P TRANSPORT FACTOR	Moderately well drained	Moderately well drained	Somewhat excessively drained	Poorly drained	Moderately well drained
Soil drainage class	· · · · ·			· · · · · ·	· · · ·
Flooding frequency	Rare (>100 years) or never				
Flow distance to blue line stream or equivalent (feet)	220	90	90	230	445
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never				
			. , ,		. , ,
Flow distance to blue line stream or equivalent (feet)	220	90	90	230	445
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)				
	29	28	29	31	29
DISSOLVED P INDEX	Low	Low	Low	Low	Low
PARTICULATE P INDEX	29	28	29	31	29
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management				
TOTAL SOURCE SCORE	97	92	97	104	97
Cail teat D contribution	16	11	16	23	16
Soil test P contribution	0.0	0.0	0.0	0.0	0.0
Fertilizer P contribution		81.1	81.1	81.1	81.1
Fertilizer P contribution Organic P contribution	81.1				
Fertilizer P contribution Organic P contribution TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Fertilizer P contribution Organic P contribution TOTAL DISSOLVED TRANSPORT SCORE Flow distance contribution	0.3 0.0	0.3 0.0	0.0	0.0	0.0
Fertilizer P contribution Organic P contribution TOTAL DISSOLVED TRANSPORT SCORE Flow distance contribution TOTAL PARTICULATE TRANSPORT SCORE	0.3 0.0 0.3	0.3 0.0 0.3	0.0 0.3	0.0 0.3	0.0 0.3
Fertilizer P contribution Organic P contribution TOTAL DISSOLVED TRANSPORT SCORE Flow distance contribution	0.3 0.0	0.3 0.0	0.0	0.0	0.0

CT NRCS Phosphoru	I:				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	1012	1013	1021	1022	1023
Soil test P (UConn modified Morgan P in lb/ac)	13	13	10	10	6
Select Field's Dominant Soil Series	Canton	Canton	Canton	Canton	Sutton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Well drained	Well drained	Well drained	Well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	245	65	140	500	75
Stream type	Perennial	Perennial	Perennial	Intermittent	Intermittent
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	245	65	140	500	75
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Intermittent	Intermittent
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
				22	
DISSOLVED P INDEX	29	29	28	28	27
	Low	Low	Low	Low	Low
	29	29	28	28	27
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	97	94	94	89
Soil test P contribution	16	16	13	13	8
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	I:				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G					
	1				
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	1024	1031	1032	1033	1034
Soil test P (UConn modified Morgan P in lb/ac)	13	10	3	13	4
Select Field's Dominant Soil Series	Paxton	Sutton	Canton	Charlton	Charlton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
ertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Drganic P application #1 rate (lbs $P_2O_5$ /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Drganic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Drganic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
DISSOLVED P TRANSPORT FACTOR					
ioil drainage class	Well drained	Moderately well drained	Well drained	Well drained	Well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
low distance to blue line stream or equivalent (feet)	590	1850	1280	650	530
Stream type	Perennial	Intermittent	Intermittent	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
irosion (RUSLE in tons/acre)	3	3	3	3	3
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	590	1850	1280	650	530
Stream type (blue line on topomap or equivalent)	Perennial	Intermittent	Intermittent	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	29	28	25	29	26
DISSOLVED P INDEX	Low	Low	Low	Low	Low
	2011		200	200	2011
PARTICULATE P INDEX	29	28	25	29	26
	Low	Low	Low	Low	Low
IANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
OTAL SOURCE SCORE	97	94	85	97	86
oil test P contribution	16	13	4	16	5
ertilizer P contribution	0.0	0.0	0.0	0.0	0.0
rganic P contribution	81.1	81.1	81.1	81.1	81.1
OTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
	0.0	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
low distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	I:				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G	r				
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	1035	1036	1037	1038	1038A
Soil test P (UConn modified Morgan P in lb/ac)	13	11	9	13	13
Select Field's Dominant Soil Series	Canton	Canton	Canton	Canton	Canton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Well drained	Well drained	Well drained	Well drained	Well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
low distance to blue line stream or equivalent (feet)	510	60	100	60	110
Stream type	Intermittent	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	510	60	100	60	110
Stream type (blue line on topomap or equivalent)	Intermittent	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
DISSOLVED P INDEX	29	28	28	29	29
	Low	Low	Low	Low	Low
	29	28	28	29	29
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	95	92	97	97
Soil test P contribution	16	14	11	16	16
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Drganic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NDCS December					
CT NRCS Phosphoru					
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G					
	Farm Name:				
Landowner/Operator: Hytone Farm, LLC					
County: Tolland	Notes:				
Date: 3/9/2018	1000				110
FIELD NAME>	1039	11	111	112	113
Soil test P (UConn modified Morgan P in lb/ac)	2	13	13	13	13
Select Field's Dominant Soil Series	Sutton	Paxton	Canton	Canton	Canton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied				
Fertilizer P application method	None applied				
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre) Organic P application #1 timing	104 October	104 October	104 October	104 October	104 October
	1				
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days				
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Well drained	Well drained	Well drained	Well drained
Flooding frequency	Rare (>100 years) or never				
Flow distance to blue line stream or equivalent (feet)	380	580	35	35	15
Stream type	Perennial	Perennial	Intermittent	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never				
Flow distance to blue line stream or equivalent (feet)	380	580	35	35	15
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Intermittent	Perennial	Perennial
Concentrated flow?	No (not present)				
	25	29	29	29	29
DISSOLVED P INDEX	Low	Low	Low	Low	Low
PARTICULATE P INDEX	25	29	29	29	29
	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management				
TOTAL SOURCE SCORE	84	97	97	97	97
Soil test P contribution	3	16 0.0	16	16	16
Fertilizer P contribution Organic P contribution	0.0 81.1	0.0 81.1	0.0 81.1	0.0 81.1	0.0 81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	I:								
The CT NRCS Phosphorus Runoff Index was adapte									
Phosphorus Runoff Index, Version 2 (January 2012									
and K. Czymmek from the "NY P Index Working G	r								
Landowner/Operator: Hytone Farm, LLC	Farm Name:								
County: Tolland	Notes:								
Date: 3/9/2018									
FIELD NAME>	114	115	1151	1152	1153				
Soil test P (UConn modified Morgan P in lb/ac)	13	13	19	13	7				
Select Field's Dominant Soil Series	Ridgebury	Udorthents	Paxton	Paxton	Paxton				
ertilizer P application rate (lbs P2O5/acre)	0	0	0	0	0				
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied				
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied				
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104				
Drganic P application #1 timing	October	October	October	October	October				
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da							
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104				
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April				
Organic P application #2 method	Surface applied or	Surface applied or	Surface applied or broadcast/incorporated after 5 days	Surface applied or	Surface applied or				
DISSOLVED P TRANSPORT FACTOR									
Soil drainage class	Poorly drained	Moderately well drained	Well drained	Well drained	Well drained				
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never							
low distance to blue line stream or equivalent (feet)	40	35	630	200	390				
Stream type	Intermittent	Intermittent	Perennial	Intermittent	Perennial				
PARTICULATE P TRANSPORT FACTOR									
Erosion (RUSLE in tons/acre)	3	3	3	3	3				
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never							
Flow distance to blue line stream or equivalent (feet)	40	35	630	200	390				
Stream type (blue line on topomap or equivalent)	Intermittent	Intermittent	Perennial	Intermittent	Perennial				
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)				
	20	20	21	20	27				
DISSOLVED P INDEX	29 Low	29 Low	31 Low	29 Low	27 Low				
	LOW	LOW	LOW	LOW	LOW				
	29	29	31	29	27				
PARTICULATE P INDEX	Low	Low	Low	Low	Low				
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management				
TOTAL SOURCE SCORE	97	97	105	97	90				
Soil test P contribution	16	16	24	16	9				
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0				
Drganic P contribution	81.1	81.1	81.1	81.1	81.1				
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3				
Flow distance contribution	0.0	0.0	0.0	0.0	0.0				
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3				
Erosion contribution	0.3	0.3	0.3	0.3	0.3				
Flow distance contribution	0.0	0.0	0.0	0.0	0.0				
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0				

CT NRCS Phosphoru								
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Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G								
Landowner/Operator: Hytone Farm, LLC	Farm Name:							
County: Tolland	Notes:							
Date: 3/9/2018								
FIELD NAME>	1154	116	1169	12	13			
Soil test P (UConn modified Morgan P in lb/ac)	13	13	3	11	13			
Select Field's Dominant Soil Series	Paxton	Woodbridge	Woodbridge	Canton	Paxton			
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0			
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied			
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied			
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104			
Organic P application #1 timing	October	October	October	October	October			
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day						
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104			
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April			
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day						
DISSOLVED P TRANSPORT FACTOR								
Soil drainage class	Well drained	Moderately well drained	Moderately well drained	Well drained	Well drained			
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never						
Flow distance to blue line stream or equivalent (feet)	341	260	360	560	325			
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial			
PARTICULATE P TRANSPORT FACTOR								
Erosion (RUSLE in tons/acre)	3	3	3	3	3			
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never						
Flow distance to blue line stream or equivalent (feet)	341	260	360	560	325			
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial			
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)			
DISSOLVED P INDEX	29	29	25	28	29			
	Low	Low	Low	Low	Low			
	29	29	25	28	29			
PARTICULATE P INDEX	Low	Low	Low	Low	Low			
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management			
TOTAL SOURCE SCORE	97	97	85	95	97			
Soil test P contribution	16	16	4	14	16			
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0			
Organic P contribution	81.1	81.1	81.1	81.1	81.1			
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3			
Flow distance contribution	0.0	0.0	0.0	0.0	0.0			
TOTAL PARTICULATE TRANSPORT SCORE Erosion contribution	0.3	0.3	0.3	0.3	0.3			
Flow distance contribution	0.3	0.3	0.3	0.3	0.3			
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0			

CT NRCS Phosphoru	I:				
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Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G	r				
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	131	132	14	141	142
Soil test P (UConn modified Morgan P in lb/ac)	13	13	13	3	3
Select Field's Dominant Soil Series	Paxton	Canton	Canton	Paxton	Woodbridge
Fertilizer P application rate (lbs P2O5/acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Well drained	Well drained	Well drained	Well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	600	310	390	420	250
Stream type	Perennial	Perennial	Intermittent	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	600	310	390	420	250
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Intermittent	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
DISSOLVED P INDEX	29	29	29	25	25
	Low	Low	Low	Low	Low
	29	29	29	25	25
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	97	97	85	85
Soil test P contribution	16	16	16	4	4
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution TOTAL PARTICULATE TRANSPORT SCORE	0.0	0.0	0.0	0.0	0.0
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	I:				
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Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G	r				
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	143	15	151	152	153
Soil test P (UConn modified Morgan P in lb/ac)	7	13	5	6	12
Select Field's Dominant Soil Series	Paxton	Canton	Woodbridge	Woodbridge	Woodbridge
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Well drained	Well drained	Moderately well drained	Moderately well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	150	95	760	930	440
Stream type	Perennial	Perennial	Perennial	Perennial	Intermittent
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	150	95	760	930	440
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Intermittent
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	27	29	26	27	29
DISSOLVED P INDEX	Low	Low	Low	Low	Low
PARTICULATE P INDEX	27	29	26	27	29
	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	90	97	87	89	96
Soil test P contribution	9	16	6	8	15
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0
					5.0

CT NRCS Phosphoru	1:				
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Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	154	155	156	157	158
Soil test P (UConn modified Morgan P in lb/ac)	35	7	6	13	5
Select Field's Dominant Soil Series	Paxton	Paxton	Paxton	Paxton	Woodbridge
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Drganic P application #1 rate (lbs P2O5/acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da
Drganic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Drganic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 d			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Well drained	Well drained	Well drained	Well drained	Moderately well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
low distance to blue line stream or equivalent (feet)	430	700	150	240	40
Stream type	Intermittent	Perennial	Perennial	Intermittent	Intermittent
PARTICULATE P TRANSPORT FACTOR					
crosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	430	700	150	240	40
Stream type (blue line on topomap or equivalent)	Intermittent	Perennial	Perennial	Intermittent	Intermittent
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	No (not present)	no (not present)	no (not present)	no (not present)	No (not present)
DISSOLVED P INDEX	37	27	27	29	26
DISSOLVED P INDEA	Low	Low	Low	Low	Low
PARTICULATE P INDEX	37 Low	27 Low	27 Low	29 Low	26 Low
	LOW	LOW	LOW	LOW	EOW
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	100	90	89	97	87
	125				
	44	9	8	16	6
ertilizer P contribution	44 0.0	9 0.0	8 0.0	16 0.0	0.0
ertilizer P contribution Organic P contribution	44 0.0 81.1	9 0.0 81.1	8 0.0 81.1	16 0.0 81.1	0.0 81.1
Fertilizer P contribution Organic P contribution FOTAL DISSOLVED TRANSPORT SCORE	44 0.0 81.1 0.3	9 0.0 81.1 0.3	8 0.0 81.1 0.3	16 0.0 81.1 0.3	0.0 81.1 0.3
Fertilizer P contribution Organic P contribution FOTAL DISSOLVED TRANSPORT SCORE Flow distance contribution	44 0.0 81.1 0.3 0.0	9 0.0 81.1 0.3 0.0	8 0.0 81.1 0.3 0.0	16 0.0 81.1 0.3 0.0	0.0 81.1 0.3 0.0
Fertilizer P contribution Organic P contribution TOTAL DISSOLVED TRANSPORT SCORE Flow distance contribution TOTAL PARTICULATE TRANSPORT SCORE	44 0.0 81.1 0.3 0.0 0.3	9 0.0 81.1 0.3 0.0 0.3	8 0.0 81.1 0.3 0.0 0.3	16 0.0 81.1 0.3 0.0 0.3	0.0 81.1 0.3 0.0 0.3
Soil test P contribution Fertilizer P contribution Organic P contribution <b>TOTAL DISSOLVED TRANSPORT SCORE</b> Flow distance contribution <b>TOTAL PARTICULATE TRANSPORT SCORE</b> Erosion contribution Flow distance contribution	44 0.0 81.1 0.3 0.0	9 0.0 81.1 0.3 0.0	8 0.0 81.1 0.3 0.0	16 0.0 81.1 0.3 0.0	0.0 81.1 0.3 0.0

CT NRCS Phosphoru	I:				
The CT NRCS Phosphorus Runoff Index was adapted					
Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	159	16	161	163	164
Soil test P (UConn modified Morgan P in lb/ac)	13	13	27	31	13
Select Field's Dominant Soil Series	Paxton	Charlton	Woodbridge	Sudbury	Paxton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
ertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 d			
Drganic P application #2 rate (lbs $P_2O_5/acre$ )	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Drganic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 d			
DISSOLVED P TRANSPORT FACTOR					
ioil drainage class	Well drained	Well drained	Moderately well drained	Moderately well drained	Well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
low distance to blue line stream or equivalent (feet)	220	80	280	35	390
Stream type	Perennial	Perennial	Perennial	Perennial	Intermittent
PARTICULATE P TRANSPORT FACTOR					
rosion (RUSLE in tons/acre)	3	3	3	3	3
-looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	220	80	280	35	390
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Intermittent
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	29	29	34	36	29
DISSOLVED P INDEX	Low	Low	Low	Low	Low
	Low	Low	Low	Low	Low
PARTICULATE P INDEX	29	29	34	36	29
ARTICOLATE P INDEX	Low	Low	Low	Low	Low
ANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
OTAL SOURCE SCORE	97	97	115	120	97
oil test P contribution	16	16	34	39	16
ertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Iow distance contribution OTAL PARTICULATE TRANSPORT SCORE	0.0	0.0	0.0	0.0	0.0
rosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	1				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
nd K. Czymmek from the "NY P Index Working G					
andowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	17	171	18	2	21
Soil test P (UConn modified Morgan P in lb/ac)	4	13	13	14	12
Select Field's Dominant Soil Series	Canton	Narragansett	Canton	Woodbridge	Paxton
ertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Drganic P application #1 rate (lbs P2O5/acre)	104	104	104	104	104
Drganic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 d			
Drganic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
	Surface applied or	Surface applied or	Surface applied or	Surface applied or	Surface applied or
Drganic P application #2 method	broadcast/incorporated after 5 days	broadcast/incorporated after 5 c			
DISSOLVED P TRANSPORT FACTOR					
ioil drainage class	Well drained	Well drained	Well drained	Moderately well drained	Well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Now distance to blue line stream or equivalent (feet)	40	120	350	460	220
Stream type	Intermittent	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
rosion (RUSLE in tons/acre)	3	3	3	3	3
	, , , , , , , , , , , , , , , , , , ,				
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
low distance to blue line stream or equivalent (feet)	40	120	350	460	220
Stream type (blue line on topomap or equivalent)	Intermittent	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	26	29	29	20	29
DISSOLVED P INDEX	Low	29 Low	Low	30 Low	Low
	LOW	LOW	LOW	LOW	LOW
	26	29	29	30	29
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
	te based management	it based management	t based management	it based management	te based management
TOTAL SOURCE SCORE	86	97	97	99	96
Soil test P contribution	5	16	16	18	15
ertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
OTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
low distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Frosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0
	0.0		0.0	0.0	0.0

CT NRCS Phosphoru					
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name: Notes:				
County: Tolland	Notes:				
Date: 3/9/2018			•4		
FIELD NAME>	22	23	24	25	26
Soil test P (UConn modified Morgan P in lb/ac)	28	13	17	13	19
Select Field's Dominant Soil Series	Paxton	Paxton	Woodbridge	Woodbridge	Woodbridge
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
Organic P application #2 rate (lbs P2O5/acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da
DISSOLVED P TRANSPORT FACTOR					
Goil drainage class	Well drained	Well drained	Moderately well drained	Moderately well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	115	460	120	35	240
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Frosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	115	460	120	35	240
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	25	29	21	20	21
DISSOLVED P INDEX	35 Low	Low	31 Low	29 Low	31 Low
	LOW	LOW	LOW	Low	Low
PARTICULATE P INDEX	35	29	31	29	31
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	116	97	102	97	105
Soil test P contribution	35	16	21	16	24
ertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	l.				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
nd K. Czymmek from the "NY P Index Working G					
andowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
TELD NAME>	27	28	29	3	301
oil test P (UConn modified Morgan P in lb/ac)	13	5	17	16	5
elect Field's Dominant Soil Series	Woodbridge	Woodbridge	Woodbridge	Woodbridge	Sutton
ertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
ertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
ertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 d
Drganic P application #2 rate (lbs $P_2O_5$ /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Drganic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 d
DISSOLVED P TRANSPORT FACTOR					
oil drainage class	Moderately well drained	Moderately well drained	Moderately well drained	Moderately well drained	Moderately well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never
low distance to blue line stream or equivalent (feet)	220	950	860	360	675
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
ARTICULATE P TRANSPORT FACTOR					
rosion (RUSLE in tons/acre)	3	3	3	3	3
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never
low distance to blue line stream or equivalent (feet)	220	950	860	360	675
tream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	29	26	31	30	26
DISSOLVED P INDEX		20	51	50	
	OW	Low	Low	Low	LOW.
	Low	Low	Low	Low	Low
	Low 29	Low 26	Low 31	Low 30	26
PARTICULATE P INDEX					
	29	26	31	30	26
	29 Low	26 Low	31 Low	30 Low	26 Low
IANAGEMENT RECOMMENDATION	29 Low	26 Low	31 Low	30 Low	26 Low
IANAGEMENT RECOMMENDATION	29 Low N based management 97 16	26 Low N based management 87 6	31 Low N based management 102 21	30 Low N based management 101 20	26 Low N based management
IANAGEMENT RECOMMENDATION OTAL SOURCE SCORE oil test P contribution ertilizer P contribution	29 Low N based management 97 16 0.0	26 Low N based management 87 6 0.0	31 Low N based management 102 21 0.0	30 Low N based management 101 20 0.0	26 Low N based management 87 6 0.0
IANAGEMENT RECOMMENDATION OTAL SOURCE SCORE oil test P contribution ertilizer P contribution Irganic P contribution	29 Low N based management 97 16 0.0 81.1	26 Low N based management 87 6 0.0 81.1	31 Low N based management 102 21 0.0 81.1	30 Low N based management 101 20 0.0 81.1	26 Low N based management 87 6 0.0 81.1
TOTAL SOURCE SCORE ioil test P contribution ertilizer P contribution rganic P contribution OTAL DISSOLVED TRANSPORT SCORE	29 Low N based management 97 16 0.0 81.1 0.3	26 Low N based management 87 6 0.0 81.1 0.3	31 Low N based management 102 21 0.0 81.1 0.3	30 Low N based management 101 20 0.0 81.1 0.3	26 Low N based management 87 6 0.0 81.1 0.3
INTERPORT INTERCOMMENDATION	29 Low N based management 97 16 0.0 81.1 0.3 0.0	26 Low N based management 87 6 0.0 81.1 0.3 0.0	31 Low N based management 102 21 0.0 81.1 0.3 0.0	30 Low N based management 101 20 0.0 81.1 0.3 0.0	26 Low N based management 87 6 0.0 81.1 0.3 0.0
VANAGEMENT RECOMMENDATION TOTAL SOURCE SCORE Soli test P contribution Sertilizer P contribution Organic P contribution TOTAL DISSOLVED TRANSPORT SCORE Total PARTICULATE TRANSPORT SCORE	29 Low N based management 97 16 0.0 81.1 0.3 0.0 0.0 0.3	26 Low N based management 87 6 0.0 81.1 0.3 0.0 0.3	31 Low N based management 102 21 0.0 81.1 0.3 0.0 0.3	30 Low N based management 101 20 0.0 81.1 0.3 0.0 0.3	26 Low N based management 87 6 0.0 81.1 0.3 0.0 0.0 0.3
PARTICULATE P INDEX MANAGEMENT RECOMMENDATION TOTAL SOURCE SCORE Soil test P contribution Fertilizer P contribution TOTAL DISSOLVED TRANSPORT SCORE Flow distance contribution TOTAL PARTICULATE TRANSPORT SCORE Firesion contribution TOTAL DISSOLVED TRANSPORT SCORE Firesion CONTRIBUTION FIRESPORT SCORE FIRESPORT FIRESPORT SCORE FIRESPORT F	29 Low N based management 97 16 0.0 81.1 0.3 0.0	26 Low N based management 87 6 0.0 81.1 0.3 0.0	31 Low N based management 102 21 0.0 81.1 0.3 0.0	30 Low N based management 101 20 0.0 81.1 0.3 0.0	26 Low N based management 87 6 0.0 81.1 0.3 0.0

CT NRCS Phosphoru	1				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G	ir				
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	302	31	311	312	32
Soil test P (UConn modified Morgan P in lb/ac)	5	20	13	13	20
Select Field's Dominant Soil Series	Sutton	Woodbridge	Canton	Canton	Woodbridge
Fertilizer P application rate (lbs P2O5/acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P2O5/acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Moderately well drained	Well drained	Well drained	Moderately well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
low distance to blue line stream or equivalent (feet)	560	270	520	530	1300
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	560	270	520	530	1300
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
DISSOLVED P INDEX	26	32	29	29	32
	Low	Low	Low	Low	Low
	26	32	29	29	32
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	87	106	97	97	106
Soll test P contribution	6	25	16	16	25
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Drganic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

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CT NRCS Phosphoru					
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012) and K. Czymmek from the "NY P Index Working Gr					
	Farm Name:				
···· ··	Notes:				
Date: 3/9/2018					
FIELD NAME>	321	322	323	324	326
Soil test P (UConn modified Morgan P in lb/ac)	13	9	13	4	22
Select Field's Dominant Soil Series	Woodbridge	Woodbridge	Woodbridge	Woodbridge	Woodbridge
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs $P_2O_5/acre$ )	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Moderately well drained	Moderately well drained	Moderately well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	40	40	665	200	1340
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	40	40	665	200	1340
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	20	20	20		22
DISSOLVED P INDEX	29 Low	28 Low	29 Low	26 Low	33 Low
	LOW	LOW	LOW	LOW	LOW
	29	28	29	26	33
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	92	97	86	109
Soil test P contribution	16	11	16	5	28
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
			••••		0.0
					0.3
					0.3
			••		
Fertilizer P contribution Organic P contribution	0.0 81.1	0.0 81.1	0.0 81.1	0.0 81.1	0. 81 0. 0. 0.

CT NRCS Phosphoru	1				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G	ir				
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018	7				
FIELD NAME>	33	331	332	333	334
Soil test P (UConn modified Morgan P in Ib/ac)	49	13	3	13	5
Select Field's Dominant Soil Series	Woodbridge	Woodbridge	Canton	Canton	Woodbridge
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or	Surface applied or	Surface applied or	Surface applied or	Surface applied or
	broadcast/incorporated after 5 days	broadcast/incorporated after 5 days	broadcast/incorporated after 5 days	oroducasty incorporated after 5 days	bioducasymeorporateu arter 5 udy
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Moderately well drained	Well drained	Well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	450	1285	1650	990	560
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	450	1285	1650	990	560
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	43	29	25	29	26
DISSOLVED P INDEX	Low	Low	Low	Low	Low
	2011	2011	2011	2011	2011
PARTICULATE P INDEX	43	29	25	29	26
	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	142	97	85	97	87
Soil test P contribution	61	16	4	16	6
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution Flow distance contribution	0.3	0.3	0.3	0.3	0.3
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	1				
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	335	34	35	36	37
Soil test P (UConn modified Morgan P in lb/ac)	13	10	14	4	25
Select Field's Dominant Soil Series	Woodbridge	Walpole	Woodbridge	Woodbridge	Woodbridge
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Poorly drained	Moderately well drained	Moderately well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	1520	1060	800	35	240
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	1520	1060	800	35	240
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	29	28	30	26	34
DISSOLVED P INDEX	Low	Low	Low	Low	Low
PARTICULATE P INDEX	29	28	30	26	34
	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	94	99	86	112
Soil test P contribution	16	13	18	5	31
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution TOTAL PARTICULATE TRANSPORT SCORE	0.0	0.0	0.0	0.0	0.0
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	I:				
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Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name: Notes:				
County: Tolland	Notes:				
Date: 3/9/2018 FIELD NAME>	39	4	41	42	5
		•			
Soil test P (UConn modified Morgan P in lb/ac)	14	13	23	15	14
Select Field's Dominant Soil Series	Woodbridge	Woodbridge	Merrimac	Fluvaquents	Woodbridge
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
ertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
Drganic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
DISSOLVED P TRANSPORT FACTOR					
Goil drainage class	Moderately well drained	Moderately well drained	Somewhat excessively drained	Poorly drained	Moderately well drained
flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Frequent (<10 years frequency)	Rare (>100 years) or never
Flow distance to blue line stream or equivalent (feet)	1120	1630	35	20	660
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Frosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Frequent (<10 years frequency)	Rare (>100 years) or never
Flow distance to blue line stream or equivalent (feet)	1120	1630	35	20	660
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
DISSOLVED P INDEX	30 Low	29 Low	33 Low	30 Low	30 Low
	LOW	LOW	LOW	LOW	LOW
	30	29	33	30	30
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	99	97	110	100	99
Soil test P contribution	18	16	29	19	18
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
low distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution Flow distance contribution	0.3	0.3	0.3	0.3	0.3
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	l:				
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Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	51	52	53	55	56
Soil test P (UConn modified Morgan P in lb/ac)	13	13	13	13	6
Select Field's Dominant Soil Series	Paxton	Paxton	Paxton	Paxton	Woodbridge
ertilizer P application rate (lbs P2O5/acre)	0	0	0	0	0
ertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Drganic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #1 timing	October	October	October	October	October
Drganic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 da			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Drganic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Drganic P application #2 method	Surface applied or	Surface applied or	Surface applied or broadcast/incorporated after 5 days	Surface applied or	Surface applied or
DISSOLVED P TRANSPORT FACTOR				,	
Soil drainage class	Well drained	Well drained	Well drained	Well drained	Moderately well drained
looding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	320	15	40	80	330
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	320	15	40	80	330
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	22	20	20	20	27
DISSOLVED P INDEX	29 Low	29 Low	29 Low	29 Low	27 Low
	LOW	LOW	LOW	LOW	LOW
	29	29	29	29	27
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	97	97	97	89
Soil test P contribution	16	16	16	16	8
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Drganic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
-low distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Frosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	1:				
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Phosphorus Runoff Index, Version 2 (January 2012					
and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	58	6	61	62	63
Soil test P (UConn modified Morgan P in lb/ac)	13	29	13	13	13
Select Field's Dominant Soil Series	Woodbridge	Woodbridge	Paxton	Woodbridge	Paxton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
	· ·	· ·	· · · · · · · · · · · · · · · · · · ·	•	•
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Moderately well drained	Well drained	Moderately well drained	Well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	70	1390	40	500	350
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR	3	2	2	2	2
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	70	1390	40	500	350
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	29	25	29	29	29
DISSOLVED P INDEX	Low	35 Low	Low	Low	29 Low
	LOW	LOW	LOW	LOW	LOW
	29	35	29	29	29
PARTICULATE P INDEX	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	117	97	97	97
Soil test P contribution	16	36	16	16	16
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
	0.3	0.3	0.3	0.3	0.3
Erosion contribution Flow distance contribution Concentrated flow contribution	0.3 0.0 0.0	0.3 0.0 0.0	0.3 0.0 0.0	0.3 0.0 0.0	0.3 0.0 0.0

CT NRCS Phosphoru	I:				
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Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018					
FIELD NAME>	64	65	66	67	7
Soil test P (UConn modified Morgan P in lb/ac)	13	13	13	13	13
Select Field's Dominant Soil Series	Merrimac	Merrimac	Merrimac	Paxton	Paxton
Fertilizer P application rate (lbs P2O5/acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Somewhat excessively drained	Somewhat excessively drained	Somewhat excessively drained	Well drained	Well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	20	20	20	680	1120
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	20	20	20	680	1120
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	29	29	29	29	29
DISSOLVED P INDEX	Low	Low	Low	Low	Low
	Low	Low	Low	Low	Low
PARTICULATE P INDEX	29	29	29	29	29
	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	97	97	97	97
Soil test P contribution	16	16	16	16	16
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru	I:				
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Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G					
Landowner/Operator: Hytone Farm, LLC	Farm Name: Notes:				
County: Tolland	Notes:				
Date: 3/9/2018				•	
FIELD NAME>	8	81	82	9	147
Soil test P (UConn modified Morgan P in lb/ac)	13	5	13	13	4
Select Field's Dominant Soil Series	Woodbridge	Paxton	Canton	Paxton	Paxton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	None Applied
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Well drained	Well drained	Well drained	Well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	1040	75	320	1240	15
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never			
Flow distance to blue line stream or equivalent (feet)	1040	75	320	1240	15
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	29	26	29	29	26
DISSOLVED P INDEX	Low	Low	Low	Low	Low
PARTICULATE P INDEX	29	26	29	29	26
	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	97	87	97	97	86
Soil test P contribution	16	6	16	16	5
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE Flow distance contribution	0.3	0.3	0.3	0.3	0.3
TOTAL PARTICULATE TRANSPORT SCORE	0.0	0.3	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru					
The CT NRCS Phosphorus Runoff Index was adapte					
Phosphorus Runoff Index, Version 2 (January 2012 and K. Czymmek from the "NY P Index Working G					
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Landowner/Operator: Hytone Farm, LLC	Farm Name:				
County: Tolland	Notes:				
Date: 3/9/2018		110	450	1.20	
FIELD NAME>	148	149	172	173	174
Soil test P (UConn modified Morgan P in lb/ac)	3	1	1	1	1
Select Field's Dominant Soil Series	Sutton	Canton	Watchaug	Narragansett	Watchaug
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0	0	0	0	0
Fertilizer P application timing	None Applied	None Applied	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #1 timing	October	October	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104	104	104
Organic P application #2 timing	March-April	March-April	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 day			
DISSOLVED P TRANSPORT FACTOR					
Soil drainage class	Moderately well drained	Well drained	Moderately well drained	Well drained	Moderately well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never
Flow distance to blue line stream or equivalent (feet)	15	198	40	240	90
Stream type	Perennial	Perennial	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR					
Erosion (RUSLE in tons/acre)	3	3	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never
Flow distance to blue line stream or equivalent (feet)	15	198	40	240	90
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)	No (not present)	No (not present)
	25	25	25	25	25
DISSOLVED P INDEX	Low	Low	Low	Low	Low
PARTICULATE P INDEX	25	25	25	25	25
	Low	Low	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management	N based management	N based management
TOTAL SOURCE SCORE	85	82	82	82	82
Soil test P contribution	4	1	1	1	1
Fertilizer P contribution	0.0	0.0	0.0	0.0	0.0
Organic P contribution	81.1	81.1	81.1	81.1	81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3	0.3	0.3
Flow distance contribution TOTAL PARTICULATE TRANSPORT SCORE	0.0	0.0	0.0	0.0	0.0
Erosion contribution	0.3	0.3	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0

CT NRCS Phosphoru			
The CT NRCS Phosphorus Runoff Index was adapte			
Phosphorus Runoff Index, Version 2 (January 2012			
and K. Czymmek from the "NY P Index Working G			
Landowner/Operator: Hytone Farm, LLC	Farm Name:		
County: Tolland	Notes:		
Date: 3/9/2018			
FIELD NAME>	175	1155	1156
	1	4	7
Soil test P (UConn modified Morgan P in Ib/ac)		-	
Select Field's Dominant Soil Series	Cheshire	Woodbridge	Paxton
Fertilizer P application rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	0 Norse Appelland	0	0 Nava Analiad
Fertilizer P application timing	None Applied	None Applied	None Applied
Fertilizer P application method	None applied	None applied	None applied
Organic P application #1 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104
Organic P application #1 timing	October	October	October
Organic P application #1 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days
Organic P application #2 rate (lbs P <sub>2</sub> O <sub>5</sub> /acre)	104	104	104
Organic P application #2 timing	March-April	March-April	March-April
Organic P application #2 method	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days	Surface applied or broadcast/incorporated after 5 days
DISSOLVED P TRANSPORT FACTOR	Mail desired	Madau takan II daring d	Mall during d
Soil drainage class	Well drained	Moderately well drained	Well drained
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never
Flow distance to blue line stream or equivalent (feet)	680	755	1567
Stream type	Perennial	Perennial	Perennial
PARTICULATE P TRANSPORT FACTOR			
Erosion (RUSLE in tons/acre)	3	3	3
Flooding frequency	Rare (>100 years) or never	Rare (>100 years) or never	Rare (>100 years) or never
Flow distance to blue line stream or equivalent (feet)	680	755	1567
Stream type (blue line on topomap or equivalent)	Perennial	Perennial	Perennial
Concentrated flow?	No (not present)	No (not present)	No (not present)
	25	26	27
DISSOLVED P INDEX	25	26	27
	Low	Low	Low
	25	26	27
PARTICULATE P INDEX	Low	Low	Low
MANAGEMENT RECOMMENDATION	N based management	N based management	N based management
TOTAL SOURCE SCORE	82	86	90
Soil test P contribution	1	5	9
Fertilizer P contribution Organic P contribution	0.0 81.1	0.0 81.1	0.0 81.1
TOTAL DISSOLVED TRANSPORT SCORE	0.3	0.3	0.3
Flow distance contribution	0.5	0.0	0.0
TOTAL PARTICULATE TRANSPORT SCORE	0.3	0.3	0.3
Erosion contribution	0.3	0.3	0.3
Flow distance contribution	0.0	0.0	0.0
Concentrated flow contribution	0.0	0.0	0.0

## 5.5 Available Water Holding Capacity

Map unit symbol	Map unit name	Rating (centimeters	Acres in AOI	Percent of AOI
		per centimeter)		
2	Ridgebury fine sandy loam, 0 to 3 percent slopes	0.17	19.0	2.8%
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	0.17	15.5	2.3%
12	Raypol silt loam	0.18	0.5	0.1%
13	Walpole sandy loam, 0 to 3 percent slopes	0.20	17.6	2.6%
15	Scarboro muck, 0 to 3 percent slopes	0.32	0.1	0.0%
21A	Ninigret and Tisbury soils, 0 to 5 percent slopes	0.13	3.2	0.5%
23A	Sudbury sandy loam, 0 to 5 percent slopes	0.12	16.3	2.4%
29B	Agawam fine sandy loam, 3 to 8 percent slopes	0.13	0.1	0.0%
32A	Haven and Enfield soils, 0 to 3 percent slopes	0.18	6.2	0.9%
34A	Merrimac fine sandy loam, 0 to 3 percent slopes	0.12	0.3	0.0%
34B	Merrimac fine sandy loam, 3 to 8 percent slopes	0.12	17.5	2.6%
38C	Hinckley loamy sand, 3 to 15 percent slopes	0.12	1.9	0.3%
45A	Woodbridge fine sandy loam, 0 to 3 percent slopes	0.17	30.1	4.4%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	0.12	157.5	23.1%
45C	Woodbridge fine sandy loam, 8 to 15 percent slopes	0.17	11.0	1.6%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	0.14	61.7	9.1%
46C	Woodbridge fine sandy loam, 8 to 15 percent slopes, very stony	0.20	0.4	0.1%

Map unit symbol	Map unit name	Rating (centimeters per centimeter)	Acres in AOI	Percent of AOI
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony	0.20	8.9	1.3%
50A	Sutton fine sandy loam, 0 to 3 percent slopes	0.13	20.0	2.9%
50B	Sutton fine sandy loam, 3 to 8 percent slopes	0.13	11.5	1.7%
51B	Sutton fine sandy loam, 2 to 8 percent slopes, very stony	0.13	14.4	2.1%
55B	Watchaug fine sandy loam, 3 to 8 percent slopes	0.14	1.1	0.2%
60B	Canton and Charlton fine sandy loams, 3 to 8 percent slopes	0.11	51.8	7.6%
60C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes	0.11	26.8	3.9%
61B	Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	0.17	0.0	0.0%
61C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony	0.17	6.5	1.0%
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	0.17	2.7	0.4%
62D	Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony	0.17	0.0	0.0%
67B	Narragansett silt loam, 3 to 8 percent slopes, very stony	0.19	7.0	1.0%
72C	Nipmuck-Brookfield complex, 3 to 15 percent slopes, very rocky	0.13	0.1	0.0%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	0.19	6.4	0.9%
75C	Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes	0.12	2.8	0.4%

Map unit symbol	Map unit name	Rating (centimeters per centimeter)	Acres in AOI	Percent of AOI
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	0.12	68.3	10.0%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	0.18	22.0	3.2%
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	0.18	1.6	0.2%
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	0.20	38.4	5.6%
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	0.20	21.4	3.1%
86C	Paxton and Montauk fine sandy loams, 3 to 15 percent slopes, extremely stony	0.20	3.4	0.5%
108	Saco silt loam	0.20	0.4	0.1%
109	Fluvaquents-Udifluvents complex, frequently flooded	0.11	4.1	0.6%
303	Pits, quarries		0.1	0.0%
306	Udorthents-Urban land complex	0.14	0.4	0.1%
308	Udorthents, smoothed	0.14	2.1	0.3%
Totals for Area of Inter	est		680.7	100.0%

## Description

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in centimeters of water per centimeter of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure, with corrections for salinity and rock fragments. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. It is not an estimate of the quantity of water actually available to plants at any given time.

Available water supply (AWS) is computed as AWC times the thickness of the soil. For example, if AWC is 0.15 cm/cm, the available water supply for 25 centimeters of soil would be 0.15 x 25, or 3.75 centimeters of water.

For each soil layer, AWC is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

## 5.6 Special Manure Application Criteria

## **Manure Application on Steep Fields**

Applications of liquid manure on fields greater than 15% slope should be avoided.

## Manure Application on Fields Subject to Flooding

Manure is not to be land-applied on soils that are frequently flooded during the period when flooding is expected unless incorporated immediately.

## **General Liquid Manure Applications**

The application rate is to be adjusted to the most limiting factor to avoid ponding, surface runoff, subsurface drainage (tile) discharge, the nutrient needs of the field, or the nitrogen or phosphorus risks of the field. The total application is not to exceed the field capacity of the upper 8 inches of soil. Applications shall be split so that no single applications exceeds 9000gal/ac. No applications should be made when the field reaches 100% of its available capacity. The actual application rate shall be adjusted during application to avoid ponding or runoff.

## Liquid Manure Application – Tile Drained Fields

Fields or areas of fields that are subsurface (TILE) drained require additional precautions. When liquid wastes are applied to fields with TILE drains, the liquid can follow soil macro-pores (in dry soils) directly to the tile drains creating a surface water pollution hazard from direct tile discharge. (A field is considered TILE drained if <sup>1</sup>/<sub>2</sub> or more of the field is subsurface (tiled) drained; however, even a field with one subsurface drainage line may present a risk of manure/wastewater movement to subsurface drains and cause a direct discharge. Do not apply application rates (volume) that would exceed AWC in the upper 8 inches.

Leave as much residue as possible on the soil surface. The adsorption of liquid manure by the soil in the root zone will minimize nitrogen loss and the manure/nutrient runoff potential. For perennial cops (hay or pasture), or continuous no till fields where tillage is not an option, all tile outlets from the application area are to be plugged prior to application. The producers should visually inspect subsurface drainage systems prior to and after land applications. Visual inspections may determine failures of subsurface drainage systems that may cause discharges. Visual inspections should be completed for all tile risers, collection boxes, and outflow locations located within or down gradient of application areas if injection is used, inject only deep enough to cover the manure with soil.

## Manure Application on Fields with "Systematic Surface Drainage"

There are no fields on this operation with Systematic Surface Drainage

## **Minimum Ground Cover for Manure Applications**

Medium Phosphorus Risk Fields

• The fields shall have at least 30% ground cover at the time of application or the manure or other organic byproducts shall be incorporated within one week.

High Phosphorus Risk Field

• The field shall have at least 50% ground cover at the time of application unless the manure is incorporated within 7 days on areas with < 50% cover.

## Generalized Interpretation of the Nitrogen Leaching Risk Analysis:

- Fields with a rating of "LOW" or "MEDIUM" have a low/medium potential to leach nitrates below the root zone. These fields have more flexibility for timing of nitrogen application; however, care must be taken to limit loss of applied nitrogen through denitrification.
- Fields with a rating of HIGH" have a high potential to leach nitrates below the root zone. Fields with systematic subsurface drains (tile) are rated "HIGH" potential to leach nitrates out of the root zone. These fields require management that applies the nitrogen closer to the time the crop can utilize the applied nitrogen.

## Criteria for Nitrogen via Commercial Fertilizer Sources:

On fields with a "High Nitrogen Leaching Potential" apply the recommended nitrogen for spring planted crops prior to planting spring crops or split applications between pre-plant and a sidedress application. For perennial crops split the recommended application between two or three periods including early spring, early summer, or late summer. For fall planted crops apply 20-30 Lbs/Ac of the recommended amount in the fall and the remainder in the spring. Nitrogen may be fall applied for spring planted crops following the guidance in Table 1 of this standard.

## Criteria for Nitrogen Application via Manure (during Summer and Fall Periods):

On fields with a "High Nitrogen Leaching Potential" (rating more than 10) and with no growing crop, manure and other organic by-products application is to be limited to 50 Lbs/ac of Nitrogen (Ammonium N + 1/3 of the Organic N) calculated at the time of application from June to October 1<sup>st</sup> to limit nitrogen leaching. When a grass or legume cover crop is growing or established immediately after waste application, manure or other organic by-products can be applied prior to October 1<sup>st</sup> at the recommended Nitrogen rate for the next non-legume crop or the nitrogen removal rate for the next legume (maximum 150 Lbs/ac) crop.





# Section 6. Nutrient Management

## 6.1. Field Information Table

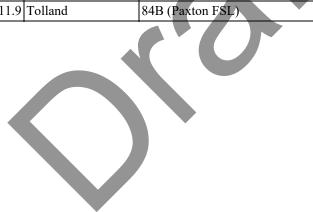
Field ID	Сгор	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	Slope (%)	Slope Length	Soil Loss
1	Grass Hay	2.1	1.7	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
1001	Corn Silage	1.6	1.6	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
1002	Grass Hay	1.2	1.2	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
1003	Corn Silage	19.2	19.2	Tolland	50A (Sutton FSL)	1.5	150	0.50
1004	Grass Hay	4.1	4.1	Tolland	85B (Paxton MPM)	5.5	150	0.09
1005	Corn Silage	4.0	4.0	Tolland	47C (Woodbridge MPM)	9.0	125	2.94
1006	Grass Hay	4.0	4.0	Tolland	46B (Woodbridge MPM)	4.0	200	0.07
1007	Corn Silage	4.1	4.1	Tolland	75C (Hollis HPM)	9.0	125	1.75
1008	Grass Hay	19.6	19.6	Tolland	2 (Ridgebury MPM)	1.5	150	0.03
1011	Corn Silage	4.7	4.7	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
1012	Corn Silage	3.7	3.7	Tolland	60C (Canton FSL)	11.5	125	4.62
1013	Corn Silage	7.5	7.5	Tolland	60B (Canton FSL)	5.5	150	1.80
1021	Grass Hay	4.1	3.9	Tolland	60B (Canton FSL)	5.5	150	0.07
1022	Grass Hay	1.9	1.6	Tolland	60B (Canton FSL)	5.5	150	0.07
1023	Grass Hay	4.9	4.5	Tolland	51B (Sutton FSL)	5.0	175	0.06
1024	Corn Silage	5.0	5.0	Tolland	84C (Paxton FSL)	11.5	125	3.00
1031	Corn Silage	2.5	2.5	Tolland	50B (Sutton FSL)	5.5	150	1.51
1032	Grass Hay	2.1	2.1	Tolland	60B (Canton FSL)	5.5	150	0.07
1033	Grass Hay	2.1	2.0	Tolland	73C (Charlton MPM)	9.0	125	0.12
1034	Grass Hay	2.5	2.5	Tolland	73C (Charlton MPM)	9.0	125	0.12
1035	Grass Hay	0.9	0.6	Tolland	60C (Canton FSL)	11.5	125	0.17
1036	Grass Hay	4.6	4.6	Tolland	60C (Canton FSL)	11.5	125	0.17
1037	Grass Hay	3.4	3.4	Tolland	60B (Canton FSL)	5.5	150	0.07
1038	Corn Silage	3.8	3.8	Tolland	60B (Canton FSL)	5.5	150	1.80
1038A	Corn Silage	1.6	1.6	Tolland	60B (Canton FSL)	5.5	150	1.80

Field ID	Сгор	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	Slope (%)	Slope Length	Soil Loss
1039	Grass Hay	1.2		Tolland	50A (Sutton FSL)	1.5	150	0.03
11	Grass Hay	4.7		Tolland	85B (Paxton MPM)	5.5	150	0.09
111	Grass Hay	1.5		Tolland	60C (Canton FSL)	11.5	125	0.17
112	Grass Hay	1.0		Tolland	60C (Canton FSL)	11.5	125	0.17
113	Grass Hay	4.6		Tolland	60C (Canton FSL)	11.5	125	0.17
114	Grass Hay	4.4	4.4	Tolland	3 (Ridgebury MPM)	4.0	200	0.10
115	Grass Hay	2.1	2.1	Tolland	308 (Udorthents L)	17.5	50	0.08
1151	Grass Hay	3.6	3.3	Tolland	84B (Paxton FSL)	5.5	150	0.09
1152	Grass Hay	1.0	1.0	Tolland	84B (Paxton FSL)	5.5	150	0.09
1153	Grass Hay	1.5	1.4	Tolland	84B (Paxton FSL)	5.5	150	0.09
1154	Grass Hay	4.8	4.8	Tolland	84B (Paxton FSL)	5.5	150	0.09
116	Grass Hay	1.9	1.9	Tolland	45C (Woodbridge FSL)	11.5	125	0.14
1169	Grass Hay	20.1	20.0	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
12	Grass Hay	3.8	3.8	Tolland	60C (Canton FSL)	11.5	125	0.17
13	Grass Hay	8.1	8.1	Tolland	85B (Paxton MPM)	5.5	150	0.09
131	Corn Silage	8.1	8.1	Tolland	85B (Paxton MPM)	5.5	150	2.11
132	Corn Silage	2.4	2.4	Tolland	61C (Canton SPM)	11.5	125	4.62
14	Grass Hay	4.5	4.5	Tølland	60B (Canton FSL)	5.5	150	0.07
141	Grass Hay	17.8	17.8	Tolland	84B (Paxton FSL)	5.5	150	0.09
142	Grass Hay	4.1	4.1	Tolland	45A (Woodbridge FSL)	1.5	150	0.21
143	Grass Hay	5.0	4.4	Tolland	84C (Paxton FSL)	11.5	125	0.17
15	Grass Hay	1.6	1.6	Tolland	60B (Canton FSL)	5.5	150	0.07
151	Grass Hay	6.9	6.6	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
152	Grass Hay	7.5	7.5	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
153	Grass Hay	11.4	11.2	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
154	Grass Hay	5.0	4.8	Tolland	84B (Paxton FSL)	5.5	150	0.09
155	Grass Hay	2.9	2.9	Tolland	84B (Paxton FSL)	5.5	150	0.09
156	Grass Hay	3.0	2.9	Tolland	84B (Paxton FSL)	5.5	150	0.09
157	Grass Hay	3.4	3.3	Tolland	84B (Paxton FSL)	5.5	150	0.09
158	Grass Hay	9.4	9.4	Tolland	46B (Woodbridge MPM)	4.0	200	0.07

Field ID	Crop	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	Slope (%)	Slope Length	Soil Loss
159	Grass Hay	4.2	4.2	Tolland	85C (Paxton MPM)	11.5	125	0.13
16	Grass Hay	1.9	1.9	Tolland	73C (Charlton MPM)	9.0	125	0.12
161	Corn Silage	11.4	11.4	Tolland	45A (Woodbridge FSL)	1.5	150	4.62
163	Corn Silage	10.8	10.8	Tolland	23A (Sudbury MPM)	2.5	250	1.12
164	Corn Silage	4.9	4.9	Tolland	85C (Paxton MPM)	11.5	125	2.58
17	Grass Hay	3.8	3.8	Tolland	60B (Canton FSL)	5.5	150	0.07
171	Corn Silage	8.0	7.6	Tolland	67B (Narragansett SIL)	5.5	150	2.84
18	Grass Hay	2.8	2.8	Tolland	60C (Canton FSL)	11.5	125	0.17
2	Corn Silage	22.0	21.8	Tolland	45A (Woodbridge FSL)	1.5	150	4.62
21	Grass Hay	8.1	7.9	Tolland	84B (Paxton FSL)	5.5	150	0.09
22	Corn Silage	11.8	11.5	Tolland	84B (Paxton FSL)	5.5	150	2.11
23	Grass Hay	0.9	0.9	Tolland	84B (Paxton FSL)	5.5	150	0.09
24	Corn Silage	10.0	10.0	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
25	Corn Silage	9.5	9.5	Tolland	46B (Woodbridge MPM)	4.0	200	1.66
26	Corn Silage	3.1	3.1	Tolland	45A (Woodbridge FSL)	1.5	150	4.62
27	Corn Silage	1.9	1.9	Tolland	45A (Woodbridge FSL)	1.5	150	4.62
28	Corn Silage	5.0	4.7	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
29	Grass Hay	3.3	3.1	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
3	Grass Hay	1.6	1.6	Tolland	47C (Woodbridge MPM)	9.0	125	0.11
301	Grass Hay	10.1	9.9	Tolland	50B (Sutton FSL)	5.5	150	0.06
302	Grass Hay	6.7	6.4	Tolland	51B (Sutton FSL)	5.0	175	0.06
31	Corn Silage	12.8	12.8	Tolland	45C (Woodbridge FSL)	11.5	125	2.56
311	Grass Hay	4.2	3.6	Tolland	60B (Canton FSL)	5.5	150	0.07
312	Grass Hay	2.9	2.7	Tolland	60B (Canton FSL)	5.5	150	0.07
32	Grass Hay	3.5	2.8	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
321	Grass Hay	11.4	11.2	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
322	Grass Hay	13.8	13.7	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
323	Corn Silage	6.3	6.1	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
324	Grass Hay	8.6	8.5	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
326	Corn Silage	3.5	3.4	Tolland	45A (Woodbridge FSL)	1.5	150	4.62

Field ID	Crop	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	Slope (%)	Slope Length	Soil Loss
33	Corn Silage	26.7	26.5	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
331	Grass Hay	1.5	1.3	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
332	Grass Hay	5.2	5.0	Tolland	60B (Canton FSL)	5.5	150	0.07
333	Grass Hay	1.7	1.7	Tolland	61C (Canton SPM)	11.5	125	1.52
334	Grass Hay	4.1	4.1	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
335	Grass Hay	0.6	0.6	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
34	Grass Hay	5.1	5.1	Tolland	13 (Walpole MPT)	1.5	150	0.03
35	Corn Silage	4.0	4.0	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
36	Grass Hay	3.0	3.0	Tolland	46B (Woodbridge MPM)	4.0	200	0.07
37	Corn Silage	23.5	23.5	Tolland	46B (Woodbridge MPM)	4.0	200	1.66
39	Grass Hay	1.9	1.9	Tolland	46B (Woodbridge MPM)	4.0	200	0.07
4	Corn Silage	2.9	2.8	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
41	Corn Silage	28.4	28.4	Tolland	34B (Merrimac FSL)	5.5	150	2.10
42	Corn Silage	2.8	2.0	Tolland	109 (Fluvaquents SIL)	1.5	150	0.80
5	Grass Hay	12.7	12.7	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
51	Corn Silage	2.6	2.3	Tolland	84B (Paxton FSL)	5.5	150	2.11
52	Corn Silage	2.9	2.2	Tolland	84C (Paxton FSL)	11.5	125	3.00
53	Corn Silage	2.8	2.6	Tolland	84C (Paxton FSL)	11.5	125	3.00
55	Corn Silage	1.6	1.5	Tolland	84C (Paxton FSL)	11.5	125	3.00
56	Grass Hay	1.6	1.6	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
58	Grass Hay	9.6	9.6	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
6	Grass Hay	1.3	1.3	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
61	Corn Silage	6.2	6.2	Tolland	84C (Paxton FSL)	11.5	125	3.00
62	Corn Silage	1.8	1.8	Tolland	45B (Woodbridge FSL)	5.5	150	2.11
63	Corn Silage	5.7	5.0	Tolland	84B (Paxton FSL)	5.5	150	2.11
64	Corn Silage	3.5	3.2	Tolland	34B (Merrimac FSL)	5.5	150	2.10
65	Corn Silage	2.8	2.6	Tolland	34B (Merrimac FSL)	5.5	150	2.10
66	Corn Silage	2.0	1.5	Tolland	34B (Merrimac FSL)	5.5	150	2.10
67	Corn Silage	1.5	1.5	Tolland	84B (Paxton FSL)	5.5	150	2.11
7	Corn Silage	7.4	7.4	Tolland	85B (Paxton MPM)	5.5	150	2.11

Field ID	Сгор	Total Area (ac)	Spread- able Area (ac)	County	Predominant Soil Type	Slope (%)	Slope Length	Soil Loss
8	Grass Hay	0.6	0.6	Tolland	45B (Woodbridge FSL)	5.5	150	0.09
81	Grass Hay	5.4	5.3	Tolland	84B (Paxton FSL)	5.5	150	0.09
82	Grass Hay	1.6	1.4	Tolland	60C (Canton FSL)	11.5	125	0.17
9	Grass Hay	0.8	0.8	Tolland	85B (Paxton MPM)	5.5	150	0.09
147	Grass Hay	37.1	31.5	Tolland	84B (Paxton FSL)	3.0	150	0.09
148	Grass Hay	1.6	0.5	Tolland	50A (Sutton FSL)	3.0	150	0.09
149	Grass Hay	29.0	29.0	Tolland	60C (Canton FSL)	5.0	120	0.18
172	Grass Hay	2.5	2.5	Tolland	55B (Watchaug FSL)	5.5	150	2.84
173	Grass Hay	5.1	4.7	Tolland	67B (Narragansett SIL)	5.5	150	2.84
174	Grass Hay	1.3	1.3	Tolland	55B (Watchaug FSL)	5.5	150	2.84
175	Grass Hay	5.2	5.2	Tolland	63B (Cheshire FSL)	5.5	150	2.84
1155	Grass Hay	5.7	4.8	Tolland	45C (Woodbridge FSL)	5.5	150	0.09
1156	Grass Hay	12.3	11.9	Tolland	84B (Paxton FSL)	5.5	150	0.09





## 6.2. Manure Application Setbacks

Setbacks by State Feature Type	
State: Connecticut	<b>Operation Type:</b> AFO/CAFO
Source: Connecticut General Statutes (CGS), Sections 22a-424, CAFO Regs 40 CFR 412.4(c)(5) 1/ Setbacks are planning based values not specifically designated in statutes or regulations	<b>Date:</b> 02-20-2013
Surface waters	1
Application Criteria	Setback (feet)
Manure applied downslope of surface water	35
Manure applied up-slope of surface water with permanent, vegetated setback $\geq$ 35 feet	35
Manure applied up-slope of surface water with no permanent or insufficient vegetated setback	100
Dwelling	-
Application Criteria	Setback (feet)
Manure applied with injection or incorporation same-day	75
Manure applied to surface (no incorporation)	150
Wells: Public/Private/Agricultural	
Application Criteria	Setback (feet)
Well output < 10 gpm with permanent vegetated buffer <= 35 feet	35
Well output < 10 gpm without permanent vegetated buffer	100
Well output $\ge 10$ gpm and $\le 50$ gpm	100
Well output > 50 gpm	200



## 6.3. Soil Test Table

Field	Test Year	OM (%)	P Test Used	Р	K	Mg	Ca	Units	Soil pH	Buffer pH	CEC (meq/ 100g)
1	2020		UConn mod Morgan	3	75			lbs/ac	5.8	6.2	
1001	2020		UConn mod Morgan	36	258			lbs/ac	6.1	6.3	
1002	2020		UConn mod Morgan	20	169			lbs/ac	5.9	6.2	
1003	2020		UConn mod Morgan	23	322			lbs/ac	6.4	6.3	
1004	2020		UConn mod Morgan	8	91			lbs/ac	5.8	6.1	
1005	2020		UConn mod Morgan	15	238			lbs/ac	6.0	6.2	
1006	2020		UConn mod Morgan	4	70	J		lbs/ac	5.6	6.1	
1007	2020		UConn mod Morgan	12	257			lbs/ac	6.4	6.4	
1008	2020		UConn mod Morgan	10	106			lbs/ac	5.8	6.1	
1011	2020		UConn mod Morgan	11	227			lbs/ac	5.6	6.1	
1012	2020		UConn mod Morgan	13	231			lbs/ac	6.0	6.2	
1013	2020		UConn mod Morgan	8	202			lbs/ac	6.1	6.3	
1021	2016		UConn mod Morgan	10	100			lbs/ac	6.1	6.3	
1022	2016		UConn mod Morgan	10	100			lbs/ac	6.1	6.3	
1023	2016		UConn mod Morgan	6	198			lbs/ac	6.0	6.2	
1024	2020		UConn mod Morgan	9	163			lbs/ac	5.1	6.0	
1031	2020		UConn mod Morgan	9	191			lbs/ac	6.1	6.2	
1032	2016		UConn mod Morgan	3	225			lbs/ac	6.1	6.2	
1033	2020		UConn mod Morgan	1	95			lbs/ac	5.7	6.1	
1034	2020		UConn mod Morgan	2	78			lbs/ac	5.9	6.1	
1035	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
1036	2016		UConn mod Morgan	11	116			lbs/ac	5.9	6.2	
1037	2016		UConn mod Morgan	9	286			lbs/ac	5.9	6.3	
1038	2020		UConn mod Morgan	13	153			lbs/ac	5.5	6.1	
1038A	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
1039	2020		UConn mod Morgan	3	61			lbs/ac	5.4	6.0	
11	2020		UConn mod Morgan	8	87			lbs/ac	6.0	6.2	
111	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
112	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	

Field	Test Year	OM (%)	P Test Used	Р	K	Mg	Ca	Units	Soil pH	Buffer pH	CEC (meq/ 100g)
113	2020		UConn mod Morgan	2	75			lbs/ac	5.2	6.0	
114	2020		UConn mod Morgan	1	69			lbs/ac	5.1	6.0	
115	2020		UConn mod Morgan	2	59			lbs/ac	5.3	5.9	
1151	2020		UConn mod Morgan	9	48			lbs/ac	5.6	6.2	
1152	2020		UConn mod Morgan	3	52			lbs/ac	5.7	6.1	
1153	2020		UConn mod Morgan	2	40			lbs/ac	5.3	6.1	
1154	2020		UConn mod Morgan	3	39			lbs/ac	5.6	6.2	
116	2020		UConn mod Morgan	4	32			lbs/ac	5.0	6.0	
1169	2020		UConn mod Morgan	2	37	J		lbs/ac	5.4	6.1	
12	2016		UConn mod Morgan	11	294			lbs/ac	6.5	6.4	
13	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
131	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
132	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
14	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
141	2020		UConn mod Morgan	3	57			lbs/ac	5.8	6.1	
142	2020		UConn mod Morgan	7	47			lbs/ac	5.2	5.9	
143	2020		UConn mod Morgan	3	48			lbs/ac	5.0	6.0	
15	2020		UConn mod Morgan	1	137			lbs/ac	5.3	6.0	
151	2020		UConn mod Morgan	5	40			lbs/ac	5.8	6.2	
152	2020		UConn mod Morgan	2	44			lbs/ac	5.9	6.2	
153	2020		UConn mod Morgan	8	39			lbs/ac	5.9	6.2	
154	2020		UConn mod Morgan	25	54			lbs/ac	5.8	6.2	
155	2020		UConn mod Morgan	5	49			lbs/ac	5.6	6.1	
156	2016		UConn mod Morgan	6	77			lbs/ac	6.4	6.4	
157	2016		UConn mod Morgan	13	100			lbs/ac	6.3	6.3	
158	2020		UConn mod Morgan	2	46			lbs/ac	5.6	6.1	
159	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
16	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
161	2020		UConn mod Morgan	19	102			lbs/ac	5.5	6.1	
163	2020		UConn mod Morgan	34	99			lbs/ac	5.7	6.2	

Field	Test Year	OM (%)	P Test Used	Р	K	Mg	Ca	Units	Soil pH	Buffer pH	CEC (meq/ 100g)
164	2020		UConn mod Morgan	8	70			lbs/ac	5.5	6.1	
17	2020		UConn mod Morgan	2	102			lbs/ac	5.2	5.9	
171	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
18	2020		UConn mod Morgan	3	107			lbs/ac	5.0	6.0	
2	2020		UConn mod Morgan	14	182			lbs/ac	6.5	6.5	
21	2020		UConn mod Morgan	4	47			lbs/ac	5.8	6.2	
22	2020		UConn mod Morgan	21	228			lbs/ac	5.8	6.2	
23	2016		UConn mod Morgan	13	220			Ibs/ac	6.1	6.3	
24	2020		UConn mod Morgan	6	192	J		lbs/ac	6.0	6.3	
25	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
26	2020		UConn mod Morgan	17	163			lbs/ac	6.5	6.4	
27	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
28	2020		UConn mod Morgan	3	56			lbs/ac	5.3	6.0	
29	2020		UConn mod Morgan	11	129			lbs/ac	5.5	6.1	
3	2016		UConn mod Morgan	16	138			lbs/ac	6.6	6.5	
301	2016		UConn mod Morgan	5	173			lbs/ac	5.9	6.2	
302	2016		UConn mod Morgan	5	115			lbs/ac	5.8	6.3	
31	2020		UConn mod Morgan	15	159			lbs/ac	6.5	6.4	
311	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
312	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
32	2020		UConn mod Morgan	14	87			lbs/ac	6.4	6.3	
321	2020		UConn mod Morgan	7	99			lbs/ac	5.7	6.1	
322	2020		UConn mod Morgan	5	51			lbs/ac	5.7	6.1	
323	2020		UConn mod Morgan	20	180			lbs/ac	6.1	6.3	
324	2020		UConn mod Morgan	5	78			lbs/ac	5.6	6.1	
326	2020		UConn mod Morgan	15	169			lbs/ac	6.0	6.2	
33	2020		UConn mod Morgan	22	228			lbs/ac	6.5	6.4	
331	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
332	2016		UConn mod Morgan	3	87			lbs/ac	5.9	6.3	
333	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	

Field	Test Year	OM (%)	P Test Used	Р	K	Mg	Ca	Units	Soil pH	Buffer pH	CEC (meq/ 100g)
334	2016		UConn mod Morgan	5	76			lbs/ac	5.9	6.3	
335	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
34	2020		UConn mod Morgan	5	76			lbs/ac	6.1	6.2	
35	2020		UConn mod Morgan	9	321			lbs/ac	6.0	6.2	
36	2020		UConn mod Morgan	2	56			lbs/ac	6.2	6.3	
37	2020		UConn mod Morgan	11	184			lbs/ac	6.2	6.3	
39	2016		UConn mod Morgan	14	244			lbs/ac	6.5	6.4	
4	2020		UConn mod Morgan	29	221			lbs/ac	6.4	6.4	
41	2020		UConn mod Morgan	20	86	J		lbs/ac	6.0	6.2	
42	2020		UConn mod Morgan	9	56			lbs/ac	5.9	6.1	
5	2020		UConn mod Morgan	13	87			lbs/ac	6.0	6.2	
51	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
52	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
53	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
55	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
56	2016		UConn mod Morgan	6	152			lbs/ac	5.9	6.2	
58	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
6	2016		UConn mod Morgan	29	543			lbs/ac	6.6	6.5	
61	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
62	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
63	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
64	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
65	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
66	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
67	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
7	2020		UConn mod Morgan	19	220			lbs/ac	6.1	6.3	
8	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
81	2016		UConn mod Morgan	5	110			lbs/ac	5.9	6.3	
82	2016		UConn mod Morgan	13	220			lbs/ac	6.1	6.3	
9	2020		UConn mod Morgan	10	62			lbs/ac	5.9	6.2	

Field	Test Year	OM (%)	P Test Used	Р	K	Mg	Ca	Units	Soil pH	Buffer pH	CEC (meq/
	1 cui	(70)							pm	PII	(inteq/ 100g)
147	2020		UConn mod Morgan	4	42			lbs/ac	5.7	6.1	
148	2020		UConn mod Morgan	3	48			lbs/ac	5.6	6.0	
149	2020		UConn mod Morgan	1	127			lbs/ac	5.7	6.2	
172	2020		UConn mod Morgan	1	84			lbs/ac	5.7	6.1	
173	2020		UConn mod Morgan	1	84			lbs/ac	5.7	6.1	
174	2020		UConn mod Morgan	1	84			lbs/ac	5.7	6.1	
175	2020		UConn mod Morgan	1	84			lbs/ac	5.7	6.1	
1155	2020		UConn mod Morgan	4	48			lbs/ac	5.4	6.0	
1156	2020		UConn mod Morgan	7	45			lbs/ac	5.6	6.1	



## 6.4. Manure Analysis Table

Manure Source	Dry Matter (%)	Total N	NH4-N	Total P <sub>2</sub> O <sub>5</sub>	Total K <sub>2</sub> O	Avail. P <sub>2</sub> O <sub>5</sub>	Avail. K <sub>2</sub> O	Units	Analysis Source and Date
Heifer Lagoon	5.2	19.2	3.6	11.2	14.2	11.2	14.2	lbs/1000 gal	MMP Estimate
Proposed Digester	NA	NA	NA	NA	NA	NA	NA	lbs/1000 gal	NA
Proposed Separator	NA	NA	NA	NA	NA	NA	NA	lbs/ton	NA
Proposed Mix Tanks	NA	NA	NA	NA	NA	NA	NA	lbs/1000 gal	NA
Proposed Round Tank	1.3	17.0	8.0	7.0	8.0	7.0	8.0	lbs/1000 gal	NRCS Mass Balance Calculation

a. Entered analysis may be the average of several individual analyses.

b. Connecticut assumes that 100% of manure phosphorus and 100% of manure potassium is crop available. First-year per-acre nitrogen availability for individual manure applications is given in the Planned Nutrient Applications table. For more information about nitrogen availability in Connecticut, see The Penn State Agronomy Guide 2013-2014, Table 1.2-15 (http://extension.psu.edu/agronomy-guide/cm/tables/table1-2-15.pdf).



## 6.5. Planned Crops and Fertilizer Recommendations

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
1	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1001	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1001	2021	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1001	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1001	2022	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1001	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1001	2023	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1001	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1001	2024	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1001	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1001	2025	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1002	2021	Orchardgrass	4.0 tons	100	23	68	150	60	200	
1002	2022	Orchardgrass	4.0 tons	100	23	68	150	60	200	
1002	2023	Orchardgrass	4.0 tons	100	23	68	150	60	200	
1002	2024	Orchardgrass	4.0 tons	100	23	68	150	60	200	
1002	2025	Orchardgrass	4.0 tons	100	23	68	150	60	200	
1003	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1003	2021	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1003	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1003	2022	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1003	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1003	2023	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1003	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1003	2024	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K2O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
1003	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1003	2025	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
1004	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1004	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1004	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1004	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1004	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1005	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1005	2021	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
1005	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1005	2022	Corn for Silage, convent	23.0 tons	147	46	72	207	-115	253	
1005	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1005	2023	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
1005	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1005	2024	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
1005	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1005	2025	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
1006	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1006	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1006	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1006	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1006	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1007	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1007	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1007	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1007	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1007	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1007	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1007	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1007	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
1007	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	ů	
1007	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1008	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1008	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1008	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1008	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1008	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1011	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1011	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1011	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1011	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	-115	253	
1011	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1011	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1011	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1011	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1011	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1011	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1012	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1012	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1012	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1012	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1012	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1012	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1012	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1012	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1012	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1012	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1013	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1013	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1013	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K2O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
1013	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1013	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1013	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1013	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1013	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1013	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1013	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1021	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1021	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1021	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1021	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1021	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1022	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1022	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1022	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1022	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1022	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1023	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1023	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1023	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1023	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1023	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1024	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1024	2021	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1024	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1024	2022	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1024	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1024	2023	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1024	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1024	2024	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
1024	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	· ·	
1024	2025	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1031	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1031	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1031	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1031	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1031	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1031	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1031	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1031	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1031	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1031	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1032	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1032	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1032	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1032	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1032	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1033	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1033	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1033	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1033	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1033	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1034	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1034	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1034	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1034	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1034	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1035	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1035	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1035	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K2O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	1 0 001		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
1035	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1035	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1036	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1036	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1036	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1036	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1036	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1037	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1037	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1037	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1037	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1037	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
1038	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038	2021	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1038	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038	2022	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1038	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038	2023	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1038	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038	2024	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1038	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038	2025	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
1038A	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038A	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1038A	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038A	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1038A	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038A	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1038A	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
1038A	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal (per ac)	N Rec (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Rec (lbs/ac)	K <sub>2</sub> O Rec (lbs/ac)	N Removed (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Removed (lbs/ac)	K <sub>2</sub> O Removed (lbs/ac)	Custom Fert. Rec. Source
1038A	2025	Small grain cover <sup>a</sup>	(per ue)	0	0	0	0	0	· · · · ·	
1038A	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
1039	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1039	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1039	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1039	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1039	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
11	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
11	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
11	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
11	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
11	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
111	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
111	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
111	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
111	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
111	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
112	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
112	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
112	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
112	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
112	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
113	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
113	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
113	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
113	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
113	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
114	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
114	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
114	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
114	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
114	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
115	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
115	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
115	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
115	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
115	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1151	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1151	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1151	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1151	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1151	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1152	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1152	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1152	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1152	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1152	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1153	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1153	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1153	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1153	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1153	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1154	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1154	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1154	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1154	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1154	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
116	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
116	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
116	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K2O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	1 cai		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
116	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
116	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1169	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1169	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1169	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1169	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1169	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
12	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
12	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
12	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
12	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
12	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
13	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
13	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
13	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
13	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
13	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
131	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
131	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
131	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
131	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
131	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
131	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
131	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
131	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
131	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
131	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
132	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
132	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
132	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	

Field	Crop Year	Planned Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub> Rec	K2O Rec	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Custom Fert. Rec. Source
	Year		(per ac)	Rec (lbs/ac)	(lbs/ac)	(lbs/ac)	Removed (lbs/ac)	Removed (lbs/ac)	Removed (lbs/ac)	
132	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
132	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
132	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
132	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
132	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
132	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
132	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
14	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
14	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
14	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
14	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
14	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
141	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
141	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
141	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
141	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
141	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
142	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
142	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
142	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
142	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
142	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
143	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
143	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
143	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
143	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
143	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
15	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
15	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
15	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	i cai		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
15	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
15	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
151	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
151	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
151	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
151	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
151	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
152	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
152	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
152	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
152	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
152	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
153	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
153	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
153	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
153	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
153	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
154	2021	Orchardgrass	4.0 tons	100	0	68	150	60	200	
154	2022	Orchardgrass	4.0 tons	100	0	68	150	60	200	
154	2023	Orchardgrass	4.0 tons	100	0	68	150	60	200	
154	2024	Orchardgrass	4.0 tons	100	0	68	150	60	200	
154	2025	Orchardgrass	4.0 tons	100	0	68	150	60	200	
155	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
155	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
155	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
155	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
155	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
156	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
156	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
156	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K2O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	I cai		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
156	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
156	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
157	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
157	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
157	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
157	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
157	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
158	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
158	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
158	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
158	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
158	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
159	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
159	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
159	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
159	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
159	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
16	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
16	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
16	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
16	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
16	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
161	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
161	2021	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
161	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
161	2022	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
161	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
161	2023	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
161	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
161	2024	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
161	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
161	2025	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
163	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
163	2021	Corn for Silage, convent	23.0 tons	147	0	128	207	115	253	
163	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
163	2022	Corn for Silage, convent	23.0 tons	147	0	128	207	115	253	
163	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
163	2023	Corn for Silage, convent	23.0 tons	147	0	128	207	115	253	
163	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
163	2024	Corn for Silage, convent	23.0 tons	147	0	128	207	115	253	
163	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
163	2025	Corn for Silage, convent	23.0 tons	147	0	128	207	115	253	
164	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
164	2021	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
164	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
164	2022	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
164	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
164	2023	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
164	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
164	2024	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
164	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
164	2025	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
17	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
17	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
17	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
17	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
17	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
171	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
171	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
171	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K2O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	1 cai		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
171	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
171	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
171	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
171	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
171	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
171	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
171	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
18	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
18	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
18	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
18	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
18	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
2	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
2	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
2	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
2	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
2	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
2	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
2	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
2	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
2	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
2	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
21	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
21	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
21	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
21	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
21	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
22	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
22	2021	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
22	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	i cai		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
22	2022	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
22	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
22	2023	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
22	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
22	2024	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
22	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
22	2025	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
23	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
23	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
23	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
23	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
23	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
24	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
24	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
24	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
24	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
24	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
24	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
24	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
24	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
24	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
24	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
25	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
25	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
25	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
25	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
25	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
25	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
25	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
25	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal (per ac)	N Rec (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Rec (lbs/ac)	K <sub>2</sub> O Rec (lbs/ac)	N Removed (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Removed (lbs/ac)	K <sub>2</sub> O Removed (lbs/ac)	Custom Fert. Rec. Source
25	2025	Small grain cover <sup>a</sup>	( <b>F</b> == ==)	0	0	0	0	0	0	
25	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
26	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
26	2021	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
26	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
26	2022	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
26	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
26	2023	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
26	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
26	2024	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
26	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
26	2025	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
27	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
27	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
27	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
27	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
27	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
27	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
27	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
27	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
27	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
27	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
28	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
28	2021	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
28	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
28	2022	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
28	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
28	2023	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
28	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
28	2024	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
			(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
28	2025	Small grain cover <sup>a</sup>		0	0	0	0	0		
28	2025	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
29	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
29	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
29	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
29	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
29	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
3	2021	Orchardgrass	4.0 tons	100	23	68	150	60	200	
3	2022	Orchardgrass	4.0 tons	100	23	68	150	60	200	
3	2023	Orchardgrass	4.0 tons	100	23	68	150	60	200	
3	2024	Orchardgrass	4.0 tons	100	23	68	150	60	200	
3	2025	Orchardgrass	4.0 tons	100	23	68	150	60	200	
301	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
301	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
301	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
301	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
301	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
302	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
302	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
302	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
302	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
302	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
31	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
31	2021	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
31	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
31	2022	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
31	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
31	2023	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
31	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
31	2024	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	i cai		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
31	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
31	2025	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
311	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
311	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
311	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
311	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
311	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
312	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
312	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
312	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
312	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
312	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
32	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
32	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
32	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
32	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
32	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
321	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
321	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
321	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
321	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
321	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
322	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
322	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
322	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
322	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
322	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
323	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
323	2021	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
323	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	1 cui		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
323	2022	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
323	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
323	2023	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
323	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
323	2024	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
323	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
323	2025	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
324	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
324	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
324	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
324	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
324	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
326	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
326	2021	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
326	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
326	2022	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
326	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
326	2023	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
326	2024	Small grain cover <sup>a</sup>		0	Ő	0	0	0	0	
326	2024	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
326	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
326	2025	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
33	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
33	2021	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
33	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
33	2022	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
33	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
33	2023	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
33	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
33	2024	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal (per ac)	N Rec (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Rec (lbs/ac)	K <sub>2</sub> O Rec (lbs/ac)	N Removed (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Removed (lbs/ac)	K <sub>2</sub> O Removed (lbs/ac)	Custom Fert. Rec. Source
33	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	、 /	
33	2025	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
331	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
331	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
331	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
331	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
331	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
332	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
332	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
332	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
332	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
332	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
333	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
333	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
333	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
333	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
333	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
334	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
334	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
334	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
334	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
334	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
335	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
335	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
335	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
335	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
335	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
34	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
34	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
34	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	1 cai		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
34	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
34	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
35	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
35	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
35	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
35	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
35	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
35	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
35	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
35	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
35	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
35	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
36	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
36	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
36	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
36	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
36	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
37	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
37	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
37	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
37	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
37	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
37	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
37	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
37	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
37	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
37	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
39	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
39	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
39	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal (per ac)	N Rec (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Rec (lbs/ac)	K <sub>2</sub> O Rec (lbs/ac)	N Removed (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Removed (lbs/ac)	K <sub>2</sub> O Removed (lbs/ac)	Custom Fert. Rec. Source
39	2024	Orchardgrass	4.0 tons	100	34	31	150	60		
39	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
4	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
4	2021	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
4	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
4	2022	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
4	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
4	2023	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
4	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
4	2024	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
4	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
4	2025	Corn for Silage, convent	23.0 tons	147	0	72	207	115	253	
41	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
41	2021	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
41	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
41	2022	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
41	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
41	2023	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
41	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
41	2024	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
41	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
41	2025	Corn for Silage, convent	23.0 tons	147	46	128	207	115	253	
42	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
42	2021	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
42	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
42	2022	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
42	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
42	2023	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
42	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
42	2024	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	Year		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
42	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
42	2025	Corn for Silage, convent	23.0 tons	147	61	128	207	115	253	
5	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
5	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
5	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
5	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
5	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
51	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
51	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
51	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
51	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
51	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
51	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
51	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
51	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
51	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
51	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
52	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
52	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
52	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
52	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
52	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
52	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
52	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
52	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
52	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
52	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
53	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
53	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
53	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	rear		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	Removed (lbs/ac)	(lbs/ac)	
53	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
53	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
53	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
53	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
53	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
53	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
53	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
55	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
55	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
55	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
55	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
55	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
55	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
55	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
55	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
55	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
55	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
56	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
56	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
56	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
56	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
56	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
58	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
58	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
58	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
58	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
58	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
6	2021	Orchardgrass	4.0 tons	100	0	0	150	60	200	
6	2022	Orchardgrass	4.0 tons	100	0	0	150	60	200	
6	2023	Orchardgrass	4.0 tons	100	0	0	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec (lbs/ac)	K <sub>2</sub> O Rec (lbs/ac)	N Removed (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Removed (lbs/ac)	K <sub>2</sub> O Removed (lbs/ac)	Custom Fert. Rec. Source
6	2024	Orchardgrass	(per ac) 4.0 tons	(lbs/ac) 100	(105/ac) 0	(105/ac)	(105/ac)	(105/ac) 60	. ,	
6	2025	Orchardgrass	4.0 tons	100	0	0	150	60	200	
61	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
61	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
61	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
61	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
61	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
61	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
61	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
61	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
61	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
61	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
62	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
62	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
62	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
62	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
62	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
62	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
62	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
62	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
62	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
62	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
63	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
63	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
63	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
63	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
63	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
63	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
63	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
63	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal (per ac)	N Rec (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Rec (lbs/ac)	K <sub>2</sub> O Rec (lbs/ac)	N Removed (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Removed (lbs/ac)	K <sub>2</sub> O Removed (lbs/ac)	Custom Fert. Rec. Source
63	2025	Small grain cover <sup>a</sup>	u /	0	0	0	0	0	0	
63	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
64	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
64	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
64	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
64	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
64	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
64	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
64	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
64	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
64	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
64	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
65	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
65	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
65	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
65	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
65	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
65	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
65	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
65	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
65	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
65	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
66	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
66	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
66	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
66	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
66	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
66	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
66	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
66	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	

Field	Crop Year	Planned Crop	Yield Goal	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub> Removed	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	1 cui		(per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	
66	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
66	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
67	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
67	2021	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
67	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
67	2022	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
67	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
67	2023	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
67	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
67	2024	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
67	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
67	2025	Corn for Silage, convent	23.0 tons	147	61	72	207	115	253	
7	2021	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
7	2021	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
7	2022	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
7	2022	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
7	2023	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
7	2023	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
7	2024	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
7	2024	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
7	2025	Small grain cover <sup>a</sup>		0	0	0	0	0	0	
7	2025	Corn for Silage, convent	23.0 tons	147	46	72	207	115	253	
8	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
8	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
8	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
8	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
8	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
81	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
81	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
81	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	

Field	Crop Year	Planned Crop	Yield	N Rec	P <sub>2</sub> O <sub>5</sub> Rec	K <sub>2</sub> O Rec	N Removed	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O Removed	Custom Fert. Rec. Source
	rear		Goal (per ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	(lbs/ac)	Removed (lbs/ac)	(lbs/ac)	
81	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
81	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
82	2021	Orchardgrass	4.0 tons	100	34	31	150	60	200	
82	2022	Orchardgrass	4.0 tons	100	34	31	150	60	200	
82	2023	Orchardgrass	4.0 tons	100	34	31	150	60	200	
82	2024	Orchardgrass	4.0 tons	100	34	31	150	60	200	
82	2025	Orchardgrass	4.0 tons	100	34	31	150	60	200	
9	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
9	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
9	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
9	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
9	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
147	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
147	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
147	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
147	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
147	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
148	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
148	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
148	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
148	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
148	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
149	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
149	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
149	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
149	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
149	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
172	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
172	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
172	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	

Field	Crop Year	Planned Crop	Yield Goal (per ac)	N Rec (lbs/ac)	P2O5 Rec (lbs/ac)	K <sub>2</sub> O Rec (lbs/ac)	N Removed (lbs/ac)	P <sub>2</sub> O <sub>5</sub> Removed (lbs/ac)	K <sub>2</sub> O Removed (lbs/ac)	Custom Fert. Rec. Source
172	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
172	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
173	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
173	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
173	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
173	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
173	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
174	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
174	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
174	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
174	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
174	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
175	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
175	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
175	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
175	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
175	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1155	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1155	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1155	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1155	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1155	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1156	2021	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1156	2022	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1156	2023	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1156	2024	Orchardgrass	4.0 tons	100	34	68	150	60	200	
1156	2025	Orchardgrass	4.0 tons	100	34	68	150	60	200	

a. Unharvested cover crop or first crop in double-crop system.b. Custom fertilizer recommendation.



## 6.6. Manure Application Planning Calendar

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2021 Crop (Prev. Primary Crop)	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21
1	2.1	1.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						2.1					
1001	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	1.6						2.1					
1002	1.2	1.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.2						1.5					
1003	19.2	19.2	Sutton FSL (50A 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	9.4						12.2					
1004	4.1	4.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	3.9						5.3					
1005	4.0	4.0	Woodbridge MPM (47C 3- 15%)	Corn for Silage, convent (Corn for Silage, convent)							5.3					
1006	4.0	4.0	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	3.9						5.3					
1007	4.1	4.1	Hollis HPM (75C 3-15%)	Corn for Silage, convent (Corn for Silage, convent)							5.4					
1008	19.6	19.6	Ridgebury MPM (2 0-3%)	Orchardgrass (Orchardgrass)	18.7						0.1					
1011	4.7	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)							6.2					
1012	3.7	3.7	Canton FSL (60C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							4.9					
1013	7.5	7.5	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							9.8					
1021	4.1	3.9	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	3.8						5.0					
1022	1.9	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	1.6						2.0					
1023	4.9	4.5	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	4.4						5.9					
1024	5.0	5.0	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							6.6					
1031	2.5	2.5	Sutton FSL (50B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							3.3					
1032	2.1	2.1	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.7					
1033	2.1	2.0	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	1.9						2.6					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2021 Crop (Prev. Primary Crop)	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21
1034	2.5	2.5	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.4						3.3					
1035	0.9	0.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.6						0.8					
1036	4.6	4.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	4.4						6.0					
1037	3.4	3.4	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	3.3						4.4					
1038	3.8	3.8	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							5.0					
1038A	1.6	1.6	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							2.1					
1039	1.2	1.2	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	1.2						1.4					
11	4.7	4.7	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	4.5						6.1					
111	1.5	1.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	1.5						1.8					
112	1.0	0.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.5						0.1					
113	4.6	3.7	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	3.6						4.8					
114	4.4	4.4	Ridgebury MPM (3 0-8%)	Orchardgrass (Orchardgrass)	4.3						5.8					
115	2.1	2.1	Udorthents L (308 0-35%)	Orchardgrass (Orchardgrass)	2.1						2.7					
1151	3.6	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.2						4.3					
1152	1.0	1.0	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.0						1.3					
1153	1.5	1.4	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.4						1.7					
1154	4.8	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.6						0.1					
116	1.9	1.9	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	1.8						2.4					
1169	20.1	20.0	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	19.1						26.2					
12	3.8	3.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	3.7						4.9					
13	8.1	8.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	7.7						10.6					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2021 Crop (Prev. Primary Crop)	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21
131	8.1	8.1	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							10.6					
132	2.4	2.4	Canton SPM (61C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							3.2					
14	4.5	4.5	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.3						5.8					
141	17.8	17.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	17.0						23.3					
142	4.1	4.1	Woodbridge FSL (45A 0- 3%)	Orchardgrass (Orchardgrass)	4.0						5.4					
143	5.0	4.4	Paxton FSL (84C 8-15%)	Orchardgrass (Orchardgrass)	4.2						5.8					
15	1.6	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	1.5						2.1					
151	6.9	6.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						6.3					
152	7.5	7.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							9.8					
153	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							14.7					
154	5.0	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							6.3					
155	2.9	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							3.8					
156	3.0	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							3.8					
157	3.4	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							4.4					
158	9.4	9.4	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)							12.3					
159	4.2	4.2	Paxton MPM (85C 8-15%)	Orchardgrass (Orchardgrass)							5.6					
16	1.9	1.9	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)							2.5					
161	11.4	11.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)							15.0					
163	10.8	10.8	Sudbury MPM (23A 0-5%)	Corn for Silage, convent (Corn for Silage, convent)							14.2					
164	4.9	4.9	Paxton MPM (85C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							6.5					
17	3.8	3.8	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)							5.0					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2021 Crop (Prev. Primary Crop)	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21
171	8.0	7.6	Narragansett SIL (67B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)							9.9					
18	2.8	2.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)							3.8					
2	22.0	21.8	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)							28.6					
21	8.1	7.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							10.4					
22	11.8	11.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							15.1					
23	0.9	0.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							1.2					
24	10.0	10.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)							13.2					
25	9.5	9.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)							12.5					
26	3.1	3.1	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)							4.2					
27	1.9	1.9	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)							2.5					
28	5.0	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	r						6.2					
29	3.3	3.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							4.1					
3	1.6	1.6	Woodbridge MPM (47C 3- 15%)	Orchardgrass (Orchardgrass)							2.1					
301	10.1	9.9	Sutton FSL (50B 3-8%)	Orchardgrass (Orchardgrass)							13.1					
302	6.7	6.4	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)							8.4					
31	12.8	12.8	Woodbridge FSL (45C 8- 15%)	Corn for Silage, convent (Corn for Silage, convent)							16.8					
311	4.2	3.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)							4.7					
312	2.9	2.7	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)							3.6					
32	3.5	2.8	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							3.8					
321	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							14.7					
322	13.8	13.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							18.0					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2021 Crop (Prev. Primary Crop)	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21
323	6.3	6.1	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)							8.0					
324	8.6	8.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							11.2					
326	3.5	3.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)							4.6					
33	26.7	26.5	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)							34.7					
331	1.5	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							1.7					
332	5.2	5.0	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)							6.6					
333	1.7	1.7	Canton SPM (61C 8-15%)	Orchardgrass (Orchardgrass)							2.3					
334	4.1	4.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							5.4					
335	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							0.9					
34	5.1	5.1	Walpole MPT (13 0-3%)	Orchardgrass (Orchardgrass)							6.7					
35	4.0	4.0	8%)	Corn for Silage, convent (Corn for Silage, convent)	r						5.3					
36	3.0	3.0	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)							4.0					
37	23.5	23.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)							30.8					
39	1.9	1.9	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)							2.6					
4	2.9	2.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)							3.7					
41	28.4	28.4	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							37.2					
42	2.8		Fluvaquents SIL (109 0-3%)	Corn for Silage, convent (Corn for Silage, convent)							2.6					
5	12.7	12.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							16.6					
51	2.6	2.3	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							3.0					
52	2.9	2.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							2.9					
53	2.8	2.6	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							3.5					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2021 Crop (Prev. Primary Crop)	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21
55	1.6	1.5	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							2.1					
56	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							2.1					
58	9.6	9.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							12.7					
6	1.3	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							1.7					
61	6.2	6.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)							8.2					
62	1.8	1.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)							2.4					
63	5.7	5.0	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							6.7					
64	3.5	3.2	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							4.2					
65	2.8	2.6	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							3.5					
66	2.0	1.5	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							2.0					
67	1.5	1.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	r						2.0					
7	7.4		Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							9.8					
8	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							0.8					
81	5.4	5.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							6.9					
82	1.6	1.4	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)							1.8					
9	0.8	0.8	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)							1.0					
147	37.1	31.5	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							41.3					
148	1.6	0.5	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)							0.7					
149	29.0	29.0	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)							38.1					
172	2.5	2.5	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)							3.3					
173	5.1	4.7	Narragansett SIL (67B 3- 8%)	Orchardgrass (Orchardgrass)							6.2					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2021 Crop (Prev. Primary Crop)	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21
174	1.3	1.3	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)							1.8					
175	5.2	5.2	Cheshire FSL (63B 3-8%)	Orchardgrass (Orchardgrass)							6.9					
1155	5.7		Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)							6.4					
1156	12.3	11.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)							15.6					
Total	766.4	743.7			157. 8						929. 9					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2022 Crop (Prev. Primary Crop)	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22
1	2.1	1.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.3						2.1					
1001	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	2.2						2.1					
1002	1.2	1.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.6						1.6					
1003	19.2	19.2	Sutton FSL (50A 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	25.2						25.2					
1004	4.1	4.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
1005	4.0	4.0	Woodbridge MPM (47C 3- 15%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
1006	4.0	4.0	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	5.3						5.3					
1007	4.1	4.1	Hollis HPM (75C 3-15%)	Corn for Silage, convent (Corn for Silage, convent)	5.4						5.4					
1008	19.6	19.6	Ridgebury MPM (2 0-3%)	Orchardgrass (Orchardgrass)	25.7						12.6					
1011	4.7	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
1012	3.7	3.7	Canton FSL (60C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	4.9						4.9					
1013	7.5	7.5	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	9.8						9.8					
1021	4.1	3.9	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.2						5.0					
1022	1.9	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
1023	4.9	4.5	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	6.0						5.9					
1024	5.0	5.0	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.6						6.6					
1031	2.5	2.5	Sutton FSL (50B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.3						3.3					
1032	2.1	2.1	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1033	2.1	2.0	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.6						2.6					
1034	2.5	2.5	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	3.3						3.3					
1035	0.9	0.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.8						0.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2022 Crop (Prev. Primary Crop)	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22
1036	4.6	4.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	6.0						6.0					
1037	3.4	3.4	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	3.4						3.4					
1038	3.8	3.8	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	5.0						5.0					
1038A	1.6	1.6	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.1					
1039	1.2	1.2	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	1.6						1.5					
11	4.7	4.7	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	6.1						6.1					
111	1.5	1.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	2.0						2.0					
112	1.0	0.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.7						0.7					
113	4.6	3.7	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	4.9						4.9					
114	4.4	4.4	Ridgebury MPM (3 0-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
115	2.1	2.1	Udorthents L (308 0-35%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1151	3.6	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.3					
1152	1.0	1.0	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.3						1.3					
1153	1.5	1.4	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.9						1.7					
1154	4.8	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
116	1.9	1.9	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	2.5						2.4					
1169	20.1	20.0	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	26.3						23.2					
12	3.8	3.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	5.1						4.9					
13	8.1	8.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	10.6						10.6					
131	8.1	8.1	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	10.6						10.6					
132	2.4	2.4	Canton SPM (61C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.2						3.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2022 Crop (Prev. Primary Crop)	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22
14	4.5	4.5	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
141	17.8	17.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	23.4						23.3					
142	4.1	4.1	Woodbridge FSL (45A 0- 3%)	Orchardgrass (Orchardgrass)	5.5						5.4					
143	5.0	4.4	Paxton FSL (84C 8-15%)	Orchardgrass (Orchardgrass)	5.8						5.8					
15	1.6	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
151	6.9	6.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	8.7						8.6					
152	7.5	7.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	9.8						9.8					
153	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						14.7					
154	5.0	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
155	2.9	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						3.8					
156	3.0	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						3.8					
157	3.4	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.2					
158	9.4	9.4	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	12.3						12.3					
159	4.2	4.2	Paxton MPM (85C 8-15%)	Orchardgrass (Orchardgrass)	5.6						5.4					
16	1.9	1.9	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.5						2.5					
161	11.4	11.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	15.0						14.8					
163	10.8	10.8	Sudbury MPM (23A 0-5%)	Corn for Silage, convent (Corn for Silage, convent)	14.2						14.2					
164	4.9	4.9	Paxton MPM (85C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.5						6.4					
17	3.8	3.8	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.0						4.9					
171	8.0	7.6	Narragansett SIL (67B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	9.9						9.9					
18	2.8	2.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	3.8						3.7					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2022 Crop (Prev. Primary Crop)	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22
2	22.0	21.8	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	28.6						28.6					
21	8.1	7.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	10.4						10.4					
22	11.8	11.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	15.1						15.1					
23	0.9	0.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.2						1.2					
24	10.0	10.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	13.2						13.1					
25	9.5	9.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	12.5						12.4					
26	3.1	3.1	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.2						4.1					
27	1.9	1.9	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	2.5						2.4					
28	5.0	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
29	3.3	3.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	4.1						4.0					
3	1.6	1.6	Woodbridge MPM (47C 3- 15%)	Orchardgrass (Orchardgrass)	2.1						2.1					
301	10.1	9.9	Sutton FSL (50B 3-8%)	Orchardgrass (Orchardgrass)	13.1						13.0					
302	6.7	6.4	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	8.4						8.4					
31	12.8	12.8	Woodbridge FSL (45C 8- 15%)	Corn for Silage, convent (Corn for Silage, convent)	16.8						16.7					
311	4.2	3.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.7						4.7					
312	2.9	2.7	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	3.6						3.5					
32	3.5	2.8	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)							3.8					
321	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						14.7					
322	13.8	13.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	18.0						17.9					
323	6.3	6.1	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	8.0						7.9					
324	8.6	8.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	11.2						11.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2022 Crop (Prev. Primary Crop)	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22
326	3.5	3.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.6						4.5					
33	26.7	26.5	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	34.7						34.6					
331	1.5	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.7					
332	5.2	5.0	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	6.6						6.5					
333	1.7	1.7	Canton SPM (61C 8-15%)	Orchardgrass (Orchardgrass)	2.3						2.2					
334	4.1	4.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
335	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.9						0.8					
34	5.1	5.1	Walpole MPT (13 0-3%)	Orchardgrass (Orchardgrass)	6.7						6.7					
35	4.0	4.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
36	3.0	3.0	8%)	Orchardgrass (Orchardgrass)	4.0						4.0					
37	23.5	23.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	30.8						30.7					
39	1.9	1.9	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	2.6						2.5					
4	2.9	2.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	3.7						0.1					
41	28.4	28.4	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	37.2						37.1					
42	2.8	2.0	Fluvaquents SIL (109 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	2.6						2.6					
5	12.7	12.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	16.6						16.6					
51	2.6	2.3	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.0						3.0					
52	2.9	2.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.9						2.8					
53	2.8	2.6	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.5						3.4					
55	1.6	1.5	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.0					
56	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.1						2.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2022 Crop (Prev. Primary Crop)	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22
58	9.6	9.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	12.7						12.6					
6	1.3	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.6					
61	6.2	6.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	8.2						8.0					
62	1.8	1.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	2.4						2.4					
63	5.7	5.0	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	6.7						6.6					
64	3.5	3.2	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	4.2						4.2					
65	2.8	2.6	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.5						3.4					
66	2.0	1.5	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.0						2.0					
67	1.5	1.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.0						2.0					
7	7.4	7.4	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	9.8						9.7					
8	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.8						0.8					
81	5.4	5.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.9					
82	1.6	1.4	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	1.8						1.8					
9	0.8	0.8	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	1.0						1.0					
147	37.1	31.5	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	41.3						41.2					
148	1.6	0.5	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	0.7						0.6					
149	29.0	29.0	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	38.1						37.9					
172	2.5	2.5	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	3.3						3.2					
173	5.1	4.7	Narragansett SIL (67B 3- 8%)	Orchardgrass (Orchardgrass)	6.2						6.2					
174	1.3	1.3	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	1.8						1.6					
175	5.2	5.2	Cheshire FSL (63B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2022 Crop (Prev. Primary Crop)	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22
1155	5.7	4.8	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	6.4						6.3					
1156	12.3	11.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	5.2						10.3					
Total	766.4	743.7			965. 2						947. 5					



Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2023 Crop (Prev. Primary Crop)	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23
1	2.1	1.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.3						2.1					
1001	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	2.2						2.1					
1002	1.2	1.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.6						1.6					
1003	19.2	19.2	Sutton FSL (50A 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	25.2						25.2					
1004	4.1	4.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
1005	4.0	4.0	Woodbridge MPM (47C 3- 15%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
1006	4.0	4.0	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	5.3						5.3					
1007	4.1	4.1	Hollis HPM (75C 3-15%)	Corn for Silage, convent (Corn for Silage, convent)	5.4						5.4					
1008	19.6	19.6	Ridgebury MPM (2 0-3%)	Orchardgrass (Orchardgrass)	25.7						25.7					
1011	4.7	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
1012	3.7	3.7	Canton FSL (60C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	4.9						4.9					
1013	7.5	7.5	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	9.8						9.8					
1021	4.1	3.9	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.2						5.0					
1022	1.9	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
1023	4.9	4.5	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	6.0						5.9					
1024	5.0	5.0	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.6						6.6					
1031	2.5	2.5	Sutton FSL (50B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.3						3.3					
1032	2.1	2.1	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1033	2.1	2.0	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.6						2.6					
1034	2.5	2.5	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	3.3						3.3					
1035	0.9	0.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.8						0.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2023 Crop (Prev. Primary Crop)	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23
1036	4.6	4.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	6.0						6.0					
1037	3.4	3.4	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.5						4.5					
1038	3.8	3.8	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	5.0						5.0					
1038A	1.6	1.6	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.1					
1039	1.2	1.2	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	1.6						1.5					
11	4.7	4.7	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	6.1						6.1					
111	1.5	1.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	2.0						2.0					
112	1.0	0.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.7						0.7					
113	4.6	3.7	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	4.9						4.9					
114	4.4	4.4	Ridgebury MPM (3 0-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
115	2.1	2.1	Udorthents L (308 0-35%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1151	3.6	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.3					
1152	1.0	1.0	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.3						1.3					
1153	1.5	1.4	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.9						1.7					
1154	4.8	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
116	1.9	1.9	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	2.5						2.4					
1169	20.1	20.0	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	26.3						26.2					
12	3.8	3.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	5.1						4.9					
13	8.1	8.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	10.6						10.6					
131	8.1	8.1	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	10.6						10.6					
132	2.4	2.4	Canton SPM (61C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.2						3.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2023 Crop (Prev. Primary Crop)	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23
14	4.5	4.5	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
141	17.8	17.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	23.4						23.3					
142	4.1	4.1	Woodbridge FSL (45A 0- 3%)	Orchardgrass (Orchardgrass)	5.5						5.4					
143	5.0	4.4	Paxton FSL (84C 8-15%)	Orchardgrass (Orchardgrass)	5.8						5.8					
15	1.6	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
151	6.9	6.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	8.7						8.6					
152	7.5	7.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	9.8						9.8					
153	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						14.7					
154	5.0	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
155	2.9	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						3.8					
156	3.0	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						3.8					
157	3.4	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.2					
158	9.4	9.4	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	12.3						12.3					
159	4.2	4.2	Paxton MPM (85C 8-15%)	Orchardgrass (Orchardgrass)	5.6						5.4					
16	1.9	1.9	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.5						2.5					
161	11.4	11.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	15.0						14.8					
163	10.8	10.8	Sudbury MPM (23A 0-5%)	Corn for Silage, convent (Corn for Silage, convent)	14.2						14.2					
164	4.9	4.9	Paxton MPM (85C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.5						6.4					
17	3.8	3.8	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.0						4.9					
171	8.0	7.6	Narragansett SIL (67B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	9.9						9.9					
18	2.8	2.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	3.8						3.7					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2023 Crop (Prev. Primary Crop)	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23
2	22.0	21.8	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	28.6						28.6					
21	8.1	7.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	10.4						10.4					
22	11.8	11.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	15.1						15.1					
23	0.9	0.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.2						1.2					
24	10.0	10.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	13.2						13.1					
25	9.5	9.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	12.5						12.4					
26	3.1	3.1	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.2		>				3.7					
27	1.9	1.9	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	2.5						2.4					
28	5.0	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
29	3.3	3.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	4.1						4.0					
3	1.6	1.6	Woodbridge MPM (47C 3- 15%)	Orchardgrass (Orchardgrass)	2.1						2.1					
301	10.1	9.9	Sutton FSL (50B 3-8%)	Orchardgrass (Orchardgrass)	13.1						13.0					
302	6.7	6.4	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	8.4						8.4					
31	12.8	12.8	Woodbridge FSL (45C 8- 15%)	Corn for Silage, convent (Corn for Silage, convent)	16.8						16.7					
311	4.2	3.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.7						4.7					
312	2.9	2.7	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	3.6						3.5					
32	3.5	2.8	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	3.8						3.7					
321	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						14.7					
322	13.8	13.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	18.0						17.9					
323	6.3	6.1	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	8.0						7.9					
324	8.6	8.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	11.2						11.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2023 Crop (Prev. Primary Crop)	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23
326	3.5	3.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.6						4.5					
33	26.7	26.5	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	34.7						34.6					
331	1.5	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.7					
332	5.2	5.0	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	6.6						6.5					
333	1.7	1.7	Canton SPM (61C 8-15%)	Orchardgrass (Orchardgrass)	2.3						2.2					
334	4.1	4.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
335	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.9						0.8					
34	5.1	5.1	Walpole MPT (13 0-3%)	Orchardgrass (Orchardgrass)	6.7						6.7					
35	4.0	4.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
36	3.0	3.0	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	4.0						4.0					
37	23.5	23.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	28.0						2.7					
39	1.9	1.9	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	2.6						2.5					
4	2.9	2.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	3.7						3.7					
41	28.4	28.4	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	37.2						37.1					
42	2.8	2.0	Fluvaquents SIL (109 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	2.6						2.6					
5	12.7	12.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	16.6						16.6					
51	2.6	2.3	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.0						3.0					
52	2.9	2.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.9						2.8					
53	2.8	2.6	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.5						3.4					
55	1.6	1.5	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.0					
56	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.1						2.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2023 Crop (Prev. Primary Crop)	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23
58	9.6	9.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	12.7						12.6					
6	1.3	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.6					
61	6.2	6.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	8.2						8.0					
62	1.8	1.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	0.4						2.0					
63	5.7	5.0	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							6.7					
64	3.5	3.2	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							4.2					
65	2.8	2.6	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							3.5					
66	2.0	1.5	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							2.0					
67	1.5	1.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							2.0					
7	7.4	7.4	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							9.8					
8	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.8						0.8					
81	5.4	5.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.9					
82	1.6	1.4	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	1.8						1.8					
9	0.8	0.8	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	1.0						1.0					
147	37.1	31.5	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	41.3						41.2					
148	1.6	0.5	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	0.7						0.6					
149	29.0	29.0	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	38.1						37.9					
172	2.5	2.5	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	3.3						3.2					
173	5.1	4.7	Narragansett SIL (67B 3- 8%)	Orchardgrass (Orchardgrass)	6.2						6.2					
174	1.3	1.3	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	1.8						1.6					
175	5.2	5.2	Cheshire FSL (63B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2023 Crop (Prev. Primary Crop)	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23
1155	5.7	4.8	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	6.4						6.3					
1156	12.3	11.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	15.6						15.5					
Total	766.4	743.7			947. 5						944. 9					



Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2024 Crop (Prev. Primary Crop)	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24
1	2.1	1.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.3						2.1					
1001	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	2.2						2.1					
1002	1.2	1.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.6						1.6					
1003	19.2	19.2	Sutton FSL (50A 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	25.2						25.2					
1004	4.1	4.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
1005	4.0	4.0	Woodbridge MPM (47C 3- 15%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
1006	4.0	4.0	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	5.3						5.3					
1007	4.1	4.1	Hollis HPM (75C 3-15%)	Corn for Silage, convent (Corn for Silage, convent)	5.4						5.4					
1008	19.6	19.6	Ridgebury MPM (2 0-3%)	Orchardgrass (Orchardgrass)	25.7						25.7					
1011	4.7	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
1012	3.7	3.7	Canton FSL (60C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	4.9						4.9					
1013	7.5	7.5	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	9.8						9.8					
1021	4.1	3.9	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.2						5.0					
1022	1.9	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
1023	4.9	4.5	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	6.0						5.9					
1024	5.0	5.0	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.6						6.6					
1031	2.5	2.5	Sutton FSL (50B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.3						3.3					
1032	2.1	2.1	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1033	2.1	2.0	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.6						2.6					
1034	2.5	2.5	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	3.3						3.3					
1035	0.9	0.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.8						0.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2024 Crop (Prev. Primary Crop)	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24
1036	4.6	4.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	6.0						6.0					
1037	3.4	3.4	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.5						4.5					
1038	3.8	3.8	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	5.0						5.0					
1038A	1.6	1.6	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.1					
1039	1.2	1.2	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	1.6						1.5					
11	4.7	4.7	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	6.1						6.1					
111	1.5	1.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	2.0						2.0					
112	1.0	0.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.7						0.7					
113	4.6	3.7	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	4.9						4.9					
114	4.4	4.4	Ridgebury MPM (3 0-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
115	2.1	2.1	Udorthents L (308 0-35%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1151	3.6	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.3					
1152	1.0	1.0	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.3						1.3					
1153	1.5	1.4	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.9						1.7					
1154	4.8	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
116	1.9	1.9	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	2.5						2.4					
1169	20.1	20.0	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	26.3						26.2					
12	3.8	3.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	5.1						4.9					
13	8.1	8.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	10.6						10.6					
131	8.1	8.1	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	10.6						10.6					
132	2.4	2.4	Canton SPM (61C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.2						3.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2024 Crop (Prev. Primary Crop)	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24
14	4.5	4.5	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
141	17.8	17.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	23.4						23.3					
142	4.1	4.1	Woodbridge FSL (45A 0- 3%)	Orchardgrass (Orchardgrass)	5.5						5.4					
143	5.0	4.4	Paxton FSL (84C 8-15%)	Orchardgrass (Orchardgrass)	5.8						5.8					
15	1.6	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
151	6.9	6.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	8.7						8.6					
152	7.5	7.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	9.8						9.8					
153	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						14.7					
154	5.0	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
155	2.9	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						1.8					
156	3.0	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						3.8					
157	3.4	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.2					
158	9.4	9.4	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	12.3						12.3					
159	4.2	4.2	Paxton MPM (85C 8-15%)	Orchardgrass (Orchardgrass)	5.6						5.4					
16	1.9	1.9	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.5						2.5					
161	11.4	11.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	15.0						14.8					
163	10.8	10.8	Sudbury MPM (23A 0-5%)	Corn for Silage, convent (Corn for Silage, convent)	14.2						14.2					
164	4.9	4.9	Paxton MPM (85C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.5						6.4					
17	3.8	3.8	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.0						4.9					
171	8.0	7.6	Narragansett SIL (67B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	9.9						9.9					
18	2.8	2.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)							3.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2024 Crop (Prev. Primary Crop)	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24
2	22.0	21.8	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	28.6						24.2					
21	8.1	7.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	10.4						10.4					
22	11.8	11.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	15.1						15.1					
23	0.9	0.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.2						1.2					
24	10.0	10.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	13.2						13.1					
25	9.5	9.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	12.5						12.4					
26	3.1	3.1	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.2						4.1					
27	1.9	1.9	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	2.5						2.4					
28	5.0	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
29	3.3	3.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	4.1						4.0					
3	1.6	1.6	Woodbridge MPM (47C 3- 15%)	Orchardgrass (Orchardgrass)	2.1						2.1					
301	10.1	9.9	Sutton FSL (50B 3-8%)	Orchardgrass (Orchardgrass)	13.1						13.0					
302	6.7	6.4	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	8.4						8.4					
31	12.8	12.8	Woodbridge FSL (45C 8- 15%)	Corn for Silage, convent (Corn for Silage, convent)	16.8						16.7					
311	4.2	3.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.7						4.7					
312	2.9	2.7	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	3.6						3.5					
32	3.5	2.8	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	3.8						3.7					
321	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						0.1					
322	13.8	13.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	18.0						17.9					
323	6.3	6.1	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	8.0						7.9					
324	8.6	8.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	11.2						11.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2024 Crop (Prev. Primary Crop)	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24
326	3.5	3.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.6						4.5					
33	26.7	26.5	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	34.7						34.6					
331	1.5	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.7					
332	5.2	5.0	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	6.6						6.5					
333	1.7	1.7	Canton SPM (61C 8-15%)	Orchardgrass (Orchardgrass)	2.3						2.2					
334	4.1	4.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
335	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.9						0.8					
34	5.1	5.1	Walpole MPT (13 0-3%)	Orchardgrass (Orchardgrass)	6.7						6.7					
35	4.0	4.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
36	3.0	3.0	8%)	Orchardgrass (Orchardgrass)	4.0						4.0					
37	23.5	23.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	30.8						30.7					
39	1.9	1.9	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	2.6						2.5					
4	2.9	2.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	3.7						0.1					
41	28.4	28.4	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	37.2						37.1					
42	2.8	2.0	Fluvaquents SIL (109 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	2.6						2.6					
5	12.7	12.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	16.6						16.6					
51	2.6	2.3	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.0						3.0					
52	2.9	2.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.9						2.8					
53	2.8	2.6	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.5						3.4					
55	1.6	1.5	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.0					
56	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.1	_					2.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2024 Crop (Prev. Primary Crop)	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24
58	9.6	9.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	12.7						12.6					
6	1.3	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.6					
61	6.2	6.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	8.2						8.0					
62	1.8	1.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	2.4						2.4					
63	5.7	5.0	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							6.7					
64	3.5	3.2	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							4.2					
65	2.8	2.6	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							3.5					
66	2.0	1.5	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							2.0					
67	1.5	1.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							2.0					
7	7.4		Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)							9.8					
8	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.8						0.8					
81	5.4	5.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.9					
82	1.6	1.4	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	1.8						1.8					
9	0.8	0.8	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	1.0						1.0					
147	37.1	31.5	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	41.3						41.2					
148	1.6	0.5	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	0.7						0.6					
149	29.0	29.0	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	38.1						37.9					
172	2.5	2.5	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	3.3						3.2					
173	5.1	4.7	Narragansett SIL (67B 3- 8%)	Orchardgrass (Orchardgrass)	6.2						6.2					
174	1.3	1.3	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	1.8						1.6					
175	5.2	5.2	Cheshire FSL (63B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2024 Crop (Prev. Primary Crop)	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24
1155	5.7	4.8	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	6.4						6.3					
1156	12.3	11.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	15.6						15.5					
Total	766.4	743.7			948. 5						949. 2					



Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2025 Crop (Prev. Primary Crop)	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25
1	2.1	1.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.3						2.1					
1001	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	2.2						2.1					
1002	1.2	1.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.6						1.6					
1003	19.2	19.2	Sutton FSL (50A 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	25.2						25.2					
1004	4.1	4.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
1005	4.0	4.0	Woodbridge MPM (47C 3- 15%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
1006	4.0	4.0	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	5.3						5.3					
1007	4.1	4.1	Hollis HPM (75C 3-15%)	Corn for Silage, convent (Corn for Silage, convent)	5.4						5.4					
1008	19.6	19.6	Ridgebury MPM (2 0-3%)	Orchardgrass (Orchardgrass)	25.7						25.7					
1011	4.7	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
1012	3.7	3.7	Canton FSL (60C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	4.9						4.9					
1013	7.5	7.5	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	9.8						9.8					
1021	4.1	3.9	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.2						5.0					
1022	1.9	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
1023	4.9	4.5	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	6.0						5.9					
1024	5.0	5.0	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.6						6.6					
1031	2.5	2.5	Sutton FSL (50B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.3						3.3					
1032	2.1	2.1	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1033	2.1	2.0	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.6						2.6					
1034	2.5	2.5	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	3.3						3.3					
1035	0.9	0.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.8						0.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2025 Crop (Prev. Primary Crop)	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25
1036	4.6	4.6	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	6.0						6.0					
1037	3.4	3.4	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.5						4.5					
1038	3.8	3.8	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	5.0						5.0					
1038A	1.6	1.6	Canton FSL (60B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.1					
1039	1.2	1.2	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	1.6						1.5					
11	4.7	4.7	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	6.1						6.1					
111	1.5	1.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	2.0						2.0					
112	1.0	0.5	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	0.7						0.7					
113	4.6	3.7	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	4.9						4.9					
114	4.4	4.4	Ridgebury MPM (3 0-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
115	2.1	2.1	Udorthents L (308 0-35%)	Orchardgrass (Orchardgrass)	2.8						2.8					
1151	3.6	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.3					
1152	1.0	1.0	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.3						1.3					
1153	1.5	1.4	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.9						1.7					
1154	4.8	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
116	1.9	1.9	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	2.5						2.4					
1169	20.1	20.0	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	26.3						26.2					
12	3.8	3.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	5.1						4.9					
13	8.1	8.1	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	10.6						10.6					
131	8.1	8.1	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	10.6						10.6					
132	2.4	2.4	Canton SPM (61C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.2						3.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2025 Crop (Prev. Primary Crop)	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25
14	4.5	4.5	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.9						5.8					
141	17.8	17.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	23.4						23.3					
142	4.1	4.1	Woodbridge FSL (45A 0- 3%)	Orchardgrass (Orchardgrass)	5.5						5.4					
143	5.0	4.4	Paxton FSL (84C 8-15%)	Orchardgrass (Orchardgrass)	5.8						5.8					
15	1.6	1.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	2.1						2.1					
151	6.9	6.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	8.7						8.6					
152	7.5	7.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	9.8						9.8					
153	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						14.7					
154	5.0	4.8	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.3						6.3					
155	2.9	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						3.8					
156	3.0	2.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	3.8						3.8					
157	3.4	3.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	4.4						4.2					
158	9.4	9.4	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	12.3						12.3					
159	4.2	4.2	Paxton MPM (85C 8-15%)	Orchardgrass (Orchardgrass)	5.6						5.4					
16	1.9	1.9	Charlton MPM (73C 3- 15%)	Orchardgrass (Orchardgrass)	2.5						2.5					
161	11.4	11.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	15.0						14.8					
163	10.8	10.8	Sudbury MPM (23A 0-5%)	Corn for Silage, convent (Corn for Silage, convent)	14.2						14.2					
164	4.9	4.9	Paxton MPM (85C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	6.5						6.4					
17	3.8	3.8	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	5.0						4.9					
171	8.0	7.6	Narragansett SIL (67B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	9.9						9.9					
18	2.8	2.8	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	3.8						3.7	_				

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2025 Crop (Prev. Primary Crop)	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25
2	22.0	21.8	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	28.6						28.6					
21	8.1	7.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	10.4						10.4					
22	11.8	11.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	15.1						15.1					
23	0.9	0.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	1.2						1.2					
24	10.0	10.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	13.2						13.1					
25	9.5	9.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	12.5						12.4					
26	3.1	3.1	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.2		$\langle$				4.1					
27	1.9	1.9	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	2.5						2.4					
28	5.0	4.7	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	6.2						6.2					
29	3.3	3.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	4.1						4.0					
3	1.6	1.6	Woodbridge MPM (47C 3- 15%)	Orchardgrass (Orchardgrass)	2.1						2.1					
301	10.1	9.9	Sutton FSL (50B 3-8%)	Orchardgrass (Orchardgrass)	13.1						13.0					
302	6.7	6.4	Sutton FSL (51B 2-8%)	Orchardgrass (Orchardgrass)	8.4						8.4					
31	12.8	12.8	Woodbridge FSL (45C 8- 15%)	Corn for Silage, convent (Corn for Silage, convent)	16.8						16.7					
311	4.2	3.6	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	4.7						4.7					
312	2.9		Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	3.6						3.5					1
32	3.5	2.8	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	3.8						3.7					1
321	11.4	11.2	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	14.7						14.7					1
322	13.8	13.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	18.0						17.9					
323	6.3	6.1	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	8.0						7.9					
324	8.6	8.5	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	11.2						11.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2025 Crop (Prev. Primary Crop)	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25
326	3.5	3.4	Woodbridge FSL (45A 0- 3%)	Corn for Silage, convent (Corn for Silage, convent)	4.6						4.5					
33	26.7	26.5	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	34.7						34.6					
331	1.5	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.7					
332	5.2	5.0	Canton FSL (60B 3-8%)	Orchardgrass (Orchardgrass)	6.6						6.5					
333	1.7	1.7	Canton SPM (61C 8-15%)	Orchardgrass (Orchardgrass)	2.3						2.2					
334	4.1	4.1	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	5.4						5.3					
335	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.9						0.8					
34	5.1	5.1	Walpole MPT (13 0-3%)	Orchardgrass (Orchardgrass)	6.7						6.7					
35	4.0	4.0	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	5.3						5.3					
36	3.0	3.0	8%)	Orchardgrass (Orchardgrass)	4.0						4.0					
37	23.5	23.5	Woodbridge MPM (46B 0- 8%)	Corn for Silage, convent (Corn for Silage, convent)	30.8						30.7					
39	1.9	1.9	Woodbridge MPM (46B 0- 8%)	Orchardgrass (Orchardgrass)	2.6						2.5					
4	2.9	2.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	3.7						3.7					
41	28.4	28.4	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	37.2						37.1					
42	2.8	2.0	Fluvaquents SIL (109 0-3%)	Corn for Silage, convent (Corn for Silage, convent)	2.6						2.6					
5	12.7	12.7	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	16.6						16.6					
51	2.6	2.3	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.0						3.0					
52	2.9	2.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.9						2.8					
53	2.8	2.6	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	3.5						3.4					
55	1.6	1.5	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	2.1						2.0					
56	1.6	1.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	2.1						2.1					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2025 Crop (Prev. Primary Crop)	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25
58	9.6	9.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	12.7						12.6					
6	1.3	1.3	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	1.7						1.6					
61	6.2	6.2	Paxton FSL (84C 8-15%)	Corn for Silage, convent (Corn for Silage, convent)	8.2						8.0					
62	1.8	1.8	Woodbridge FSL (45B 3- 8%)	Corn for Silage, convent (Corn for Silage, convent)	2.4						2.4					
63	5.7	5.0	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	6.7						6.6					
64	3.5	3.2	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	4.2						4.2					
65	2.8	2.6	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	3.5						3.4					
66	2.0	1.5	Merrimac FSL (34B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.0						2.0					
67	1.5	1.5	Paxton FSL (84B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	2.0						2.0					
7	7.4	7.4	Paxton MPM (85B 3-8%)	Corn for Silage, convent (Corn for Silage, convent)	9.8						9.7					
8	0.6	0.6	Woodbridge FSL (45B 3- 8%)	Orchardgrass (Orchardgrass)	0.8						0.8					
81	5.4	5.3	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.9					
82	1.6	1.4	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	1.8						1.8					
9	0.8	0.8	Paxton MPM (85B 3-8%)	Orchardgrass (Orchardgrass)	1.0						1.0					
147	37.1	31.5	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	20.3						21.0					
148	1.6	0.5	Sutton FSL (50A 0-3%)	Orchardgrass (Orchardgrass)	0.7						0.6					
149	29.0	29.0	Canton FSL (60C 8-15%)	Orchardgrass (Orchardgrass)	26.1						12.0					
172	2.5	2.5	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	3.3						3.2					
173	5.1	4.7	Narragansett SIL (67B 3- 8%)	Orchardgrass (Orchardgrass)	6.2						6.2					
174	1.3	1.3	Watchaug FSL (55B 3-8%)	Orchardgrass (Orchardgrass)	1.8						1.6					
175	5.2	5.2	Cheshire FSL (63B 3-8%)	Orchardgrass (Orchardgrass)	6.9						6.8					

Field	Total Area (ac)	Spread. Area (ac)	Predominant Soil Type	Primary 2025 Crop (Prev. Primary Crop)	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25
1155	5.7	4.8	Woodbridge FSL (45C 8- 15%)	Orchardgrass (Orchardgrass)	6.4						6.3					
1156	12.3	11.9	Paxton FSL (84B 3-8%)	Orchardgrass (Orchardgrass)	15.6						15.5					
Total	766.4	743.7			947. 5						927. 3					





## 6.7. Planned Nutrient Applications (Manure-spreadable Area)

## Manure-spreadable Area

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P2O5 (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.7 loads	10,710 gal	1.8	19	42	48
1	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	35	92	117
1	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	26	58	66
1	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	26	58	66
1	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
1	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	26	58	66
1	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1001	Oct 2020	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	6,000 gal	1.6 loads	10,080 gal	1.7	33	67	85
1001	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
1001	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	26	58	66
1001	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1001	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	26	58	66
1001	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
1001	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	45	92	117
1001	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1001	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	26	58	66
1001	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1002	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.2 loads	7,560 gal	1.3	19	42	48
1002	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.5 loads	9,450 gal	1.1	33	58	66
1002	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	35	92	117
1002	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
1002	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	26	58	66
1002	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
1002	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	26	58	66
1002	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
1002	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	26	58	66
1002	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
1003	Oct 2020	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	6,000 gal	9.4 loads	59,220 gal	9.9	33	67	85
1003	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	12.2 loads	76,860 gal	9.3	48	92	117
1003	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	26	58	66
1003	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	33	58	66
1003	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	26	58	66
1003	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	48	92	117
1003	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	45	92	117
1003	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	33	58	66
1003	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	26	58	66
1003	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.2 loads	158,760 gal	19.2	33	58	66
1004	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	3.9 loads	24,570 gal	4.1	19	42	48
1004	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1004	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	35	92	117
1004	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1004	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
1004	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1004	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
1004	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	48	92	117
1004	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
1004	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1005	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	48	92	117
1005	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
1005	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1005	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
1005	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1005	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	45	92	117
1005	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1005	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
1005	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1006	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	3.9 loads	24,570 gal	4.1	19	42	48
1006	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1006	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	35	92	117
1006	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1006	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1006	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1006	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
1006	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1006	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
1006	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
1007	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	48	92	117
1007	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
1007	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
1007	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
1007	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	48	92	117
1007	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	45	92	117
1007	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
1007	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
1007	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
1008	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	18.7 loads	117,810 gal	19.6	19	42	48
1008	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.1 loads	630 gal	0.1	33	58	66
1008	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	25.7 loads	161,910 gal	19.6	35	92	117
1008	Apr 2022	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	12.6 loads	79,380 gal	9.6	48	92	117
1008	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.7 loads	161,910 gal	19.6	26	58	66
1008	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.7 loads	161,910 gal	19.6	33	58	66
1008	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.7 loads	161,910 gal	19.6	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1008	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.7 loads	161,910 gal	19.6	33	58	66
1008	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.7 loads	161,910 gal	19.6	26	58	66
1008	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	25.7 loads	161,910 gal	19.6	33	58	66
1011	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	48	92	117
1011	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
1011	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
1011	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
1011	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
1011	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	45	92	117
1011	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
1011	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
1011	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
1012	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	48	92	117
1012	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	26	58	66
1012	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
1012	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	26	58	66
1012	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
1012	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	45	92	117
1012	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
1012	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	26	58	66
1012	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1013	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	48	92	117
1013	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
1013	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
1013	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
1013	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	48	92	117
1013	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	45	92	117
1013	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
1013	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
1013	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
1021	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	3.8 loads	23,940 gal	4.0	19	42	48
1021	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
1021	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.2 loads	32,760 gal	4.0	35	92	117
1021	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
1021	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.2 loads	32,760 gal	4.0	26	58	66
1021	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
1021	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.2 loads	32,760 gal	4.0	26	58	66
1021	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	48	92	117
1021	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.2 loads	32,760 gal	4.0	26	58	66
1021	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
1022	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.6 loads	10,080 gal	1.7	19	42	48
1022	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
1022	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	35	92	117

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1022	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1022	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
1022	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1022	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
1022	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
1022	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
1022	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1023	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4.4 loads	27,720 gal	4.6	19	42	48
1023	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	33	58	66
1023	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	35	92	117
1023	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	33	58	66
1023	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	26	58	66
1023	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	33	58	66
1023	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	26	58	66
1023	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	48	92	117
1023	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	26	58	66
1023	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	33	58	66
1024	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	48	92	117
1024	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	26	58	66
1024	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	33	58	66
1024	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	26	58	66
1024	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	48	92	117

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1024	Oct 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	45	92	117
1024	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	33	58	66
1024	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	26	58	66
1024	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	33	58	66
1031	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	48	92	117
1031	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
1031	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
1031	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
1031	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	48	92	117
1031	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
1031	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
1031	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
1031	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
1032	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	2.1 loads	13,230 gal	2.2	19	42	48
1032	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.7 loads	17,010 gal	2.1	33	58	66
1032	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	35	92	117
1032	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
1032	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	26	58	66
1032	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
1032	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	26	58	66
1032	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
1032	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1032	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
1033	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.9 loads	11,970 gal	2.0	19	42	48
1033	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
1033	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	35	92	117
1033	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
1033	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
1033	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
1033	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
1033	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	48	92	117
1033	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
1033	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
1034	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	2.4 loads	15,120 gal	2.5	19	42	48
1034	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
1034	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	35	92	117
1034	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
1034	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
1034	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
1034	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
1034	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	48	92	117
1034	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
1034	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
1035	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	0.6 loads	3,780 gal	0.6	19	42	48

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1035	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
1035	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	35	92	117
1035	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
1035	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	26	58	66
1035	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
1035	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	26	58	66
1035	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	48	92	117
1035	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	26	58	66
1035	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
1036	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4.4 loads	27,720 gal	4.6	19	42	48
1036	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	33	58	66
1036	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	26	58	66
1036	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	33	58	66
1036	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	26	58	66
1036	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	33	58	66
1036	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	26	58	66
1036	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	48	92	117
1036	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	26	58	66
1036	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6 loads	37,800 gal	4.6	33	58	66
1037	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	3.3 loads	20,790 gal	3.5	19	42	48
1037	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	33	58	66
1037	Oct 2021	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	35	92	117
1037	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1037	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	26	58	66
1037	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	33	58	66
1037	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	26	58	66
1037	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	33	58	66
1037	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	26	58	66
1037	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	33	58	66
1038	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	48	92	117
1038	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66
1038	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
1038	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66
1038	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	48	92	117
1038	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66
1038	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
1038	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66
1038	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
1038A	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
1038A	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
1038A	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1038A	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
1038A	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
1038A	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1038A	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1038A	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
1038A	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
1039	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.2 loads	7,560 gal	1.3	19	42	48
1039	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.4 loads	8,820 gal	1.1	33	58	66
1039	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	26	58	66
1039	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.5 loads	9,450 gal	1.1	33	58	66
1039	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	26	58	66
1039	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.5 loads	9,450 gal	1.1	33	58	66
1039	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	26	58	66
1039	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.5 loads	9,450 gal	1.1	48	92	117
1039	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	26	58	66
1039	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.5 loads	9,450 gal	1.1	33	58	66
11	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4.5 loads	28,350 gal	4.7	19	42	48
11	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	33	58	66
11	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	26	58	66
11	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	33	58	66
11	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	26	58	66
11	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	33	58	66
11	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	26	58	66
11	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	48	92	117
11	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
11	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.1 loads	38,430 gal	4.7	33	58	66
111	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.5 loads	9,450 gal	1.6	19	42	48
111	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	33	58	66
111	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
111	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
111	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
111	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
111	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
111	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	48	92	117
111	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
111	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
112	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	0.5 loads	3,150 gal	0.5	19	42	48
112	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.1 loads	630 gal	0.1	33	58	66
112	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
112	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	33	58	66
112	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
112	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	33	58	66
112	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
112	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	33	58	66
112	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
112	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	33	58	66
113	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	3.6 loads	22,680 gal	3.8	19	42	48

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
113	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.8 loads	30,240 gal	3.7	33	58	66
113	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	26	58	66
113	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
113	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	26	58	66
113	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
113	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	26	58	66
113	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
113	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	26	58	66
113	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
114	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4.3 loads	27,090 gal	4.5	19	42	48
114	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
114	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
114	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
114	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
114	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
114	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
114	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	48	92	117
114	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
114	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
115	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	2.1 loads	13,230 gal	2.2	19	42	48
115	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.7 loads	17,010 gal	2.1	33	58	66
115	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
115	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
115	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	26	58	66
115	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
115	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	26	58	66
115	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
115	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	26	58	66
115	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
1151	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	3.2 loads	20,160 gal	3.4	19	42	48
1151	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.3 loads	27,090 gal	3.3	33	58	66
1151	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66
1151	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.3 loads	27,090 gal	3.3	33	58	66
1151	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66
1151	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.3 loads	27,090 gal	3.3	33	58	66
1151	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66
1151	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	4.3 loads	27,090 gal	3.3	48	92	117
1151	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66
1151	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.3 loads	27,090 gal	3.3	33	58	66
1152	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1 loads	6,300 gal	1.0	19	42	48
1152	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	33	58	66
1152	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	26	58	66
1152	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	33	58	66
1152	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1152	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	33	58	66
1152	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	26	58	66
1152	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	48	92	117
1152	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	26	58	66
1152	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.3 loads	8,190 gal	1.0	33	58	66
1153	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.4 loads	8,820 gal	1.5	19	42	48
1153	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
1153	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.9 loads	11,970 gal	1.5	26	58	66
1153	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
1153	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.9 loads	11,970 gal	1.5	26	58	66
1153	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
1153	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.9 loads	11,970 gal	1.5	26	58	66
1153	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	48	92	117
1153	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.9 loads	11,970 gal	1.5	26	58	66
1153	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
1154	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4.6 loads	28,980 gal	4.8	19	42	48
1154	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.1 loads	630 gal	0.1	33	58	66
1154	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66
1154	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
1154	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66
1154	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
1154	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1154	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
1154	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66
1154	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
116	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.8 loads	11,340 gal	1.9	19	42	48
116	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
116	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
116	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
116	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
116	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
116	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
116	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	48	92	117
116	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
116	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
1169	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	19.1 loads	120,330 gal	20.1	19	42	48
1169	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.2 loads	165,060 gal	20.0	33	58	66
1169	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.3 loads	165,690 gal	20.1	26	58	66
1169	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.2 loads	146,160 gal	17.7	33	58	66
1169	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.3 loads	165,690 gal	20.1	26	58	66
1169	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.2 loads	165,060 gal	20.0	33	58	66
1169	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.3 loads	165,690 gal	20.1	26	58	66
1169	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.2 loads	165,060 gal	20.0	33	58	66
1169	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.3 loads	165,690 gal	20.1	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1169	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	26.2 loads	165,060 gal	20.0	33	58	66
12	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	3.7 loads	23,310 gal	3.9	19	42	48
12	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
12	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.1 loads	32,130 gal	3.9	26	58	66
12	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
12	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.1 loads	32,130 gal	3.9	26	58	66
12	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
12	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.1 loads	32,130 gal	3.9	26	58	66
12	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	48	92	117
12	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.1 loads	32,130 gal	3.9	26	58	66
12	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
13	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	7.7 loads	48,510 gal	8.1	19	42	48
13	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
13	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
13	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
13	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
13	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
13	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
13	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
13	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
13	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
131	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
131	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
131	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
131	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
131	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
131	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
131	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
131	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	26	58	66
131	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.6 loads	66,780 gal	8.1	33	58	66
132	Apr 2021	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	48	92	117
132	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	26	58	66
132	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.1 loads	19,530 gal	2.4	33	58	66
132	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	26	58	66
132	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.1 loads	19,530 gal	2.4	48	92	117
132	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	26	58	66
132	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.1 loads	19,530 gal	2.4	33	58	66
132	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	26	58	66
132	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.1 loads	19,530 gal	2.4	33	58	66
14	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4.3 loads	27,090 gal	4.5	19	42	48
14	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
14	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
14	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
14	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
14	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
14	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
14	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
14	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.9 loads	37,170 gal	4.5	26	58	66
14	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
141	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	17 loads	107,100 gal	17.9	19	42	48
141	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.3 loads	146,790 gal	17.8	33	58	66
141	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.4 loads	147,420 gal	17.9	26	58	66
141	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.3 loads	146,790 gal	17.8	33	58	66
141	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.4 loads	147,420 gal	17.9	26	58	66
141	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.3 loads	146,790 gal	17.8	33	58	66
141	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.4 loads	147,420 gal	17.9	26	58	66
141	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.3 loads	146,790 gal	17.8	33	58	66
141	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.4 loads	147,420 gal	17.9	26	58	66
141	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	23.3 loads	146,790 gal	17.8	33	58	66
142	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4 loads	25,200 gal	4.2	19	42	48
142	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
142	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.5 loads	34,650 gal	4.2	26	58	66
142	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
142	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.5 loads	34,650 gal	4.2	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
142	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
142	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.5 loads	34,650 gal	4.2	26	58	66
142	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
142	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.5 loads	34,650 gal	4.2	26	58	66
142	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
143	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	4.2 loads	26,460 gal	4.4	19	42	48
143	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
143	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	26	58	66
143	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
143	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	26	58	66
143	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
143	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	26	58	66
143	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
143	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	26	58	66
143	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.8 loads	36,540 gal	4.4	33	58	66
15	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.5 loads	9,450 gal	1.6	19	42	48
15	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
15	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
15	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
15	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
15	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
15	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
15	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
15	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
15	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
151	Oct 2020	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	6,000 gal	1.7 loads	10,710 gal	1.8	19	42	48
151	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
151	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.7 loads	54,810 gal	6.6	26	58	66
151	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.6 loads	54,180 gal	6.6	33	58	66
151	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.7 loads	54,810 gal	6.6	26	58	66
151	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.6 loads	54,180 gal	6.6	33	58	66
151	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.7 loads	54,810 gal	6.6	26	58	66
151	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.6 loads	54,180 gal	6.6	33	58	66
151	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.7 loads	54,810 gal	6.6	26	58	66
151	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.6 loads	54,180 gal	6.6	33	58	66
152	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
152	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
152	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
152	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
152	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
152	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
152	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
152	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
152	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
153	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
153	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
153	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
153	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
153	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
153	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
153	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
153	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
153	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
154	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
154	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66
154	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
154	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66
154	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
154	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66
154	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
154	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	26	58	66
154	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
155	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
155	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
155	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
155	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
155	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
155	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
155	Apr 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	48	92	117
155	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
155	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
156	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
156	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
156	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
156	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
156	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
156	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
156	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
156	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
156	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
157	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	33	58	66
157	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66
157	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
157	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66
157	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
157	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
157	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
157	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.4 loads	27,720 gal	3.4	26	58	66
157	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
158	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	33	58	66
158	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	26	58	66
158	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	33	58	66
158	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	26	58	66
158	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	33	58	66
158	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	26	58	66
158	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	33	58	66
158	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	26	58	66
158	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.3 loads	77,490 gal	9.4	33	58	66
159	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.6 loads	35,280 gal	4.3	33	58	66
159	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.6 loads	35,280 gal	4.3	26	58	66
159	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
159	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.6 loads	35,280 gal	4.3	26	58	66
159	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
159	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.6 loads	35,280 gal	4.3	26	58	66
159	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
159	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.6 loads	35,280 gal	4.3	26	58	66
159	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
16	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
16	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
16	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
16	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
16	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
16	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
16	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
16	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
16	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
161	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15 loads	94,500 gal	11.5	33	58	66
161	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15 loads	94,500 gal	11.5	26	58	66
161	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.8 loads	93,240 gal	11.3	33	58	66
161	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15 loads	94,500 gal	11.5	26	58	66
161	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.8 loads	93,240 gal	11.3	33	58	66
161	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15 loads	94,500 gal	11.5	26	58	66
161	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.8 loads	93,240 gal	11.3	33	58	66
161	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15 loads	94,500 gal	11.5	26	58	66
161	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.8 loads	93,240 gal	11.3	33	58	66
163	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	33	58	66
163	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	26	58	66
163	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2	89,460 gal	10.8	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
163	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	26	58	66
163	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	33	58	66
163	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	26	58	66
163	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	33	58	66
163	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	26	58	66
163	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.2 loads	89,460 gal	10.8	33	58	66
164	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	33	58	66
164	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	26	58	66
164	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	33	58	66
164	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	26	58	66
164	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	33	58	66
164	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	26	58	66
164	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	33	58	66
164	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	26	58	66
164	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	33	58	66
17	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	33	58	66
17	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66
17	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
17	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66
17	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
17	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
17	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
17	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5 loads	31,500 gal	3.8	26	58	66
17	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.9 loads	30,870 gal	3.7	33	58	66
171	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	33	58	66
171	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	26	58	66
171	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	33	58	66
171	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	26	58	66
171	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	33	58	66
171	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	26	58	66
171	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	33	58	66
171	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	26	58	66
171	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.9 loads	62,370 gal	7.6	33	58	66
18	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
18	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
18	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
18	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
18	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
18	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
18	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
18	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
2	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
2	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	26	58	66
2	Apr 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	48	92	117
2	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	26	58	66
2	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	33	58	66
2	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	26	58	66
2	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	24.2 loads	152,460 gal	18.5	33	58	66
2	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	26	58	66
2	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28.6 loads	180,180 gal	21.8	33	58	66
21	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	33	58	66
21	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	26	58	66
21	Apr 2022	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	48	92	117
21	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	26	58	66
21	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	33	58	66
21	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	26	58	66
21	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	33	58	66
21	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	26	58	66
21	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.4 loads	65,520 gal	7.9	33	58	66
22	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	33	58	66
22	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	26	58	66
22	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	33	58	66
22	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
22	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	33	58	66
22	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	26	58	66
22	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	33	58	66
22	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	26	58	66
22	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.1 loads	95,130 gal	11.5	33	58	66
23	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	33	58	66
23	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	26	58	66
23	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	33	58	66
23	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	26	58	66
23	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	33	58	66
23	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	26	58	66
23	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	33	58	66
23	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	26	58	66
23	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.2 loads	7,560 gal	0.9	33	58	66
24	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.2 loads	83,160 gal	10.1	33	58	66
24	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.2 loads	83,160 gal	10.1	26	58	66
24	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	33	58	66
24	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.2 loads	83,160 gal	10.1	26	58	66
24	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	33	58	66
24	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.2 loads	83,160 gal	10.1	26	58	66
24	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
24	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.2 loads	83,160 gal	10.1	26	58	66
24	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	33	58	66
25	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.5 loads	78,750 gal	9.5	33	58	66
25	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.5 loads	78,750 gal	9.5	26	58	66
25	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.4 loads	78,120 gal	9.5	33	58	66
25	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.5 loads	78,750 gal	9.5	26	58	66
25	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.4 loads	78,120 gal	9.5	33	58	66
25	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.5 loads	78,750 gal	9.5	26	58	66
25	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.4 loads	78,120 gal	9.5	33	58	66
25	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.5 loads	78,750 gal	9.5	26	58	66
25	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.4 loads	78,120 gal	9.5	33	58	66
26	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
26	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	26	58	66
26	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	33	58	66
26	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	26	58	66
26	Apr 2023	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	48	92	117
26	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	26	58	66
26	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	33	58	66
26	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	26	58	66
26	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	33	58	66
27	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
27	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
27	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
27	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
27	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
27	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
27	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
27	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	26	58	66
27	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
28	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
28	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
28	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
28	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
28	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
28	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
28	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
28	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
28	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
29	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	33	58	66
29	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	26	58	66
29	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
29	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
29	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
29	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	26	58	66
29	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
29	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.1 loads	25,830 gal	3.1	26	58	66
29	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
3	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
3	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
3	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
3	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
3	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
3	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
3	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
3	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
3	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
301	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	33	58	66
301	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	26	58	66
301	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13 loads	81,900 gal	9.9	33	58	66
301	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	26	58	66
301	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13 loads	81,900 gal	9.9	33	58	66
301	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	26	58	66
301	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13 loads	81,900 gal	9.9	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
301	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13.1 loads	82,530 gal	10.0	26	58	66
301	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	13 loads	81,900 gal	9.9	33	58	66
302	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	33	58	66
302	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	26	58	66
302	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	33	58	66
302	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	26	58	66
302	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	33	58	66
302	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	26	58	66
302	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	33	58	66
302	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	26	58	66
302	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.4 loads	52,920 gal	6.4	33	58	66
31	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.8 loads	105,840 gal	12.8	33	58	66
31	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.8 loads	105,840 gal	12.8	26	58	66
31	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.7 loads	105,210 gal	12.8	33	58	66
31	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.8 loads	105,840 gal	12.8	26	58	66
31	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.7 loads	105,210 gal	12.8	33	58	66
31	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.8 loads	105,840 gal	12.8	26	58	66
31	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.7 loads	105,210 gal	12.8	33	58	66
31	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.8 loads	105,840 gal	12.8	26	58	66
31	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.7 loads	105,210 gal	12.8	33	58	66
311	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
311	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	26	58	66
311	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	33	58	66
311	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	26	58	66
311	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	33	58	66
311	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	26	58	66
311	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	33	58	66
311	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	26	58	66
311	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.7 loads	29,610 gal	3.6	33	58	66
312	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.6 loads	22,680 gal	2.7	33	58	66
312	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.6 loads	22,680 gal	2.7	26	58	66
312	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
312	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.6 loads	22,680 gal	2.7	26	58	66
312	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
312	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.6 loads	22,680 gal	2.7	26	58	66
312	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
312	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.6 loads	22,680 gal	2.7	26	58	66
312	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
32	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
32	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	33	58	66
32	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
32	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
32	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
32	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
32	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.8 loads	23,940 gal	2.9	26	58	66
32	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
321	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
321	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
321	Apr 2022	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	48	92	117
321	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
321	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
321	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
321	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.1 loads	630 gal	0.1	33	58	66
321	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	26	58	66
321	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	14.7 loads	92,610 gal	11.2	33	58	66
322	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	18 loads	113,400 gal	13.7	33	58	66
322	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	18 loads	113,400 gal	13.7	26	58	66
322	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	17.9 loads	112,770 gal	13.7	33	58	66
322	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	18 loads	113,400 gal	13.7	26	58	66
322	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	17.9 loads	112,770 gal	13.7	33	58	66
322	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	18 loads	113,400 gal	13.7	26	58	66
322	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	17.9 loads	112,770 gal	13.7	33	58	66
322	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	18 loads	113,400 gal	13.7	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
322	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	17.9 loads	112,770 gal	13.7	33	58	66
323	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	33	58	66
323	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	26	58	66
323	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	7.9 loads	49,770 gal	6.0	33	58	66
323	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	26	58	66
323	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	7.9 loads	49,770 gal	6.0	33	58	66
323	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	26	58	66
323	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	7.9 loads	49,770 gal	6.0	33	58	66
323	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	26	58	66
323	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	7.9 loads	49,770 gal	6.0	33	58	66
324	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.2 loads	70,560 gal	8.6	33	58	66
324	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.2 loads	70,560 gal	8.6	26	58	66
324	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.1 loads	69,930 gal	8.5	33	58	66
324	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.2 loads	70,560 gal	8.6	26	58	66
324	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.1 loads	69,930 gal	8.5	33	58	66
324	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.2 loads	70,560 gal	8.6	26	58	66
324	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.1 loads	69,930 gal	8.5	33	58	66
324	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.2 loads	70,560 gal	8.6	26	58	66
324	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	11.1 loads	69,930 gal	8.5	33	58	66
326	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.6 loads	28,980 gal	3.5	33	58	66
326	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.6 loads	28,980 gal	3.5	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
326	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	33	58	66
326	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.6 loads	28,980 gal	3.5	26	58	66
326	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	33	58	66
326	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.6 loads	28,980 gal	3.5	26	58	66
326	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	33	58	66
326	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.6 loads	28,980 gal	3.5	26	58	66
326	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.5 loads	28,350 gal	3.4	33	58	66
33	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.7 loads	218,610 gal	26.5	33	58	66
33	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.7 loads	218,610 gal	26.5	26	58	66
33	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.6 loads	217,980 gal	26.4	33	58	66
33	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.7 loads	218,610 gal	26.5	26	58	66
33	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.6 loads	217,980 gal	26.4	33	58	66
33	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.7 loads	218,610 gal	26.5	26	58	66
33	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.6 loads	217,980 gal	26.4	33	58	66
33	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.7 loads	218,610 gal	26.5	26	58	66
33	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	34.6 loads	217,980 gal	26.4	33	58	66
331	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
331	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
331	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
331	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
331	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
331	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
331	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
331	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
331	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
332	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	33	58	66
332	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	26	58	66
332	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	33	58	66
332	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	26	58	66
332	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	33	58	66
332	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	26	58	66
332	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	33	58	66
332	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	26	58	66
332	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.5 loads	40,950 gal	5.0	33	58	66
333	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	33	58	66
333	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	26	58	66
333	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	33	58	66
333	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	26	58	66
333	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	33	58	66
333	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	26	58	66
333	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	33	58	66
333	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.3 loads	14,490 gal	1.8	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
333	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.2 loads	13,860 gal	1.7	33	58	66
334	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	33	58	66
334	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
334	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
334	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
334	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
334	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
334	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
334	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.4 loads	34,020 gal	4.1	26	58	66
334	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
335	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.9 loads	5,670 gal	0.7	33	58	66
335	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.9 loads	5,670 gal	0.7	26	58	66
335	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
335	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.9 loads	5,670 gal	0.7	26	58	66
335	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
335	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.9 loads	5,670 gal	0.7	26	58	66
335	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
335	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.9 loads	5,670 gal	0.7	26	58	66
335	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
34	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
34	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
34	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
34	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	26	58	66
34	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
34	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	26	58	66
34	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
34	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	26	58	66
34	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
35	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
35	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
35	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
35	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
35	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
35	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
35	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
35	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	26	58	66
35	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.3 loads	33,390 gal	4.0	33	58	66
36	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
36	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	26	58	66
36	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
36	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	26	58	66
36	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
36	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	26	58	66
36	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
36	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	26	58	66
36	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4 loads	25,200 gal	3.1	33	58	66
37	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	30.8 loads	194,040 gal	23.5	33	58	66
37	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	30.8 loads	194,040 gal	23.5	26	58	66
37	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	30.7 loads	193,410 gal	23.4	33	58	66
37	Oct 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	28 loads	176,400 gal	21.4	26	58	66
37	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.7 loads	17,010 gal	2.1	33	58	66
37	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	30.8 loads	194,040 gal	23.5	26	58	66
37	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	30.7 loads	193,410 gal	23.4	33	58	66
37	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	30.8 loads	194,040 gal	23.5	26	58	66
37	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	30.7 loads	193,410 gal	23.4	33	58	66
39	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
39	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
39	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
39	Oct 2022	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	35	92	117
39	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
39	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
39	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66
39	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
39	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.5 loads	15,750 gal	1.9	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
4	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
4	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	26	58	66
4	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.1 loads	630 gal	0.1	33	58	66
4	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	45	92	117
4	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
4	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	26	58	66
4	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.1 loads	630 gal	0.1	33	58	66
4	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	26	58	66
4	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.7 loads	23,310 gal	2.8	33	58	66
41	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.2 loads	234,360 gal	28.4	33	58	66
41	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.2 loads	234,360 gal	28.4	26	58	66
41	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.1 loads	233,730 gal	28.3	33	58	66
41	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	37.2 loads	234,360 gal	28.4	45	92	117
41	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.1 loads	233,730 gal	28.3	33	58	66
41	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.2 loads	234,360 gal	28.4	26	58	66
41	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.1 loads	233,730 gal	28.3	33	58	66
41	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.2 loads	234,360 gal	28.4	26	58	66
41	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.1 loads	233,730 gal	28.3	33	58	66
42	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
42	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
42	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
42	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	45	92	117
42	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
42	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
42	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
42	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	26	58	66
42	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.6 loads	16,380 gal	2.0	33	58	66
5	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	33	58	66
5	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	26	58	66
5	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	33	58	66
5	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	26	58	66
5	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	33	58	66
5	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	26	58	66
5	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	33	58	66
5	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	26	58	66
5	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	16.6 loads	104,580 gal	12.7	33	58	66
51	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	33	58	66
51	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	26	58	66
51	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	33	58	66
51	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	45	92	117
51	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	33	58	66
51	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
51	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	33	58	66
51	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	26	58	66
51	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3 loads	18,900 gal	2.3	33	58	66
52	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.9 loads	18,270 gal	2.2	33	58	66
52	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.9 loads	18,270 gal	2.2	26	58	66
52	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
52	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.9 loads	18,270 gal	2.2	45	92	117
52	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
52	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.9 loads	18,270 gal	2.2	26	58	66
52	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
52	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.9 loads	18,270 gal	2.2	26	58	66
52	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.8 loads	17,640 gal	2.1	33	58	66
53	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
53	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	26	58	66
53	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	33	58	66
53	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	45	92	117
53	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	33	58	66
53	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	26	58	66
53	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	33	58	66
53	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	26	58	66
53	Apr 2025	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
55	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
55	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
55	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
55	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	45	92	117
55	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
55	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
55	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
55	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
55	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	48	92	117
56	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
56	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
56	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
56	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
56	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
56	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
56	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	33	58	66
56	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	26	58	66
56	Apr 2025	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.1 loads	13,230 gal	1.6	48	92	117
58	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.7 loads	80,010 gal	9.7	33	58	66
58	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.7 loads	80,010 gal	9.7	26	58	66
58	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.6 loads	79,380 gal	9.6	33	58	66
58	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.7 loads	80,010 gal	9.7	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
58	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.6 loads	79,380 gal	9.6	33	58	66
58	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.7 loads	80,010 gal	9.7	26	58	66
58	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.6 loads	79,380 gal	9.6	33	58	66
58	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12.7 loads	80,010 gal	9.7	26	58	66
58	Apr 2025	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	12.6 loads	79,380 gal	9.6	48	92	117
6	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	33	58	66
6	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
6	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
6	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
6	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
6	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
6	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
6	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.7 loads	10,710 gal	1.3	26	58	66
6	Apr 2025	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	48	92	117
61	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.2 loads	51,660 gal	6.3	33	58	66
61	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.2 loads	51,660 gal	6.3	26	58	66
61	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	33	58	66
61	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	8.2 loads	51,660 gal	6.3	45	92	117
61	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	33	58	66
61	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.2 loads	51,660 gal	6.3	26	58	66
61	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	33	58	66
61	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	8.2 loads	51,660 gal	6.3	26	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
61	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	8 loads	50,400 gal	6.1	48	92	117
62	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
62	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	26	58	66
62	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
62	Oct 2022	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	0.4 loads	2,520 gal	0.3	45	92	117
62	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
62	Oct 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	26	58	66
62	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	33	58	66
62	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	26	58	66
62	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2.4 loads	15,120 gal	1.8	48	92	117
63	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
63	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	26	58	66
63	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	33	58	66
63	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
63	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	33	58	66
63	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.7 loads	42,210 gal	5.1	26	58	66
63	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.6 loads	41,580 gal	5.0	48	92	117
64	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
64	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	26	58	66
64	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
64	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
64	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	33	58	66
64	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	26	58	66
64	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	4.2 loads	26,460 gal	3.2	48	92	117
65	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
65	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	26	58	66
65	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	33	58	66
65	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
65	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	33	58	66
65	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.5 loads	22,050 gal	2.7	26	58	66
65	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.4 loads	21,420 gal	2.6	48	92	117
66	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
66	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
66	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
66	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
66	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
66	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
66	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	48	92	117
67	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
67	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
67	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
67	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
67	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	33	58	66
67	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	26	58	66
67	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	2 loads	12,600 gal	1.5	48	92	117
7	Apr 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
7	Oct 2021	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
7	Apr 2022	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.7 loads	61,110 gal	7.4	33	58	66
7	Apr 2023	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
7	Apr 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	33	58	66
7	Oct 2024	Corn for Silage, convent	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	9.8 loads	61,740 gal	7.5	26	58	66
7	Apr 2025	Corn for Silage, convent	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	9.7 loads	61,110 gal	7.4	48	92	117
8	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
8	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	26	58	66
8	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
8	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	26	58	66
8	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
8	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	26	58	66
8	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	33	58	66
8	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	26	58	66
8	Apr 2025	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	0.8 loads	5,040 gal	0.6	48	92	117
81	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	33	58	66
81	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	26	58	66
81	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
81	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	26	58	66
81	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	33	58	66
81	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	26	58	66
81	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	33	58	66
81	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	26	58	66
81	Apr 2025	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	48	92	117
82	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	33	58	66
82	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	26	58	66
82	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	33	58	66
82	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	26	58	66
82	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	33	58	66
82	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	26	58	66
82	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	33	58	66
82	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	26	58	66
82	Apr 2025	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	48	92	117
9	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	33	58	66
9	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	26	58	66
9	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	33	58	66
9	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	26	58	66
9	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	33	58	66
9	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	26	58	66
9	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
9	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	26	58	66
9	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1 loads	6,300 gal	0.8	33	58	66
147	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	41.3 loads	260,190 gal	31.5	33	58	66
147	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	41.3 loads	260,190 gal	31.5	26	58	66
147	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	41.2 loads	259,560 gal	31.5	33	58	66
147	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	41.3 loads	260,190 gal	31.5	26	58	66
147	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	41.2 loads	259,560 gal	31.5	33	58	66
147	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	41.3 loads	260,190 gal	31.5	26	58	66
147	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	41.2 loads	259,560 gal	31.5	33	58	66
147	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	20.3 loads	127,890 gal	15.5	26	58	66
147	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	21 loads	132,300 gal	16.0	33	58	66
148	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	33	58	66
148	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
148	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.6 loads	3,780 gal	0.5	33	58	66
148	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
148	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.6 loads	3,780 gal	0.5	33	58	66
148	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
148	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.6 loads	3,780 gal	0.5	33	58	66
148	Oct 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.7 loads	4,410 gal	0.5	26	58	66
148	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	0.6 loads	3,780 gal	0.5	33	58	66
149	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	38.1 loads	240,030 gal	29.1	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
149	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	38.1 loads	240,030 gal	29.1	26	58	66
149	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.9 loads	238,770 gal	28.9	33	58	66
149	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	38.1 loads	240,030 gal	29.1	26	58	66
149	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.9 loads	238,770 gal	28.9	33	58	66
149	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	38.1 loads	240,030 gal	29.1	26	58	66
149	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	37.9 loads	238,770 gal	28.9	33	58	66
149	Oct 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	26.1 loads	164,430 gal	19.9	35	92	117
149	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	12 loads	75,600 gal	9.2	33	58	66
172	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	33	58	66
172	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
172	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	33	58	66
172	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
172	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	33	58	66
172	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	26	58	66
172	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	33	58	66
172	Oct 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	3.3 loads	20,790 gal	2.5	35	92	117
172	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	3.2 loads	20,160 gal	2.4	33	58	66
173	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
173	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
173	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
173	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
173	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
173	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	26	58	66
173	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
173	Oct 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	35	92	117
173	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.2 loads	39,060 gal	4.7	33	58	66
174	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	33	58	66
174	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	26	58	66
174	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
174	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	26	58	66
174	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
174	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	26	58	66
174	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
174	Oct 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	1.8 loads	11,340 gal	1.4	35	92	117
174	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	1.6 loads	10,080 gal	1.2	33	58	66
175	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	33	58	66
175	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	26	58	66
175	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.8 loads	42,840 gal	5.2	33	58	66
175	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	26	58	66
175	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.8 loads	42,840 gal	5.2	33	58	66
175	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	26	58	66
175	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.8 loads	42,840 gal	5.2	33	58	66
175	Oct 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.9 loads	43,470 gal	5.3	35	92	117
175	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.8 loads	42,840 gal	5.2	33	58	66

Field	App. Month	Target Crop	Nutrient Source	Application Method	Rate Basis	Rate/Acre	Loads, Speed or Time	Total Amount Applied	Acres Cov.	Avail N (lbs/ac)	Avail P <sub>2</sub> O <sub>5</sub> (lbs/ac)	Avail K <sub>2</sub> O (lbs/ac)
1155	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	33	58	66
1155	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	26	58	66
1155	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
1155	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	26	58	66
1155	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
1155	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	26	58	66
1155	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
1155	Oct 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	6.4 loads	40,320 gal	4.9	35	92	117
1155	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	6.3 loads	39,690 gal	4.8	33	58	66
1156	Apr 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.6 loads	98,280 gal	11.9	33	58	66
1156	Oct 2021	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	5.2 loads	32,760 gal	4.0	26	58	66
1156	Apr 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	10.3 loads	64,890 gal	7.9	33	58	66
1156	Oct 2022	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.6 loads	98,280 gal	11.9	26	58	66
1156	Apr 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.5 loads	97,650 gal	11.8	33	58	66
1156	Oct 2023	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.6 loads	98,280 gal	11.9	26	58	66
1156	Apr 2024	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.5 loads	97,650 gal	11.8	33	58	66
1156	Oct 2024	Orchardgrass	Heifer Lagoon	Tank Spreader, Not incorporated	Custom	8,250 gal	15.6 loads	98,280 gal	11.9	35	92	117
1156	Apr 2025	Orchardgrass	Proposed Round Tank	Tank Spreader, Not incorporated	Custom	8,250 gal	15.5 loads	97,650 gal	11.8	33	58	66

ALERT: field conditions must be monitored for application rates above 6,000gal/ac to ensure that runoff does not occur, planned applications may need to be split applied with at least 2 dry days between applications to prevent runoff



## 6.8. Field Nutrient Balance (Manure-spreadable Area)

## Manure-spreadable Area

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	csa	Nutri	ents App	liedb	Balar	nce After	Recs <sup>C</sup>		e After oval <sup>d</sup>
1 001	11010				N	$P_2O_5$	K <sub>2</sub> O	Ν	$P_2O_5$	K <sub>2</sub> O	N	$P_2O_5$	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
2021	1	ac	Orchardgrass	per ac	100 lbs/ac	lbs/ac 34	lbs/ac 68	lbs/ac 51	lbs/ac 99	113 lbs/ac	lbs/ac -49	lbs/ac 65	lbs/ac 45	lbs/ac 39	lbs/ac -87
2021	1	1.7	Orchardgrass	4	100	34	68	68	152	115	-49 -16 <sup>g</sup>	183	163	131	-14
2022	1	-	Orchardgrass	4	100	34	68	59	1102	132	-165 -9g	265	227	187	-68
2023	1	1.7	Orchardgrass	4	100	34		73	148	180	-98 5g	379	339	275	-20
2025	1	1.7	Orchardgrass	4	100	34	68	59	116	132	-1g	461	403	331	-68
Total	1	1.7	oronaragiass		500	170		310	631	743	-10	101	105	551	00
2021	1001	1.6	Small grain cover		0	0	0	510	001	740					
2021	1001	1.6	Corn for Silage, convent	23	147	0	72	81	159	202	-66	159	130	44	-51
2022	1001	-	Small grain cover	23	0	0	0	01	107	202	00	109	150		51
2022	1001		Corn for Silage, convent	23	147			59	117	133	-61g	276	191	46	-120
2023	1001	1.6	_		0	0	0				-010				
2023	1001	1.6	Corn for Silage, convent	23	147	0	72	74	150	182	-43g	426	301	81	-71
2024	1001	1.6	Small grain cover		0	0	0								
2024	1001	1.6	Corn for Silage, convent	23	147	0	72	79	152	186	-31g	578	415	118	-67
2025	1001	1.6	Small grain cover		0	0	0								
2025	1001	1.6	Corn for Silage, convent	23	147	0	72	59	117	133	-44g	695	476	120	-120
Total	1001				735	0	360	352	695	836					
2021	1002	1.2	Orchardgrass	4	100	23	68	50	98	112	-50	75	44	38	-88
2022	1002	1.2	Orchardgrass	4	100	23	68	68	149	181	-16 <sup>g</sup>	201	157	127	-19
2023	1002	1.2	Orchardgrass	4	100	23	68	59	116	131	-9g	294	220	183	-69
2024	1002	1.2	Orchardgrass	4	100	23	68	59	116	131	-9g	387	283	239	-69
2025	1002	1.2	Orchardgrass	4	100	23	68	59	116	131	-8g	480	346	295	-69
Total	1002				500	115	340	295	595	686					
2021	1003	19.2	Small grain cover		0	0	0								
2021	1003	19.2	Corn for Silage, convent	23	147	0	72	40	79	100	-107	79	28	-36	-153
2022	1003	19.2	Small grain cover		0	0	0								
2022	1003	19.2	Corn for Silage, convent	23	147	0	72	59	116	132	-75g	195	88	1	-121

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac	<u> </u>	per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	1003	19.2	Small grain cover		0	0	0								
2023	1003	19.2	Corn for Silage, convent	23	147	0	72	74	150	183	-49g	345	199	36	-70
2024	1003	19.2	Small grain cover		0	0	0								
2024	1003	19.2	Corn for Silage, convent	23	147	0	72	78	150	183	-34g	495	310	71	-70
2025	1003	19.2	Small grain cover		0	0	0								
2025	1003	19.2	Corn for Silage, convent	23	147	0	72	59	116	132	-46g	611	370	72	-121
Total	1003				735	0	360	310	611	730					
2021	1004	4.1	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	1004	4.1	Orchardgrass	4	100	34	68	68	150	184	-16 <sup>g</sup>	182	162	130	-16
2023	1004	4.1	Orchardgrass	4	100	34	68	59	116	132	-9g	264	226	186	-68
2024	1004	4.1	Orchardgrass	4	100	34	68	74	150	182	6g	380	340	276	-18
2025	1004	4.1	Orchardgrass	4	100	34	68	59	116	132	-1g	462	404	332	-68
Total	1004				500	170	340	312	632	744					
2021	1005	4.0	Small grain cover		0	0	0								
2021	1005	4.0	Corn for Silage, convent	23	147	46	72	48	92	116	-99	46	44	-23	-137
2022	1005	4.0	Small grain cover		0	0	0								
2022	1005	4.0	Corn for Silage, convent	23	147	46	72	59	115	131	-72g	115	103	0	-122
2023	1005	4.0	Small grain cover		0	0	0								
2023	1005	4.0	Corn for Silage, convent	23	147	46	72	59	115	131	-63g	184	162	0	-122
2024	1005	4.0	Small grain cover		0	0	0								
2024	1005	4.0	Corn for Silage, convent	23	147	46	72	78	149	182	-41g	287	272	34	-71
2025	1005	4.0	Small grain cover		0	0	0								
2025	1005	4.0	Corn for Silage, convent	23	147	46	72	59	115	131	-49g	356	331	34	-122
Total	1005				735	230	360	303	586	691					
2021	1006	4.0	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	1006	4.0	Orchardgrass	4	100	34	68	67	149	181	-17g	181	159	129	-19
2023	1006	4.0	Orchardgrass	4	100	34	68	58	115	131	-10g	262	222	184	-69
2024	1006	4.0	Orchardgrass	4	100	34	68	58	115	131	-10g	343	285	239	-69
2025	1006	4.0	Orchardgrass	4	100	34	68	58	115	131	-9g	424	348	294	-69

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	<sub>cs</sub> a	Nutri	ents App	<sub>lied</sub> b	Balan	ice After	Recs <sup>C</sup>	Balanc	e After oval <sup>d</sup>
1001			Crop		N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Ν	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Total	1006	ac		per ac	lbs/ac 500	lbs/ac 170	lbs/ac 340	lbs/ac 293	1bs/ac 594	lbs/ac 688	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac
2021	1007	4.1	Small grain cover		0	0	0								
2021	1007	4.1	Corn for Silage, convent	23	147	61	72	48	92	118	-99	31	46	-23	-135
2022	1007	4.1	Small grain cover		0	0	0								
2022	1007	4.1	Corn for Silage, convent	23	147	61	72	59	117	133	-72g	87	107	2	-120
2023	1007	4.1	Small grain cover		0	0	0								
2023	1007	4.1	Corn for Silage, convent	23	147	61	72	75	151	184	-47g	177	219	38	-69
2024	1007	4.1	Small grain cover		0	0	0								
2024	1007	4.1	Corn for Silage, convent	23	147	61	72	78	151	184	-34g	267	331	74	-69
2025	1007	4.1	Small grain cover		0		0		7						
2025	1007	4.1	Corn for Silage, convent	23	147	61	72	59	117	133	-46g	323	392	76	-120
Total	1007				735	305	360	319	628	752					
2021	1008	19.6	Orchardgrass	4	100	34	.68	19	42	48	-81	8	-20	-18	-152
2022	1008	19.6	Orchardgrass	4	100	34	68	58	137	174	-35g	111	106	77	-26
2023	1008	19.6	Orchardgrass	4	100	34	68	59	116	132	-14g	193	170	133	-68
2024	1008	19.6	Orchardgrass	4	100	34	68	59	116	132	-12g	275	234	189	-68
2025	1008	19.6	Orchardgrass	4	100	34	68	59	116	132	-11g	357	298	245	-68
Total	1008				500	170	340	254	527	618					
2021	1011	4.7	Small grain cover		0	0	0								
2021	1011	4.7	Corn for Silage, convent	23	147	61	72	48	91	116	-99	30	44	-24	-137
2022	1011	4.7	Small grain cover		0	0	0								
2022	1011	4.7	Corn for Silage, convent	23	147	61	72	59	115	131	-72g	84	103	0	-122
2023	1011	4.7	Small grain cover		0	0	0								
2023	1011	4.7	Corn for Silage, convent	23	147	61	72	59	115	131	-63g	138	162	0	-122
2024	1011	4.7	Small grain cover		0	0	0								
2024	1011	4.7	Corn for Silage, convent	23	147	61	72	77	149	182	-42 <sup>g</sup>	226	272	34	-71
2025	1011	4.7	Small grain cover		0	0	0								
2025	1011	4.7	Corn for Silage, convent	23	147	61	72	59	115	131	-49g	280	331	34	-122
Total	1011				735	305	360	302	585	691					

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2021	1012	3.7	Small grain cover		0	0	0								
2021	1012	3.7	Corn for Silage, convent	23	147	61	72	48	91	116	-99	30	44	-24	-137
2022	1012	3.7	Small grain cover		0	0	0								
2022	1012	3.7	Corn for Silage, convent	23	147	61	72	58	115	130	-73g	84	102	0	-123
2023	1012	3.7	Small grain cover		0	0	0								
2023	1012	3.7	Corn for Silage, convent	23	147	61	72	58	115	130	-64g	138	160	0	-123
2024	1012	3.7	Small grain cover		0	0	0								
2024	1012	3.7	Corn for Silage, convent	23	147	61	72	77	148	181	-42g	225	269	33	-72
2025	1012	3.7	Small grain cover		0	0	0								
2025	1012	3.7	Corn for Silage, convent	23	147	61	72	58	115	130	-50g	279	327	33	-123
Total	1012				735	305	360	299	584	687					
2021	1013	7.5	Small grain cover		0	0	0								
2021	1013	7.5	Corn for Silage, convent	23	147	61	72	48	92	117	-99	31	45	-23	-136
2022	1013	7.5	Small grain cover		0	0	0								
2022	1013	7.5	Corn for Silage, convent	23	147	61	72	59	116	132	-72 <sup>g</sup>	86	105	1	-121
2023	1013	7.5	Small grain cover		0	0	0								
2023	1013	7.5	Corn for Silage, convent	23	147	61	72	74	150	184	-48g	175	217	36	-69
2024	1013	7.5	Small grain cover		0	0	0								
2024	1013	7.5	Corn for Silage, convent	23	147	61	72	78	150	184	-34 <sup>g</sup>	264	329	71	-69
2025	1013	7.5	Small grain cover		0	0	0								
2025	1013	7.5	Corn for Silage, convent	23	147	61	72	59	116	132	-46 <sup>g</sup>	319	389	72	-121
Total	1013				735	305	360	318	624	749					
2021	1021	3.9	Orchardgrass	4	100	34	68	52	99	114	-48	65	46	39	-86
2022	1021	3.9	Orchardgrass	4	100	34	68	68	151	184	-16 <sup>g</sup>	182	162	130	-16
2023	1021	3.9	Orchardgrass	4	100	34	68	59	116	132	-9g	264	226	186	-68
2024	1021	3.9	Orchardgrass	4	100	34	68	73	149	182	5g	379	340	275	-18
2025	1021	3.9	Orchardgrass	4	100	34	68	59	116	132	-1g	461	404	331	-68
Total	1021				500	170	340	311	631	744					
2021	1022	1.6	Orchardgrass	4	100	34	68	51	99	113	-49	65	45	39	-87

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	1022	1.6	Orchardgrass	4	100	34	68	68	150	183	-16 <sup>g</sup>	181	160	129	-17
2023	1022	1.6	Orchardgrass	4	100	34	68	59	116	132	-9g	263	224	185	-68
2024	1022	1.6	Orchardgrass	4	100	34	68	74	150	183	6g	379	339	275	-17
2025	1022	1.6	Orchardgrass	4	100	34	68	59	116	132	-1g	461	403	331	-68
Total	1022				500	170	340	311	631	743					
2021	1023	4.5	Orchardgrass	4	100	34	31	52	100	115	-48	66	84	40	-85
2022	1023	4.5	Orchardgrass	4	100	34	31	68	151	185	-16 <sup>g</sup>	183	238	131	-15
2023	1023	4.5	Orchardgrass	4	100	34	31	59	117	133	-9g	266	340	188	-67
2024	1023	4.5	Orchardgrass	4	100	34	31	74	151	184	6g	383	493	279	-16
2025	1023	4.5	Orchardgrass	4	100	34	31	59	117	133	-1g	466	595	336	-67
Total	1023				500	170	155	312	636	750					
2021	1024	5.0	Small grain cover		0	0	0								
2021	1024	5.0	Corn for Silage, convent	23	147	61	128	48	92	117	-99	31	-11	-23	-136
2022	1024	5.0	Small grain cover		0	0	0								
2022	1024	5.0	Corn for Silage, convent	23	147	61	128	59	116	132	-72g	86	4	1	-121
2023	1024	5.0	Small grain cover		0	0	0								
2023	1024	5.0	Corn for Silage, convent	23	147	61	128	74	150	183	-48g	175	59	36	-70
2024	1024	5.0	Small grain cover		0	0	0								
2024	1024	5.0	Corn for Silage, convent	23	147	61	128	78	150	183	-34g	264	114	71	-70
2025	1024	5.0	Small grain cover		0	0	0								
2025	1024	5.0	Corn for Silage, convent	23	147	61	128	59	116	132	-46g	319	118	72	-121
Total	1024				735	305	640	318	624	747					
2021	1031	2.5	Small grain cover		0	0	0								
2021	1031	2.5	Corn for Silage, convent	23	147	61	72	48	92	117	-99	31	45	-23	-136
2022	1031	2.5	Small grain cover		0	0	0								
2022	1031	2.5	Corn for Silage, convent	23	147	61	72	59	116	133	-72g	86	106	1	-120
2023	1031	2.5	Small grain cover		0	0	0								
2023	1031	2.5	Corn for Silage, convent	23	147	61	72	74	151	184	-48g	176	218	37	-69
2024	1031	2.5	Small grain cover		0	0	0								
2024	1031	2.5	Corn for Silage, convent	23	147	61	72	59	116	133	-53g	231	279	38	-120

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2025	1031	2.5	Small grain cover		0	0	0								
2025	1031	2.5	Corn for Silage, convent	23	147	61	72	59	116	133	-53g	286	340	39	-120
Total	1031				735	305	360	299	591	700					
2021	1032	2.1	Orchardgrass	4	100	34	31	52	101	116	-48	67	85	41	-84
2022	1032	2.1	Orchardgrass	4	100	34	31	67	149	182	-17g	182	236	130	-18
2023	1032	2.1	Orchardgrass	4	100	34	31	58	115	131	-10g	263	336	185	-69
2024	1032	2.1	Orchardgrass	4	100	34	31	58	115	131	-10g	344	436	240	-69
2025	1032	2.1	Orchardgrass	4	100	34	31	58	115	131	-9g	425	536	295	-69
Total	1032				500	170	155	293	595	691					
2021	1033	2.0	Orchardgrass	4	100	34	68	53	102	116	-47	68	48	42	-84
2022	1033	2.0	Orchardgrass	4	100	34	68	69	153	187	-15g	187	167	135	-13
2023	1033	2.0	Orchardgrass	4	100	34	68	60	118	135	-7g	271	234	193	-65
2024	1033	2.0	Orchardgrass	4	100	34	68	76	153	187	8g	390	353	286	-13
2025	1033	2.0	Orchardgrass	4	100	34	68	60	118	135	1g	474	420	344	-65
Total	1033				500	170	340	318	644	760					
2021	1034	2.5	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	1034	2.5	Orchardgrass	4	100	34	68	68	151	184	-16 <sup>g</sup>	183	162	131	-16
2023	1034	2.5	Orchardgrass	4	100	34	68	59	116	133	-9g	265	227	187	-67
2024	1034	2.5	Orchardgrass	4	100	34	68	74	151	184	6g	382	343	278	-16
2025	1034	2.5	Orchardgrass	4	100	34	68	59	116	133	-1g	464	408	334	-67
Total	1034				500	170	340	312	634	748					
2021	1035	0.6	Orchardgrass	4	100	34	31	53	102	117	-47	68	86	42	-83
2022	1035	0.6	Orchardgrass	4	100	34	31	69	153	186	-15g	187	241	135	-14
2023	1035	0.6	Orchardgrass	4	100	34	31	61	119	136	-7g	272	346	194	-64
2024	1035	0.6	Orchardgrass	4	100	34	31	76	153	186	8g	391	501	287	-14
2025	1035	0.6	Orchardgrass	4	100	34	31	61	119	136	1g	476	606	346	-64
Total	1035				500	170	155	320	646	761					
2021	1036	4.6	Orchardgrass	4	100	34	68	52	101	115	-48	67	47	41	-85
2022	1036	4.6	Orchardgrass	4	100	34	68	60	117	133	-24g	150	112	98	-67

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After ]	Recs <sup>c</sup>	Balance Remo	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	1036		Orchardgrass	4	100	34	68	60	117	133	-15g	233	177	155	-67
2024	1036	4.6	Orchardgrass	4	100	34	68	75	151	185	4g	350	294	246	-15
2025	1036	4.6	Orchardgrass	4	100	34	68	60	117	133	0g	433	359	303	-67
Total	1036				500	170	340	307	603	699					
2021	1037	3.4	Orchardgrass	4	100	34	31	52	101	115	-48	67	84	41	-85
2022	1037	3.4	Orchardgrass	4	100	34	31	52	114	140	-32g	147	193	95	-60
2023	1037	3.4	Orchardgrass	4	100	34	31	59	116	131	-15g	229	293	151	-69
2024	1037	3.4	Orchardgrass	4	100	34	31	59	116	131	-12g	311	393	207	-69
2025	1037	3.4	Orchardgrass	4	100	34	31	59	116	131	-9g	393	493	263	-69
Total	1037				500	170	155	281	563	648					
2021	1038	3.8	Small grain cover		0	0	0								
2021	1038	3.8	Corn for Silage, convent	23	147	61	128	48	93	118	-99	32	-10	-22	-135
2022	1038	3.8	Small grain cover		0	0	0								
2022	1038	3.8	Corn for Silage, convent	23	147	61	128	59	116	133	-72g	87	5	1	-120
2023	1038	3.8	Small grain cover		0	0	0								
2023	1038	3.8	Corn for Silage, convent	23	147	61	128	74	151	184	-48g	177	61	37	-69
2024	1038	3.8	Small grain cover		0	0	0								
2024	1038	3.8	Corn for Silage, convent	23	147	61	128	59	116	133	-53g	232	66	38	-120
2025	1038	3.8	Small grain cover		0	0	0								
2025	1038	3.8	Corn for Silage, convent	23	147	61	128	59	116	133	-53g	287	71	39	-120
Total	1038				735	305	640	299	592	701					
2021	1038A	1.6	Small grain cover		0	0	0								
2021	1038A	1.6	Corn for Silage, convent	23	147	61	72	49	94	119	-98	33	47	-21	-134
2022	1038A	1.6	Small grain cover		0	0	0								
2022	1038A	1.6	Corn for Silage, convent	23	147	61	72	61	118	135	-70g	90	110	3	-118
2023	1038A	1.6	Small grain cover		0	0	0								
2023	1038A	1.6	Corn for Silage, convent	23	147	61	72	76	153	187	-46 <sup>g</sup>	182	225	41	-66
2024	1038A	1.6	Small grain cover		0	0	0								
2024	1038A	1.6	Corn for Silage, convent	23	147	61	72	61	118	135	-51g	239	288	44	-118
2025	1038A	1.6	Small grain cover		0	0	0								

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2025	1038A	1.6	Corn for Silage, convent	23	147	61	72	61	118	135	-51g	296	351	47	-118
Total	1038A				735	305	360	308	601	711					
2021	1039	1.2	Orchardgrass	4	100	34	68	52	102	115	-48	68	47	42	-85
2022	1039	1.2	Orchardgrass	4	100	34	68	57	115	130	-27g	149	109	97	-70
2023	1039	1.2	Orchardgrass	4	100	34	68	57	115	130	-18g	230	171	152	-70
2024	1039	1.2	Orchardgrass	4	100	34	68	72	146	178	1g	342	281	238	-22
2025	1039	1.2	Orchardgrass	4	100	34	68	57	115	130	-4g	423	343	293	-70
Total	1039				500	170	340	295	593	683					
2021	11	4.7	Orchardgrass	4	100	34	68	52	101	115	-48	67	47	41	-85
2022	11	4.7	Orchardgrass	4	100	34	68	60	117	133	-24 <sup>g</sup>	150	112	98	-67
2023	11	4.7	Orchardgrass	4	100	34	68	60	117	133	-15g	233	177	155	-67
2024	11	4.7	Orchardgrass	4	100	34	68	75	152	185	4g	351	294	247	-15
2025	11	4.7	Orchardgrass	4	100	34	68	60	117	133	0g	434	359	304	-67
Total	11				500	170	340	307	604	699					
2021	111	1.5	Orchardgrass	4	100	34	31	51	100	114	-49	66	83	40	-86
2022	111	1.5	Orchardgrass	4	100	34	31	60	118	134	-24 <sup>g</sup>	150	186	98	-66
2023	111	1.5	Orchardgrass	4	100	34	31	60	118	134	-15g	234	289	156	-66
2024	111	1.5	Orchardgrass	4	100	34	31	75	152	186	4g	352	444	248	-14
2025	111	1.5	Orchardgrass	4	100	34	31	60	118	134	0g	436	547	306	-66
Total	111				500	170	155	306	606	702					
2021	112	0.5	Orchardgrass	4	100	34	31	25	53	61	-75	19	30	-7	-139
2022	112	0.5	Orchardgrass	4	100	34	31	57	114	129	-34g	99	128	54	-71
2023	112	0.5	Orchardgrass	4	100	34	31	57	114	129	-21g	179	226	108	-71
2024	112	0.5	Orchardgrass	4	100	34	31	57	114	129	-16 <sup>g</sup>	259	324	162	-71
2025	112	0.5	Orchardgrass	4	100	34	31	57	114	129	-12 <sup>g</sup>	339	422	216	-71
Total	112				500	170	155	253	509	577					
2021	113	3.7	Orchardgrass	4	100	34	68	52	101	115	-48	67	47	41	-85
2022	113	3.7	Orchardgrass	4	100	34	68	59	116	131	-25g	149	110	97	-69
2023	113	3.7	Orchardgrass	4	100	34	68	59	116	131	-16 <sup>g</sup>	231	173	153	-69

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After	Recs <sup>c</sup>		e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	$P_2O_5$ lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2024	113		Orchardgrass	4	100	34	68	59	116	131	-12g	313	236	209	-69
2025	113	3.7	Orchardgrass	4	100	34	68	59	116	131	-8g	395	299	265	-69
Total	113				500	170	340	288	565	639					
2021	114	4.4	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	114	4.4	Orchardgrass	4	100	34	68	59	116	132	-25g	148	110	96	-68
2023	114	4.4	Orchardgrass	4	100	34	68	59	116	132	-16 <sup>g</sup>	230	174	152	-68
2024	114	4.4	Orchardgrass	4	100	34	68	74	150	182	3g	346	288	242	-18
2025	114	4.4	Orchardgrass	4	100	34	68	59	116	132	-1g	428	352	298	-68
Total	114				500	170	340	303	598	692					
2021	115	2.1	Orchardgrass	4	100	34	68	52	101	116	-48	67	48	41	-84
2022	115	2.1	Orchardgrass	4	100	34	68	58	115	131	-26g	148	111	96	-69
2023	115	2.1	Orchardgrass	4	100	34	68	58	115	131	-17g	229	174	151	-69
2024	115	2.1	Orchardgrass	4	100	34	68	58	115	131	-13g	310	237	206	-69
2025	115	2.1	Orchardgrass	4	100	34	68	58	115	131	-9g	391	300	261	-69
Total	115				500	170	340	284	561	640					
2021	1151	3.3	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	1151	3.3	Orchardgrass	4	100	34	68	59	116	132	-25g	148	110	96	-68
2023	1151	3.3	Orchardgrass	4	100	34	68	59	116	132	-16 <sup>g</sup>	230	174	152	-68
2024	1151	3.3	Orchardgrass	4	100	34	68	74	150	183	3g	346	289	242	-17
2025	1151	3.3	Orchardgrass	4	100	34	68	59	116	132	-1g	428	353	298	-68
Total	1151				500	170	340	303	598	693					
2021	1152	1.0	Orchardgrass	4	100	34	68	54	104	119	-46	70	51	44	-81
2022	1152	1.0	Orchardgrass	4	100	34	68	61	121	138	-22g	157	121	105	-62
2023	1152	1.0	Orchardgrass	4	100	34	68	61	121	138	-13g	244	191	166	-62
2024	1152	1.0	Orchardgrass	4	100	34	68	77	156	191	7g	366	314	262	-9
2025	1152	1.0	Orchardgrass	4	100	34	68	61	121	138	2g	453	384	323	-62
Total	1152				500	170	340	314	623	724					
2021	1153	1.4	Orchardgrass	4	100	34	68	51	100	114	-49	66	46	40	-86
2022	1153	1.4	Orchardgrass	4	100	34	68	59	117	134	-25g	149	112	97	-66

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	1153		Orchardgrass	4	100	34	68	59	117	134	-16g	232	178	154	-66
2024	1153	1.4	Orchardgrass	4	100	34	68	73	150	182	2g	348	292	244	-18
2025	1153	1.4	Orchardgrass	4	100	34	68	59	117	134	-1g	431	358	301	-66
Total	1153				500	170	340	301	601	698					
2021	1154	4.8	Orchardgrass	4	100	34	68	20	43	49	-80	9	-19	-17	-151
2022	1154	4.8	Orchardgrass	4	100	34	68	59	116	132	-34g	91	64	56	-68
2023	1154	4.8	Orchardgrass	4	100	34	68	59	116	132	-20g	173	128	112	-68
2024	1154	4.8	Orchardgrass	4	100	34	68	59	116	132	-14g	255	192	168	-68
2025	1154	4.8	Orchardgrass	4	100	34	68	59	116	132	-10g	337	256	224	-68
Total	1154				500	170	340	256	507	577					
2021	116	1.9	Orchardgrass	4	100	34	68	51	99	114	-49	65	46	39	-86
2022	116	1.9	Orchardgrass	4	100	34	68	58	116	132	-26 <sup>g</sup>	147	110	95	-68
2023	116	1.9	Orchardgrass	4	100	34	68	58	116	132	-17g	229	174	151	-68
2024	116	1.9	Orchardgrass	4	100	34	68	73	149	182	2 <sup>g</sup>	344	288	240	-18
2025	116	1.9	Orchardgrass	4	100	34	68	58	116	132	-2 <sup>g</sup>	426	352	296	-68
Total	116				500	170	340	298	596	692					<u> </u>
2021	1169	20.0	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	1169	20.0	Orchardgrass	4	100	34	68	55	109	124	-29g	141	102	89	-76
2023	1169	20.0	Orchardgrass	4	100	34	68	59	116	132	-17g	223	166	145	-68
2024	1169	20.0	Orchardgrass	4	100	34	68	59	116	132	-12 <sup>g</sup>	305	230	201	-68
2025	1169	20.0	Orchardgrass	4	100	34	68	59	116	132	-8g	387	294	257	-68
Total	1169				500	170	340	284	557	634					l
2021	12	3.8	Orchardgrass	4	100	34	31	51	99	113	-49	65	82	39	-87
2022	12	3.8	Orchardgrass	4	100	34	31	58	115	131	-26 <sup>g</sup>	146	182	94	-69
2023	12	3.8	Orchardgrass	4	100	34	31	58	115	131	-17g	227	282	149	-69
2024	12	3.8	Orchardgrass	4	100	34	31	73	148	181	2 <sup>g</sup>	341	432	237	-19
2025	12	3.8	Orchardgrass	4	100	34	31	58	115	131	-2 <sup>g</sup>	422	532	292	-69
Total	12				500	170	155	298	592	687					<u> </u>
2021	13	8.1	Orchardgrass	4	100	34	31	52	100	114	-48	66	83	40	-86

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ice After ]	Recs <sup>c</sup>	Balance Remo	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	13	8.1	Orchardgrass	4	100	34	31	59	116	132	-25g	148	184	96	-68
2023	13	8.1	Orchardgrass	4	100	34	31	59	116	132	-16 <sup>g</sup>	230	285	152	-68
2024	13	8.1	Orchardgrass	4	100	34	31	59	116	132	-12g	312	386	208	-68
2025	13	8.1	Orchardgrass	4	100	34	31	59	116	132	-8g	394	487	264	-68
Total	13				500	170	155	288	564	642					
2021	131	8.1	Small grain cover		0	0	0								
2021	131	8.1	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	131	8.1	Small grain cover		0	0	0								
2022	131	8.1	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	131	8.1	Small grain cover		0		0								
2023	131	8.1	Corn for Silage, convent	23	147	61	72	59	116	132	-66g	110	120	2	-121
2024	131	8.1	Small grain cover		0	0	0								
2024	131	8.1	Corn for Silage, convent	23	147	61	72	59	116	132	-60g	165	180	3	-121
2025	131	8.1	Small grain cover		0	0	0								
2025	131	8.1	Corn for Silage, convent	23	147	61	72	59	116	132	-56g	220	240	4	-121
Total	131				735	305	360	269	522	594					
2021	132	2.4	Small grain cover		0	0	0								
2021	132	2.4	Corn for Silage, convent	23	147	61	72	48	93	118	-99	32	46	-22	-135
2022	132	2.4	Small grain cover		0	0	0								
2022	132	2.4	Corn for Silage, convent	23	147	61	72	59	117	133	-72g	88	107	2	-120
2023	132	2.4	Small grain cover		0	0	0								
2023	132	2.4	Corn for Silage, convent	23	147	61	72	74	151	184	-48g	178	219	38	-69
2024	132	2.4	Small grain cover		0	0	0								
2024	132	2.4	Corn for Silage, convent	23	147	61	72	59	117	133	-53g	234	280	40	-120
2025	132	2.4	Small grain cover		0	0	0								
2025	132	2.4	Corn for Silage, convent	23	147	61	72	59	117	133	-53g	290	341	42	-120
Total	132				735	305	360	299	595	701					
2021	14	4.5	Orchardgrass	4	100	34	31	52	100	113	-48	66	82	40	-87
2022	14	4.5	Orchardgrass	4	100	34	31	59	116	132	-25g	148	183	96	-68
2023	14	4.5	Orchardgrass	4	100	34	31	59	116	132	-16 <sup>g</sup>	230	284	152	-68

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>c</sup>		e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2024	14		Orchardgrass	4	100	34	31	59	116	132	-12g	312	385	208	-68
2025	14	4.5	Orchardgrass	4	100	34	31	59	116	132	-8g	394	486	264	-68
Total	14				500	170	155	288	564	641					
2021	141	17.8	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	141	17.8	Orchardgrass	4	100	34	68	59	116	132	-25g	148	110	96	-68
2023	141	17.8	Orchardgrass	4	100	34	68	59	116	132	-16 <sup>g</sup>	230	174	152	-68
2024	141	17.8	Orchardgrass	4	100	34	68	59	116	132	-12 <sup>g</sup>	312	238	208	-68
2025	141	17.8	Orchardgrass	4	100	34	68	59	116	132	-8g	394	302	264	-68
Total	141				500	170	340	288	564	642					
2021	142	4.1	Orchardgrass	4	100	34	68	52	100	115	-48	66	47	40	-85
2022	142	4.1	Orchardgrass	4	100	34	68	59	117	133	-25g	149	112	97	-67
2023	142	4.1	Orchardgrass	4	100	34	68	59	117	133	-16 <sup>g</sup>	232	177	154	-67
2024	142	4.1	Orchardgrass	4	100	34	68	59	117	133	-12g	315	242	211	-67
2025	142	4.1	Orchardgrass	4	100	34	68	59	117	133	-8g	398	307	268	-67
Total	142				500	170	340	288	568	647					
2021	143	4.4	Orchardgrass	4	100	34	68	52	100	114	-48	66	46	40	-86
2022	143	4.4	Orchardgrass	4	100	34	68	59	116	132	-25g	148	110	96	-68
2023	143	4.4	Orchardgrass	4	100	34	68	59	116	132	-16 <sup>g</sup>	230	174	152	-68
2024	143	4.4	Orchardgrass	4	100	34	68	59	116	132	-12g	312	238	208	-68
2025	143	4.4	Orchardgrass	4	100	34	68	59	116	132	-8g	394	302	264	-68
Total	143				500	170	340	288	564	642					
2021	15	1.6	Orchardgrass	4	100	34	68	53	102	117	-47	68	49	42	-83
2022	15	1.6	Orchardgrass	4	100	34	68	61	118	135	-23g	152	116	100	-65
2023	15	1.6	Orchardgrass	4	100	34	68	61	118	135	-14g	236	183	158	-65
2024	15	1.6	Orchardgrass	4	100	34	68	76	153	187	5g	355	302	251	-13
2025	15	1.6	Orchardgrass	4	100	34	68	61	118	135	1g	439	369	309	-65
Total	15				500	170	340	312	609	709					
2021	151	6.6	Orchardgrass	4	100	34	68	29	54	61	-71	20	-7	-6	-139
2022	151	6.6	Orchardgrass	4	100	34	68	59	117	133	-33g	103	65	57	-67

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ice After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	151	6.6	Orchardgrass	4	100	34	68	59	117	133	-19g	186	130	114	-67
2024	151	6.6	Orchardgrass	4	100	34	68	59	117	133	-13g	269	195	171	-67
2025	151	6.6	Orchardgrass	4	100	34	68	59	117	133	-9g	352	260	228	-67
Total	151				500	170	340	265	522	593					
2021	152	7.5	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	152	7.5	Orchardgrass	4	100	34	68	59	116	133	-32g	106	65	56	-67
2023	152	7.5	Orchardgrass	4	100	34	68	59	116	133	-19g	188	130	112	-67
2024	152	7.5	Orchardgrass	4	100	34	68	59	116	133	-13g	270	195	168	-67
2025	152	7.5	Orchardgrass	4	100	34	68	59	116	133	-9g	352	260	224	-67
Total	152				500	170	340	269	522	598					
2021	153	11.2	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	153	11.2	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68
2023	153	11.2	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	153	11.2	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	153	11.2	Orchardgrass	4	100	34	68	59	116	132	-9g	352	256	224	-68
Total	153				500	170	340	269	522	594					<u> </u>
2021	154	4.8	Orchardgrass	4	100	0	68	33	58	66	-67	58	-2	-2	-134
2022	154	4.8	Orchardgrass	4	100	0	68	59	116	132	-32g	174	64	56	-68
2023	154	4.8	Orchardgrass	4	100	0	68	59	116	132	-19g	290	128	112	-68
2024	154	4.8	Orchardgrass	4	100	0	68	59	116	132	-13g	406	192	168	-68
2025	154	4.8	Orchardgrass	4	100	0	68	59	116	132	-9g	522	256	224	-68
Total	154				500	0	340	269	522	594					l
2021	155	2.9	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	155	2.9	Orchardgrass	4	100	34	68	59	117	133	-32g	107	65	57	-67
2023	155	2.9	Orchardgrass	4	100	34	68	59	117	133	-19g	190	130	114	-67
2024	155	2.9	Orchardgrass	4	100	34	68	49	103	123	-23g	259	185	157	-77
2025	155	2.9	Orchardgrass	4	100	34	68	59	117	133	-10g	342	250	214	-67
Total	155				500	170	340	259	512	588					<u> </u>
2021	156	2.9	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	<sub>lied</sub> b	Balan	ce After	Recs <sup>C</sup>	Balanc	e After oval <sup>d</sup>
1 0 001		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	156	2.9	Orchardgrass	4 per ac	105/ac	34	105/ac 68	105/ac 59	105/ac	105/ac	-32g	105/ac	64	56	-68
2023	156	2.9	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	156	2.9	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	156	2.9	Orchardgrass	4	100	34	68	59	116	132	-9g	352	256	224	-68
Total	156				500	170	340	269	522	594					
2021	157	3.3	Orchardgrass	4	100	34	68	34	60	68	-66	26	0	0	-132
2022	157	3.3	Orchardgrass	4	100	34	68	59	116	132	-32g	108	64	56	-68
2023	157	3.3	Orchardgrass	4	100	34	68	59	116	132	-19g	190	128	112	-68
2024	157	3.3	Orchardgrass	4	100	34	68	59	116	132	-13g	272	192	168	-68
2025	157	3.3	Orchardgrass	4	100	34	68	59	116	132	-9g	354	256	224	-68
Total	157				500	170	340	270	524	596					
2021	158	9.4	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	158	9.4	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68
2023	158	9.4	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	158	9.4	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	158	9.4	Orchardgrass	4	100	34	68	59	116	132	-9g	352	256	224	-68
Total	158				500	170	340	269	522	594					
2021	159	4.2	Orchardgrass	4	100	34	31	34	59	67	-66	25	36	-1	-133
2022	159	4.2	Orchardgrass	4	100	34	31	59	116	132	-32g	107	137	56	-68
2023	159	4.2	Orchardgrass	4	100	34	31	59	116	132	-19g	189	238	112	-68
2024	159	4.2	Orchardgrass	4	100	34	31	59	116	132	-13g	271	339	168	-68
2025	159	4.2	Orchardgrass	4	100	34	31	59	116	132	-9g	353	440	224	-68
Total	159				500	170	155	270	523	595					
2021	16	1.9	Orchardgrass	4	100	34	31	34	59	67	-66	25	36	-1	-133
2022	16	1.9	Orchardgrass	4	100	34	31	60	118	134	-31g	109	139	58	-66
2023	16	1.9	Orchardgrass	4	100	34	31	60	118	134	-18g	193	242	116	-66
2024	16	1.9	Orchardgrass	4	100	34	31	60	118	134	-12g	277	345	174	-66
2025	16	1.9	Orchardgrass	4	100	34	31	60	118	134	-8g	361	448	232	-66
Total	16				500	170	155	274	531	603					

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2021	161	11.4	Small grain cover		0	0	0								
2021	161	11.4	Corn for Silage, convent	23	147	46	128	33	59	67	-114	13	-61	-56	-186
2022	161	11.4	Small grain cover		0	0	0								
2022	161	11.4	Corn for Silage, convent	23	147	46	128	59	116	132	-79g	83	4	1	-121
2023	161	11.4	Small grain cover		0	0	0								
2023	161	11.4	Corn for Silage, convent	23	147	46	128	59	116	132	-66g	153	8	2	-121
2024	161	11.4	Small grain cover		0	0	0								
2024	161	11.4	Corn for Silage, convent	23	147	46	128	59	116	132	-60g	223	12	3	-121
2025	161	11.4	Small grain cover		0	0	0								
2025	161	11.4	Corn for Silage, convent	23	147	46	128	59	116	132	-56 <sup>g</sup>	293	16	4	-121
Total	161				735	230	640	269	523	595					
2021	163	10.8	Small grain cover		0	0	0								
2021	163	10.8	Corn for Silage, convent	23	147	0	128	33	58	66	-114	58	-62	-57	-187
2022	163	10.8	Small grain cover		0	0	0								
2022	163	10.8	Corn for Silage, convent	23	147	0	128	59	116	132	-79g	174	4	1	-121
2023	163	10.8	Small grain cover		0	0	0								
2023	163	10.8	Corn for Silage, convent	23	147	0	128	59	116	132	-66g	290	8	2	-121
2024	163	10.8	Small grain cover		0	0	0								
2024	163	10.8	Corn for Silage, convent	23	147	0	128	59	116	132	-60g	406	12	3	-121
2025	163	10.8	Small grain cover		0	0	0								
2025	163	10.8	Corn for Silage, convent	23	147	0	128	59	116	132	-56 <sup>g</sup>	522	16	4	-121
Total	163				735	0	640	269	522	594					
2021	164	4.9	Small grain cover		0	0	0								
2021	164	4.9	Corn for Silage, convent	23	147	61	128	34	59	67	-113	-2	-61	-56	-186
2022	164	4.9	Small grain cover		0	0	0								
2022	164	4.9	Corn for Silage, convent	23	147	61	128	59	117	133	-79g	56	5	2	-120
2023	164	4.9	Small grain cover		0	0	0								
2023	164	4.9	Corn for Silage, convent	23	147	61	128	59	117	133	-66g	112	10	4	-120
2024	164	4.9	Small grain cover		0	0	0								
2024	164	4.9	Corn for Silage, convent	23	147	61	128	59	117	133	-60g	168	15	6	-120

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2025	164		Small grain cover		0	0	0								
2025	164	4.9	Corn for Silage, convent	23	147	61	128	59	117	133	-56 <sup>g</sup>	224	20	8	-120
Total	164				735	305	640	270	527	599					
2021	17	3.8	Orchardgrass	4	100	34	68	33	59	67	-67	25	-1	-1	-133
2022	17	3.8	Orchardgrass	4	100	34	68	59	116	132	-32g	107	64	56	-68
2023	17	3.8	Orchardgrass	4	100	34	68	59	116	132	-19g	189	128	112	-68
2024	17	3.8	Orchardgrass	4	100	34	68	59	116	132	-13g	271	192	168	-68
2025	17	3.8	Orchardgrass	4	100	34	68	59	116	132	-9g	353	256	224	-68
Total	17				500	170	340	269	523	595					
2021	171	7.6	Small grain cover		0	0	0		7						
2021	171	7.6	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	171	7.6	Small grain cover		0	0	0								
2022	171	7.6	Corn for Silage, convent	23	147	61	72	59	117	133	-79g	56	61	2	-120
2023	171	7.6	Small grain cover		0	0	0								
2023	171	7.6	Corn for Silage, convent	23	147	61	72	59	117	133	-66 <sup>g</sup>	112	122	4	-120
2024	171	7.6	Small grain cover		0	0	0								
2024	171	7.6	Corn for Silage, convent	23	147	61	72	59	117	133	-60 <sup>g</sup>	168	183	6	-120
2025	171	7.6	Small grain cover		0	0	0								
2025	171	7.6	Corn for Silage, convent	23	147	61	72	59	117	133	-56 <sup>g</sup>	224	244	8	-120
Total	171				735	305	360	269	526	598					
2021	18	2.8	Orchardgrass	4	100	34	68	34	59	67	-66	25	-1	-1	-133
2022	18	2.8	Orchardgrass	4	100	34	68	59	116	132	-32g	107	64	56	-68
2023	18	2.8	Orchardgrass	4	100	34	68	59	116	132	-19g	189	128	112	-68
2024	18	2.8	Orchardgrass	4	100	34	68	34	59	67	-38g	214	127	111	-133
2025	18	2.8	Orchardgrass	4	100	34	68	59	116	132	-18g	296	191	167	-68
Total	18				500	170	340	245	466	530					
2021	2	21.8	Small grain cover		0	0	0								
2021	2	21.8	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	2	21.8	Small grain cover		0	0	0								

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>c</sup>	Balanc	
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	2	21.8	Corn for Silage, convent	23	147	61	72	74	150	183	-64g	89	111	35	-70
2023	2	21.8	Small grain cover		0	0	0								
2023	2	21.8	Corn for Silage, convent	23	147	61	72	59	116	132	-59g	144	171	36	-121
2024	2	21.8	Small grain cover		0	0	0								
2024	2	21.8	Corn for Silage, convent	23	147	61	72	54	107	122	-62g	190	221	28	-131
2025	2	21.8	Small grain cover		0	0	0								
2025	2	21.8	Corn for Silage, convent	23	147	61	72	59	116	132	-57g	245	281	29	-121
Total	2				735	305	360	279	547	635					
2021	21	7.9	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	21	7.9	Orchardgrass	4	100	34	68	74	150	182	-17g	140	114	90	-18
2023	21	7.9	Orchardgrass	4	100	34	68	59	116	132	-12g	222	178	146	-68
2024	21	7.9	Orchardgrass	4	100	34	68	59	116	132	-10g	304	242	202	-68
2025	21	7.9	Orchardgrass	4	100	34	68	59	116	132	-9g	386	306	258	-68
Total	21				500	170	340	284	556	644					
2021	22	11.5	Small grain cover		0	0	0								
2021	22	11.5	Corn for Silage, convent	23	147	0	72	33	58	66	-114	58	-6	-57	-187
2022	22	11.5	Small grain cover		0	0	0								
2022	22	11.5	Corn for Silage, convent	23	147	0	72	59	116	132	-79g	174	60	1	-121
2023	22	11.5	Small grain cover		0	0	0								
2023	22	11.5	Corn for Silage, convent	23	147	0	72	59	116	132	-66 <sup>g</sup>	290	120	2	-121
2024	22	11.5	Small grain cover	r	0	0	0								
2024	22	11.5	Corn for Silage, convent	23	147	0	72	59	116	132	-60g	406	180	3	-121
2025	22	11.5	Small grain cover		0	0	0								
2025	22	11.5	Corn for Silage, convent	23	147	0	72	59	116	132	-56 <sup>g</sup>	522	240	4	-121
Total	22				735	0	360	269	522	594					
2021	23	0.9	Orchardgrass	4	100	34	31	34	60	68	-66	26	37	0	-132
2022	23	0.9	Orchardgrass	4	100	34	31	61	120	136	-30g	112	142	60	-64
2023	23	0.9	Orchardgrass	4	100	34	31	61	120	136	-16 <sup>g</sup>	198	247	120	-64
2024	23	0.9	Orchardgrass	4	100	34	31	61	120	136	-10g	284	352	180	-64
2025	23	0.9	Orchardgrass	4	100	34	31	61	120	136	-6 <sup>g</sup>	370	457	240	-64

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After	Recs <sup>c</sup>		e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	23	ue		per de	500	170	155	278	540	612	105/40	105/40	103/40	105/40	105/40
2021	24	10.0	Small grain cover		0	0	0								
2021	24	10.0	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	24	10.0	Small grain cover		0	0	0								
2022	24	10.0	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	24	10.0	Small grain cover		0	0	0								
2023	24	10.0	Corn for Silage, convent	23	147	61	72	59	116	132	-66g	110	120	2	-121
2024	24	10.0	Small grain cover		0	0	0								
2024	24	10.0	Corn for Silage, convent	23	147	61	72	59	116	132	-60g	165	180	3	-121
2025	24	10.0	Small grain cover		0	0	0								
2025	24	10.0	Corn for Silage, convent	23	147	61	72	59	116	132	-56 <sup>g</sup>	220	240	4	-121
Total	24				735	305	360	269	522	594					
2021	25	9.5	Small grain cover		0	0	0								
2021	25	9.5	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	25	9.5	Small grain cover		0	0	0								
2022	25	9.5	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	25	9.5	Small grain cover		0	0	0								
2023	25	9.5	Corn for Silage, convent	23	147	61	72	59	116	132	-66g	110	120	2	-121
2024	25	9.5	Small grain cover		0	0	0								
2024	25	9.5	Corn for Silage, convent	23	147	61	72	59	116	132	-60g	165	180	3	-121
2025	25	9.5	Small grain cover		0	0	0								
2025	25	9.5	Corn for Silage, convent	23	147	61	72	59	116	132	-56 <sup>g</sup>	220	240	4	-121
Total	25				735	305	360	269	522	594					
2021	26	3.1	Small grain cover		0	0	0								
2021	26	3.1	Corn for Silage, convent	23	147	46	128	34	59	67	-113	13	-61	-56	-186
2022	26	3.1	Small grain cover		0	0	0								
2022	26	3.1	Corn for Silage, convent	23	147	46	128	59	117	132	-79g	84	4	2	-121
2023	26	3.1	Small grain cover		0	0	0								
2023	26	3.1	Corn for Silage, convent	23	147	46	128	69	141	172	-56 <sup>g</sup>	179	48	28	-81
2024	26	3.1	Small grain cover		0	0	0								

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After ]	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2024	26	3.1	Corn for Silage, convent	23	147	46	128	59	117	132	-55g	250	52	30	-121
2025	26	3.1	Small grain cover		0	0	0								
2025	26	3.1	Corn for Silage, convent	23	147	46	128	59	117	132	-54 <sup>g</sup>	321	56	32	-121
Total	26				735	230	640	280	551	635					
2021	27	1.9	Small grain cover		0	0	0								
2021	27	1.9	Corn for Silage, convent	23	147	61	72	34	59	68	-113	-2	-4	-56	-185
2022	27	1.9	Small grain cover		0	0	0								
2022	27	1.9	Corn for Silage, convent	23	147	61	72	58	116	132	-80g	55	60	1	-121
2023	27	1.9	Small grain cover		0	0	0								
2023	27	1.9	Corn for Silage, convent	23	147	61	72	58	116	132	-67g	110	120	2	-121
2024	27	1.9	Small grain cover		0	0	0								
2024	27	1.9	Corn for Silage, convent	23	147	61	72	58	116	132	-61g	165	180	3	-121
2025	27	1.9	Small grain cover		0	0	0								
2025	27	1.9	Corn for Silage, convent	23	147	61	72	58	116	132	-57g	220	240	4	-121
Total	27				735	305	360	266	523	596					
2021	28	4.7	Small grain cover		0	0	0								
2021	28	4.7	Corn for Silage, convent	23	147	61	128	33	58	66	-114	-3	-62	-57	-187
2022	28	4.7	Small grain cover		0	0	0								
2022	28	4.7	Corn for Silage, convent	23	147	61	128	59	117	132	-79g	56	4	2	-121
2023	28	4.7	Small grain cover		0	0	0								
2023	28	4.7	Corn for Silage, convent	23	147	61	128	59	117	132	-66 <sup>g</sup>	112	8	4	-121
2024	28	4.7	Small grain cover		0	0	0								
2024	28	4.7	Corn for Silage, convent	23	147	61	128	59	117	132	-60 <sup>g</sup>	168	12	6	-121
2025	28	4.7	Small grain cover		0	0	0								
2025	28	4.7	Corn for Silage, convent	23	147	61	128	59	117	132	-56 <sup>g</sup>	224	16	8	-121
Total	28				735	305	640	269	526	594					
2021	29	3.1	Orchardgrass	4	100	34	68	33	59	67	-67	25	-1	-1	-133
2022	29	3.1	Orchardgrass	4	100	34	68	60	117	134	-31g	108	66	57	-66
2023	29	3.1	Orchardgrass	4	100	34	68	60	117	134	-18g	191	132	114	-66
2024	29	3.1	Orchardgrass	4	100	34	68	60	117	134	-12g	274	198	171	-66

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	liedb	Balar	ce After	Recs <sup>C</sup>	Balanc	e After <sub>oval</sub> d
1 0 001		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2025	29		Orchardgrass	4 per ac	103/ac	34	68	60	103/ac	134	-8g	357	264	228	-66
Total	29				500	170	340	273	527	603					
2021	3	1.6	Orchardgrass	4	100	23	68	33	58	66	-67	35	-2	-2	-134
2022	3	1.6	Orchardgrass	4	100	23	68	59	116	132	-32g	128	64	56	-68
2023	3	1.6	Orchardgrass	4	100	23	68	59	116	132	-19g	221	128	112	-68
2024	3	1.6	Orchardgrass	4	100	23	68	59	116	132	-13g	314	192	168	-68
2025	3	1.6	Orchardgrass	4	100	23	68	59	116	132	-9g	407	256	224	-68
Total	3				500	115	340	269	522	594					
2021	301	9.9	Orchardgrass	4	100	34	31	33	58	66	-67	24	35	-2	-134
2022	301	9.9	Orchardgrass	4	100	34	31	59	116	132	-32g	106	136	56	-68
2023	301	9.9	Orchardgrass	4	100	34	31	59	116	132	-19g	188	237	112	-68
2024	301	9.9	Orchardgrass	4	100	34	31	59	116	132	-13 <sup>g</sup>	270	338	168	-68
2025	301	9.9	Orchardgrass	4	100	34	31	59	116	132	-9g	352	439	224	-68
Total	301				500	170	155	269	522	594					
2021	302	6.4	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	302	6.4	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68
2023	302	6.4	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	302	6.4	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	302	6.4	Orchardgrass	4	100	34	68	59	116	132	-9g	352	256	224	-68
Total	302				500	170	340	269	522	594					
2021	31	12.8	Small grain cover		0	0	0								
2021	31	12.8	Corn for Silage, convent	23	147	46	128	33	58	66	-114	12	-62	-57	-187
2022	31	12.8	Small grain cover		0	0	0								
2022	31	12.8	Corn for Silage, convent	23	147	46	128	59	116	132	-79g	82	4	1	-121
2023	31	12.8	Small grain cover		0	0	0								
2023	31	12.8	Corn for Silage, convent	23	147	46	128	59	116	132	-66 <sup>g</sup>	152	8	2	-121
2024	31	12.8	Small grain cover		0	0	0								
2024	31	12.8	Corn for Silage, convent	23	147	46	128	59	116	132	-60g	222	12	3	-121
2025	31	12.8	Small grain cover		0	0	0								

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	nce After	Recs <sup>C</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	$P_2O_5$ lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	$P_2O_5$ lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2025	31	12.8	Corn for Silage, convent	23	103/40	46	128	59	116	132	-56g	292	16	4	-121
Total	31				735	230	640	269	522	594					
2021	311	3.6	Orchardgrass	4	100	34	31	33	59	67	-67	25	36	-1	-133
2022	311	3.6	Orchardgrass	4	100	34	31	60	117	133	-31g	108	138	57	-67
2023	311	3.6	Orchardgrass	4	100	34	31	60	117	133	-18g	191	240	114	-67
2024	311	3.6	Orchardgrass	4	100	34	31	60	117	133	-12g	274	342	171	-67
2025	311	3.6	Orchardgrass	4	100	34	31	60	117	133	-8g	357	444	228	-67
Total	311				500	170	155	273	527	599					
2021	312	2.7	Orchardgrass	4	100	34	31	33	59	66	-67	25	35	-1	-134
2022	312	2.7	Orchardgrass	4	100	34	31	59	117	133	-32 <sup>g</sup>	108	137	57	-67
2023	312	2.7	Orchardgrass	4	100	34	31	59	117	133	-19g	191	239	114	-67
2024	312	2.7	Orchardgrass	4	100	34	31	59	117	133	-13g	274	341	171	-67
2025	312	2.7	Orchardgrass	4	100	34	31	59	117	133	-9g	357	443	228	-67
Total	312				500	170	155	269	527	598					I
2021	32	2.8	Orchardgrass	4	100	34	68	34	59	67	-66	25	-1	-1	-133
2022	32	2.8	Orchardgrass	4	100	34	68	34	59	67	-57g	50	-1	-1	-133
2023	32	2.8	Orchardgrass	4	100	34	68	59	117	133	-28g	133	65	57	-67
2024	32	2.8	Orchardgrass	4	100	34	68	59	117	133	-17g	216	130	114	-67
2025	32	2.8	Orchardgrass	4	100	34	68	59	117	133	-11g	299	195	171	-67
Total	32				500	170	340	245	469	533					<u> </u>
2021	321	11.2	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	321	11.2	Orchardgrass	4	100	34	68	74	150	183	-17g	140	115	90	-17
2023	321	11.2	Orchardgrass	4	100	34	68	59	116	132	-12 <sup>g</sup>	222	179	146	-68
2024	321	11.2	Orchardgrass	4	100	34	68	26	59	67	-43g	247	178	145	-133
2025	321	11.2	Orchardgrass	4	100	34	68	59	116	132	-18g	329	242	201	-68
Total	321				500	170	340	251	499	580					<u> </u>
2021	322	13.7	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	322	13.7	Orchardgrass	4	100	34	68	59	116	132	-32 <sup>g</sup>	106	64	56	-68
2023	322	13.7	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	nce After	Recs <sup>c</sup>		e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2024	322	13.7	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	322	13.7	Orchardgrass	4	100	34	68	59	116	132	-9g	352	256	224	-68
Total	322				500	170	340	269	522	594					
2021	323	6.1	Small grain cover		0	0	0								
2021	323	6.1	Corn for Silage, convent	23	147	46	72	33	58	67	-114	12	-5	-57	-186
2022	323	6.1	Small grain cover		0	0	0								
2022	323	6.1	Corn for Silage, convent	23	147	46	72	59	116	132	-79g	82	60	1	-121
2023	323	6.1	Small grain cover		0	0	0								
2023	323	6.1	Corn for Silage, convent	23	147	46	72	59	116	132	-66g	152	120	2	-121
2024	323	6.1	Small grain cover		0	0	0								
2024	323	6.1	Corn for Silage, convent	23	147	46	72	59	116	132	-60g	222	180	3	-121
2025	323	6.1	Small grain cover		0	0	0								
2025	323	6.1	Corn for Silage, convent	23	147	46	72	59	116	132	-56 <sup>g</sup>	292	240	4	-121
Total	323				735	230	360	269	522	595					
2021	324	8.5	Orchardgrass	4	100	34	68	33	58	67	-67	24	-1	-2	-133
2022	324	8.5	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68
2023	324	8.5	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	324	8.5	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	324	8.5	Orchardgrass	4	100	34	68	59	116	132	-9g	352	256	224	-68
Total	324				500	170	340	269	522	595					
2021	326	3.4	Small grain cover		0	0	0								
2021	326	3.4	Corn for Silage, convent	23	147	46	128	34	59	67	-113	13	-61	-56	-186
2022	326	3.4	Small grain cover		0	0	0								
2022	326	3.4	Corn for Silage, convent	23	147	46	128	59	116	132	-79g	83	4	1	-121
2023	326	3.4	Small grain cover		0	0	0								
2023	326	3.4	Corn for Silage, convent	23	147	46	128	59	116	132	-66 <sup>g</sup>	153	8	2	-121
2024	326	3.4	Small grain cover		0	0	0								
2024	326	3.4	Corn for Silage, convent	23	147	46	128	59	116	132	-60g	223	12	3	-121
2025	326	3.4	Small grain cover		0	0	0								
2025	326	3.4	Corn for Silage, convent	23	147	46	128	59	116	132	-56g	293	16	4	-121

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	<sub>lied</sub> b	Balan	ce After	Recs <sup>C</sup>		e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	326	ue		per de	735	230	640	270	523	595	103/40	103/40	105/40	105/40	103/40
2021	33	26.5	Small grain cover		0	0	0								
2021	33	26.5	Corn for Silage, convent	23	147	0	72	33	58	66	-114	58	-6	-57	-187
2022	33	26.5	Small grain cover		0	0	0								
2022	33	26.5	Corn for Silage, convent	23	147	0	72	59	116	132	-79g	174	60	1	-121
2023	33	26.5	Small grain cover		0	0	0								
2023	33	26.5	Corn for Silage, convent	23	147	0	72	59	116	132	-66g	290	120	2	-121
2024	33	26.5	Small grain cover		0	0	0								
2024	33	26.5	Corn for Silage, convent	23	147	0	72	59	116	132	-60g	406	180	3	-121
2025	33	26.5	Small grain cover		0	0	0		7						
2025	33	26.5	Corn for Silage, convent	23	147	0	72	59	116	132	-56g	522	240	4	-121
Total	33				735	0	360	269	522	594					
2021	331	1.3	Orchardgrass	4	100	34	31	33	58	67	-67	24	36	-2	-133
2022	331	1.3	Orchardgrass	4	100	34	31	60	116	133	-31g	106	138	56	-67
2023	331	1.3	Orchardgrass	4	100	34	31	60	116	133	-18g	188	240	112	-67
2024	331	1.3	Orchardgrass	4	100	34	31	60	116	133	-12g	270	342	168	-67
2025	331	1.3	Orchardgrass	4	100	34	31	60	116	133	-8g	352	444	224	-67
Total	331				500	170	155	273	522	599					
2021	332	5.0	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	332	5.0	Orchardgrass	4	100	34	68	59	116	133	-32g	106	65	56	-67
2023	332	5.0	Orchardgrass	4	100	34	68	59	116	133	-19g	188	130	112	-67
2024	332	5.0	Orchardgrass	4	100	34	68	59	116	133	-13g	270	195	168	-67
2025	332	5.0	Orchardgrass	4	100	34	68	59	116	133	-9g	352	260	224	-67
Total	332				500	170	340	269	522	598					
2021	333	1.7	Orchardgrass	4	100	34	31	34	60	69	-66	26	38	0	-131
2022	333	1.7	Orchardgrass	4	100	34	31	60	117	134	-31g	109	141	57	-66
2023	333	1.7	Orchardgrass	4	100	34	31	60	117	134	-18g	192	244	114	-66
2024	333	1.7	Orchardgrass	4	100	34	31	60	117	134	-12g	275	347	171	-66
2025	333	1.7	Orchardgrass	4	100	34	31	60	117	134	-8g	358	450	228	-66

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
					Ν	$P_2O_5$	K <sub>2</sub> O	N	$P_2O_5$ lbs/ac	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Total	333	ac		per ac	lbs/ac 500	lbs/ac 170	lbs/ac 155	1bs/ac 274	528	lbs/ac 605	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac
2021	334	4.1	Orchardgrass	4	100	34	68	33	58	67	-67	24	-1	-2	-133
2022	334	4.1	Orchardgrass	4	100	34	68	59	115	131	-32g		63	55	-69
2023	334	4.1	Orchardgrass	4	100	34	68	59	115	131	-19g	186	126	110	-69
2024	334	4.1	Orchardgrass	4	100	34	68	59	115	131	-13g	267	189	165	-69
2025	334	4.1	Orchardgrass	4	100	34	68	59	115	131	-9g	348	252	220	-69
Total	334				500	170	340	269	518	591					
2021	335	0.6	Orchardgrass	4	100	34	31	35	63	71	-65	29	40	3	-129
2022	335	0.6	Orchardgrass	4	100	34	31	58	117	132	-32g	112	141	60	-68
2023	335	0.6	Orchardgrass	4	100	34	31	58	117	132	-20g	195	242	117	-68
2024	335	0.6	Orchardgrass	4	100	34	31	58	117	132	-14g	278	343	174	-68
2025	335	0.6	Orchardgrass	4	100	34	31	58	117	132	-10 <sup>g</sup>	361	444	231	-68
Total	335				500	170	155	267	531	599					
2021	34	5.1	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	34	5.1	Orchardgrass	4	100	34	68	59	117	133	-32 <sup>g</sup>	107	65	57	-67
2023	34	5.1	Orchardgrass	4	100	34	68	59	117	133	-19g	190	130	114	-67
2024	34	5.1	Orchardgrass	4	100	34	68	59	117	133	-13g	273	195	171	-67
2025	34	5.1	Orchardgrass	4	100	34	68	59	117	133	-9g	356	260	228	-67
Total	34				500	170	340	269	526	598					
2021	35	4.0	Small grain cover		0	0	0								
2021	35	4.0	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	35	4.0	Small grain cover		0	0	0								
2022	35	4.0	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	35	4.0	Small grain cover		0	0	0								
2023	35	4.0	Corn for Silage, convent	23	147	61	72	59	116	132	-66 <sup>g</sup>	110	120	2	-121
2024	35	4.0	Small grain cover		0	0	0								
2024	35	4.0	Corn for Silage, convent	23	147	61	72	59	116	132	-60 <sup>g</sup>	165	180	3	-121
2025	35	4.0	Small grain cover		0	0	0								
2025	35	4.0	Corn for Silage, convent	23	147	61	72	59	116	132	-56 <sup>g</sup>	220	240	4	-121

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	<sub>lied</sub> b	Balan	ce After ]	Recs <sup>C</sup>	Balance Remo	e After oval <sup>d</sup>
1 0 001		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	35	ac		per ac	735	305	360	269	522	594	105/ac	105/ac	105/ac	105/ac	105/ac
2021	36	3.0	Orchardgrass	4	100	34	68	33	59	67	-67	25	-1	-1	-133
2022	36	3.0	Orchardgrass	4	100	34	68	60	118	134	-31g	109	66	58	-66
2023	36	3.0	Orchardgrass	4	100	34	68	60	118	134	-18g	193	132	116	-66
2024	36	3.0	Orchardgrass	4	100	34	68	60	118	134	-12g	277	198	174	-66
2025	36	3.0	Orchardgrass	4	100	34	68	60	118	134	-8g	361	264	232	-66
Total	36				500	170	340	273	531	603					
2021	37	23.5	Small grain cover		0	0	0								
2021	37	23.5	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	37	23.5	Small grain cover		0	0	0		7						
2022	37	23.5	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	37	23.5	Small grain cover		0	0	0								
2023	37	23.5	Corn for Silage, convent	23	147	61	72	27	58	66	-98g	52	54	-56	-187
2024	37	23.5	Small grain cover		0	0	0								
2024	37	23.5	Corn for Silage, convent	23	147	61	72	59	116	132	-69g	107	114	1	-121
2025	37	23.5	Small grain cover		0	0	0								
2025	37	23.5	Corn for Silage, convent	23	147	61	72	59	116	132	-60g	162	174	2	-121
Total	37				735	305	360	237	464	528					
2021	39	1.9	Orchardgrass	4	100	34	31	34	60	68	-66	26	37	0	-132
2022	39	1.9	Orchardgrass	4	100	34	31	60	117	133	-31g	109	139	57	-67
2023	39	1.9	Orchardgrass	4	100	34	31	69	152	186	-9g	227	294	149	-14
2024	39	1.9	Orchardgrass	4	100	34	31	60	117	133	-5g	310	396	206	-67
2025	39	1.9	Orchardgrass	4	100	34	31	60	117	133	-5g	393	498	263	-67
Total	39				500	170	155	283	563	653					
2021	4	2.8	Small grain cover		0	0	0								
2021	4	2.8	Corn for Silage, convent	23	147	0	72	33	58	66	-114	58	-6	-57	-187
2022	4	2.8	Small grain cover		0	0	0								
2022	4	2.8	Corn for Silage, convent	23	147	0	72	27	60	68	-111g	118	-4	-55	-185
2023	4	2.8	Small grain cover		0	0	0								

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ice After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	4	2.8	Corn for Silage, convent	23	147	0	72	78	149	183	-56g	267	111	34	-70
2024	4	2.8	Small grain cover		0	0	0								
2024	4	2.8	Corn for Silage, convent	23	147	0	72	27	60	68	-89g	327	107	-21	-185
2025	4	2.8	Small grain cover		0	0	0								
2025	4	2.8	Corn for Silage, convent	23	147	0	72	59	115	132	-64g	442	167	0	-121
Total	4				735	0	360	224	442	517					
2021	41	28.4	Small grain cover		0	0	0								
2021	41	28.4	Corn for Silage, convent	23	147	46	128	33	58	66	-114	12	-62	-57	-187
2022	41	28.4	Small grain cover		0	0	0								
2022	41	28.4	Corn for Silage, convent	23	147	46	128	59	116	132	-79g	82	4	1	-121
2023	41	28.4	Small grain cover		0	0	0								
2023	41	28.4	Corn for Silage, convent	23	147	46	128	78	150	183	-47g	186	59	36	-70
2024	41	28.4	Small grain cover		0	0	0								
2024	41	28.4	Corn for Silage, convent	23	147	46	128	59	116	132	-53g	256	63	37	-121
2025	41	28.4	Small grain cover		0	0	0								
2025	41	28.4	Corn for Silage, convent	23	147	46	128	59	116	132	-53g	326	67	38	-121
Total	41				735	230	640	288	556	645					
2021	42	2.0	Small grain cover		0	0	0								
2021	42	2.0	Corn for Silage, convent	23	147	61	128	34	59	67	-113	-2	-61	-56	-186
2022	42	2.0	Small grain cover		0	0	0								
2022	42	2.0	Corn for Silage, convent	23	147	61	128	60	118	134	-78g	57	6	3	-119
2023	42	2.0	Small grain cover		0	0	0								
2023	42	2.0	Corn for Silage, convent	23	147	61	128	79	152	186	-46 <sup>g</sup>	148	64	40	-67
2024	42	2.0	Small grain cover		0	0	0								
2024	42	2.0	Corn for Silage, convent	23	147	61	128	60	118	134	-52g	205	70	43	-119
2025	42	2.0	Small grain cover		0	0	0								
2025	42	2.0	Corn for Silage, convent	23	147	61	128	60	118	134	-52g	262	76	46	-119
Total	42				735	305	640	293	565	655					
2021	5	12.7	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	5	12.7	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ce After ]	Recs <sup>c</sup>	Balance Remo	
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	5	12.7	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	5	12.7	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	5	12.7	Orchardgrass	4	100	34	68	59	116	132	-9g	352	256	224	-68
Total	5				500	170	340	269	522	594					
2021	51	2.3	Small grain cover		0	0	0								
2021	51	2.3	Corn for Silage, convent	23	147	61	72	33	58	67	-114	-3	-5	-57	-186
2022	51	2.3	Small grain cover		0	0	0								
2022	51	2.3	Corn for Silage, convent	23	147	61	72	60	117	133	-78g	56	61	2	-120
2023	51	2.3	Small grain cover		0	0	0								
2023	51	2.3	Corn for Silage, convent	23	147	61	72	79	151	185	-46g	146	174	38	-68
2024	51	2.3	Small grain cover		0	0	0								
2024	51	2.3	Corn for Silage, convent	23	147	61	72	60	117	133	-52g	202	235	40	-120
2025	51	2.3	Small grain cover		0	0	0								
2025	51	2.3	Corn for Silage, convent	23	147	61	72	60	117	133	-52g	258	296	42	-120
Total	51				735	305	360	292	560	651					
2021	52	2.2	Small grain cover		0	0	0								
2021	52	2.2	Corn for Silage, convent	23	147	61	72	34	60	67	-113	-1	-5	-55	-186
2022	52	2.2	Small grain cover		0	0	0								
2022	52	2.2	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	52	2.2	Small grain cover		0	0	0								
2023	52	2.2	Corn for Silage, convent	23	147	61	72	78	151	184	-47g	145	172	37	-69
2024	52	2.2	Small grain cover		0	0	0								
2024	52	2.2	Corn for Silage, convent	23	147	61	72	59	116	132	-53g	200	232	38	-121
2025	52	2.2	Small grain cover		0	0	0								
2025	52	2.2	Corn for Silage, convent	23	147	61	72	59	116	132	-53g	255	292	39	-121
Total	52				735	305	360	289	559	647					
2021	53	2.6	Small grain cover		0	0	0								
2021	53	2.6	Corn for Silage, convent	23	147	61	72	34	60	68	-113	-1	-4	-55	-185
2022	53	2.6	Small grain cover		0	0	0								
2022	53	2.6	Corn for Silage, convent	23	147	61	72	60	118	134	-78g	57	62	3	-119

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	<sub>lied</sub> b	Balan	ce After	Recs <sup>C</sup>	Balance Remo	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	53	2.6	Small grain cover	1	0	0	0								
2023	53	2.6	Corn for Silage, convent	23	147	61	72	79	152	186	-46g	148	176	40	-67
2024	53	2.6	Small grain cover		0	0	0								
2024	53	2.6	Corn for Silage, convent	23	147	61	72	60	118	134	-52g	205	238	43	-119
2025	53	2.6	Small grain cover		0	0	0								
2025	53	2.6	Corn for Silage, convent	23	147	61	72	60	118	134	-52g	262	300	46	-119
Total	53				735	305	360	293	566	656					
2021	55	1.5	Small grain cover		0	0	0								
2021	55	1.5	Corn for Silage, convent	23	147	61	72	34	60	68	-113	-1	-4	-55	-185
2022	55	1.5	Small grain cover		0	0	0								
2022	55	1.5	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	55	1.5	Small grain cover		0	0	0								
2023	55	1.5	Corn for Silage, convent	23	147	61	72	79	151	185	-46 <sup>g</sup>	145	173	37	-68
2024	55	1.5	Small grain cover		0	0	0								
2024	55	1.5	Corn for Silage, convent	23	147	61	72	59	116	132	-53g	200	233	38	-121
2025	55	1.5	Small grain cover		0	0	0								
2025	55	1.5	Corn for Silage, convent	23	147	61	72	74	149	182	-38g	288	343	72	-71
Total	55				735	305	360	305	592	699					
2021	56	1.6	Orchardgrass	4	100	34	68	34	59	67	-66	25	-1	-1	-133
2022	56	1.6	Orchardgrass	4	100	34	68	60	118	134	-31g	109	66	58	-66
2023	56	1.6	Orchardgrass	4	100	34	68	60	118	134	-18g	193	132	116	-66
2024	56	1.6	Orchardgrass	4	100	34	68	60	118	134	-12g	277	198	174	-66
2025	56	1.6	Orchardgrass	4	100	34	68	75	152	185	7g	395	315	266	-15
Total	56				500	170	340	289	565	654					
2021	58	9.6	Orchardgrass	4	100	34	31	33	58	66	-67	24	35	-2	-134
2022	58	9.6	Orchardgrass	4	100	34	31	59	116	132	-32g	106	136	56	-68
2023	58	9.6	Orchardgrass	4	100	34	31	59	116	132	-19g	188	237	112	-68
2024	58	9.6	Orchardgrass	4	100	34	31	59	116	132	-13g	270	338	168	-68
2025	58	9.6	Orchardgrass	4	100	34	31	74	150	183	6g	386	490	258	-17

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	<sub>ns</sub> a	Nutri	ents App	liedb	Balan	ce After ]	Recs <sup>C</sup>	Balanc	e After oval <sup>d</sup>
1 0001					N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Total	58	ac		per ac	lbs/ac 500	lbs/ac 170	lbs/ac 155	lbs/ac 284	1bs/ac 556	lbs/ac 645	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac
2021	6	1.3	Orchardgrass	4	100	0	0	34	60	68	-66	60	68	0	-132
2022	6	1.3	Orchardgrass	4	100	0	0	59	115	131	-32g	175	199	55	-69
2023	6	1.3	Orchardgrass	4	100	0	0	59	115	131	-19g	290	330	110	-69
2024	6		Orchardgrass	4	100	0	0	59	115	131	-13g	405	461	165	-69
2025	6	1.3	Orchardgrass	4	100	0	0	73	147	179	5g	552	640	252	-21
Total	6				500	0	0	284	552	640	-				
2021	61	6.2	Small grain cover		0	0	0								
2021	61	6.2	Corn for Silage, convent	23	147	61	72	34	59	67	-113	-2	-5	-56	-186
2022	61	6.2	Small grain cover		0	0	0		7						
2022	61	6.2	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	61	6.2	Small grain cover		0	0	0								
2023	61	6.2	Corn for Silage, convent	23	147	61	72	78	151	184	-47g	145	172	37	-69
2024	61	6.2	Small grain cover		0	0	0								
2024	61	6.2	Corn for Silage, convent	23	147	61	72	59	116	132	-53g	200	232	38	-121
2025	61	6.2	Small grain cover		0	0	0								
2025	61	6.2	Corn for Silage, convent	23	147	61	72	74	150	183	-38g	289	343	73	-70
Total	61				735	305	360	304	592	698					
2021	62	1.8	Small grain cover		0	0	0								
2021	62	1.8	Corn for Silage, convent	23	147	61	72	33	58	67	-114	-3	-5	-57	-186
2022	62	1.8	Small grain cover		0	0	0								
2022	62	1.8	Corn for Silage, convent	23	147	61	72	60	117	134	-78g	56	62	2	-119
2023	62	1.8	Small grain cover		0	0	0								
2023	62	1.8	Corn for Silage, convent	23	147	61	72	36	65	75	-89g	60	65	-48	-178
2024	62	1.8	Small grain cover		0	0	0								
2024	62	1.8	Corn for Silage, convent	23	147	61	72	60	117	134	-67g	116	127	2	-119
2025	62	1.8	Small grain cover		0	0	0								
2025	62	1.8	Corn for Silage, convent	23	147	61	72	75	152	185	-43 <sup>g</sup>	207	240	39	-68
Total	62				735	305	360	264	509	595					

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	ecs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>c</sup>		ce After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2021	63	5.0	Small grain cover		0	0	0								
2021	63	5.0	Corn for Silage, convent	23	147	61	72	33	59	67	-114	-2	-5	-56	-186
2022	63	5.0	Small grain cover		0	0	0								
2022	63	5.0	Corn for Silage, convent	23	147	61	72	59	116	132	-79g	55	60	1	-121
2023	63	5.0	Small grain cover		0	0	0								
2023	63	5.0	Corn for Silage, convent	23	147	61	72	33	59	67	-92g	53	55	-55	-186
2024	63	5.0	Small grain cover		0	0	0								
2024	63	5.0	Corn for Silage, convent	23	147	61	72	33	59	67	-95g	51	50	-56	-186
2025	63	5.0	Small grain cover		0	0	0								
2025	63	5.0	Corn for Silage, convent	23	147	61	72	74	150	183	-54g	140	161	35	-70
Total	63				735	305	360	232	443	516					
2021	64	3.2	Small grain cover		0	0	0								
2021	64	3.2	Corn for Silage, convent	23	147	61	72	33	58	66	-114	-3	-6	-57	-187
2022	64	3.2	Small grain cover		0	0	0								
2022	64	3.2	Corn for Silage, convent	23	147	61	72	59	117	132	-79g	56	60	2	-121
2023	64	3.2	Small grain cover		0	0	0								
2023	64	3.2	Corn for Silage, convent	23	147	61	72	33	58	66	-92g	53	54	-55	-187
2024	64	3.2	Small grain cover		0	0	0								
2024	64	3.2	Corn for Silage, convent	23	147	61	72	33	58	66	-95g	50	48	-57	-187
2025	64	3.2	Small grain cover		0	0	0								
2025	64	3.2	Corn for Silage, convent	23	147	61	72	74	150	183	-54g	139	159	35	-70
Total	64				735	305	360	232	441	513					
2021	65	2.6	Small grain cover		0	0	0								
2021	65	2.6	Corn for Silage, convent	23	147	61	72	34	60	68	-113	-1	-4	-55	-185
2022	65	2.6	Small grain cover		0	0	0								
2022	65	2.6	Corn for Silage, convent	23	147	61	72	60	118	134	-78g	57	62	3	-119
2023	65	2.6	Small grain cover		0	0	0								
2023	65	2.6	Corn for Silage, convent	23	147	61	72	34	60	68	-91g	56	58	-52	-185
2024	65	2.6	Small grain cover		0	0	0								
2024	65	2.6	Corn for Silage, convent	23	147	61	72	34	60	68	-94g	55	54	-55	-185

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ice After ]	Recs <sup>c</sup>		ce After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2025	65	2.6	Small grain cover	<b>^</b>	0	0	0								
2025	65	2.6	Corn for Silage, convent	23	147	61	72	75	152	185	-53g	146	167	37	-68
Total	65				735	305	360	237	450	523					
2021	66	1.5	Small grain cover		0	0	0								
2021	66	1.5	Corn for Silage, convent	23	147	61	72	34	59	67	-113	-2	-5	-56	-186
2022	66	1.5	Small grain cover		0	0	0								
2022	66	1.5	Corn for Silage, convent	23	147	61	72	60	118	134	-78g	57	62	3	-119
2023	66	1.5	Small grain cover		0	0	0								
2023	66	1.5	Corn for Silage, convent	23	147	61	72	34	59	67	-91g	55	57	-53	-186
2024	66	1.5	Small grain cover		0	0	0								
2024	66	1.5	Corn for Silage, convent	23	147	61	72	34	59	67	-94g	53	52	-56	-186
2025	66	1.5	Small grain cover		0	0	0								
2025	66	1.5	Corn for Silage, convent	23	147	61	72	75	152	186	-53g	144	166	37	-67
Total	66				735	305	360	237	447	521					
2021	67	1.5	Small grain cover		0	0	0								
2021	67	1.5	Corn for Silage, convent	23	147	61	72	34	59	67	-113	-2	-5	-56	-186
2022	67	1.5	Small grain cover		0	0	0								
2022	67	1.5	Corn for Silage, convent	23	147	61	72	60	118	134	-78g	57	62	3	-119
2023	67	1.5	Small grain cover		0	0	0								
2023	67	1.5	Corn for Silage, convent	23	147	61	72	34	59	67	-91g	55	57	-53	-186
2024	67	1.5	Small grain cover		0	0	0								
2024	67	1.5	Corn for Silage, convent	23	147	61	72	34	59	67	-94g	53	52	-56	-186
2025	67	1.5	Small grain cover		0	0	0								
2025	67	1.5	Corn for Silage, convent	23	147	61	72	75	152	186	-53g	144	166	37	-67
Total	67				735	305	360	237	447	521					
2021	7	7.4	Small grain cover		0	0	0								
2021	7	7.4	Corn for Silage, convent	23	147	46	72	33	58	66	-114	12	-6	-57	-187
2022	7	7.4	Small grain cover		0	0	0								
2022	7	7.4	Corn for Silage, convent	23	147	46	72	59	116	132	-79g	82	60	1	-121
2023	7	7.4	Small grain cover		0	0	0								

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	esa	Nutri	ents App	liedb	Balar	nce After	Recs <sup>C</sup>	Balanc	e After oval <sup>d</sup>
1 cui	11010	ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	7		Corn for Silage, convent	23	147	46	72	33	58	66	-92g	94	54	-56	-187
2024	7	7.4	Small grain cover		0	0	0								
2024	7	7.4	Corn for Silage, convent	23	147	46	72	33	58	66	-95g	106	48	-57	-187
2025	7	7.4	Small grain cover		0	0	0								
2025	7	7.4	Corn for Silage, convent	23	147	46	72	74	150	183	-54g	210	159	35	-70
Total	7				735	230	360	232	440	513					
2021	8	0.6	Orchardgrass	4	100	34	31	35	61	70	-65	27	39	1	-130
2022	8	0.6	Orchardgrass	4	100	34	31	63	123	140	-28g	116	148	64	-60
2023	8	0.6	Orchardgrass	4	100	34	31	63	123	140	-14g	205	257	127	-60
2024	8	0.6	Orchardgrass	4	100	34	31	63	123	140	-8g	294	366	190	-60
2025	8	0.6	Orchardgrass	4	100	34	31	79	158	193	12 <sup>g</sup>	418	528	288	-7
Total	8				500	170	155	303	588	683					
2021	81	5.3	Orchardgrass	4	100	34	68	33	58	67	-67	24	-1	-2	-133
2022	81	5.3	Orchardgrass	4	100	34	68	60	117	133	-31g	107	65	57	-67
2023	81	5.3	Orchardgrass	4	100	34	68	60	117	133	-18g	190	130	114	-67
2024	81	5.3	Orchardgrass	4	100	34	68	60	117	133	-12g	273	195	171	-67
2025	81	5.3	Orchardgrass	4	100	34	68	75	151	184	7g	390	311	262	-16
Total	81				500	170	340	288	560	650					
2021	82	1.4	Orchardgrass	4	100	34	31	34	60	68	-66	26	37	0	-132
2022	82	1.4	Orchardgrass	4	100	34	31	61	120	136	-30g	112	142	60	-64
2023	82	1.4	Orchardgrass	4	100	34	31	61	120	136	-16 <sup>g</sup>	198	247	120	-64
2024	82	1.4	Orchardgrass	4	100	34	31	61	120	136	-10 <sup>g</sup>	284	352	180	-64
2025	82	1.4	Orchardgrass	4	100	34	31	76	156	190	9g	406	511	276	-10
Total	82				500	170	155	293	576	666					
2021	9	0.8	Orchardgrass	4	100	34	68	35	61	71	-65	27	3	1	-129
2022	9	0.8	Orchardgrass	4	100	34	68	63	123	141	-27g	116	76	64	-59
2023	9	0.8	Orchardgrass	4	100	34	68	63	123	141	-14g	205	149	127	-59
2024	9	0.8	Orchardgrass	4	100	34	68	63	123	141	_7g	294	222	190	-59
2025	9	0.8	Orchardgrass	4	100	34	68	63	123	141	-3g	383	295	253	-59

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balan	ice After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	9				500	170	340	287	553	635					
2021	147	31.5	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	147	31.5	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68
2023	147	31.5	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	147	31.5	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	147	31.5	Orchardgrass	4	100	34	68	30	58	66	-38g	294	190	166	-134
Total	147				500	170	340	240	464	528					
2021	148	0.5	Orchardgrass	4	100	34	68	34	62	70	-66	28	2	2	-130
2022	148	0.5	Orchardgrass	4	100	34	68	62	123	140	-28g	117	74	65	-60
2023	148	0.5	Orchardgrass	4	100	34	68	62	123	140	-15g	206	146	128	-60
2024	148	0.5	Orchardgrass	4	100	34	68	62	123	140	-8g	295	218	191	-60
2025	148	0.5	Orchardgrass	4	100	34	68	62	123	140	-4g	384	290	254	-60
Total	148				500	170	340	282	554	630					
2021	149	29.0	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	149	29.0	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68
2023	149	29.0	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	149	29.0	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68
2025	149	29.0	Orchardgrass	4	100	34	68	34	81	101	-34g	317	225	189	-99
Total	149				500	170	340	244	487	563					
2021	172	2.5	Orchardgrass	4	100	34	68	33	59	67	-67	25	-1	-1	-133
2022	172	2.5	Orchardgrass	4	100	34	68	58	115	131	-33g	106	63	55	-69
2023	172	2.5	Orchardgrass	4	100	34	68	58	115	131	-20g	187	126	110	-69
2024	172	2.5	Orchardgrass	4	100	34	68	58	115	131	-14g	268	189	165	-69
2025	172	2.5	Orchardgrass	4	100	34	68	68	149	182	0g	383	303	254	-18
Total	172				500	170	340	275	553	642					
2021	173	4.7	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	173	4.7	Orchardgrass	4	100	34	68	59	116	132	-32g	106	64	56	-68
2023	173	4.7	Orchardgrass	4	100	34	68	59	116	132	-19g	188	128	112	-68
2024	173	4.7	Orchardgrass	4	100	34	68	59	116	132	-13g	270	192	168	-68

Year	Field	Size	Сгор	Yield Goal	For	tilizer Re	aaa	Nutri	ents App	liadb	Balan	ce After ]	PaceC	Balance Remo	e After
1 cai	1 Iolu	5120	Стор	Goar	Ν	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Ν	$P_2O_5$	K <sub>2</sub> O	Ν	$P_2O_5$	Kees K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
		ac		per ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac	lbs/ac
2025	173	4.7	Orchardgrass	4	100	34	68	68	150	183	0g	386	307	258	-17
Total	173				500	170	340	278	556	645					
2021	174	1.3	Orchardgrass	4	100	34	68	35	62	71	-65	28	3	2	-129
2022	174	1.3	Orchardgrass	4	100	34	68	58	116	132	-32g	110	67	58	-68
2023	174	1.3	Orchardgrass	4	100	34	68	58	116	132	-20g	192	131	114	-68
2024	174	1.3	Orchardgrass	4	100	34	68	58	116	132	-14g	274	195	170	-68
2025	174	1.3	Orchardgrass	4	100	34	68	68	153	187	0g	393	314	263	-13
Total	174				500	170	340	277	563	654					
2021	175	5.2	Orchardgrass	4	100	34	68	34	59	67	-66	25	-1	-1	-133
2022	175	5.2	Orchardgrass	4	100	34	68	60	117	133	-31g	108	65	57	-67
2023	175	5.2	Orchardgrass	4	100	34	68	60	117	133	-18g	191	130	114	-67
2024	175	5.2	Orchardgrass	4	100	34	68	60	117	133	-12g	274	195	171	-67
2025	175	5.2	Orchardgrass	4	100	34	68	69	152	185	1g	392	312	263	-15
Total	175				500	170	340	283	562	651					
2021	1155	4.8	Orchardgrass	4	100	34	68	33	59	67	-67	25	-1	-1	-133
2022	1155	4.8	Orchardgrass	4	100	34	68	59	116	132	-32g	107	64	56	-68
2023	1155	4.8	Orchardgrass	4	100	34	68	59	116	132	-19g	189	128	112	-68
2024	1155	4.8	Orchardgrass	4	100	34	68	59	116	132	-13g	271	192	168	-68
2025	1155	4.8	Orchardgrass	4	100	34	68	68	150	184	0g	387	308	258	-16
Total	1155				500	170	340	278	557	647					
2021	1156	11.9	Orchardgrass	4	100	34	68	33	58	66	-67	24	-2	-2	-134
2022	1156	11.9	Orchardgrass	4	100	34	68	31	58	66	-60g	48	-2	-2	-134
2023	1156	11.9	Orchardgrass	4	100	34	68	59	116	132	-28g	130	64	56	-68
2024	1156	11.9	Orchardgrass	4	100	34	68	59	116	132	-17g	212	128	112	-68
2025	1156	11.9	Orchardgrass	4	100	34	68	68	150	183	-2 <sup>g</sup>	328	243	202	-17
Total	1156				500	170	340	250	498	579					

### Non-manure-spreadable Area

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
					N	$P_2O_5$	K <sub>2</sub> O	Ν	$P_2O_5$	K <sub>2</sub> O	Ν	$P_2O_5$	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
2021	1	ac 0.4	Orchardgrass	per ac 4	100 lbs/ac	lbs/ac 34	lbs/ac 68	lbs/ac	lbs/ac 0	lbs/ac	lbs/ac -100	1bs/ac -34	lbs/ac -68	lbs/ac -60	lbs/ac -200
2021	1	0.4	Orchardgrass	4	100	34	68	0		0	-100	-34	-68		-200
2022	1	0.1	Orchardgrass	4		34	68	0	0	0	-100	-34	-68		-200
2023	1		Orchardgrass	4		34	68	0		0	-100	-34	-68		-200
2025	1		Orchardgrass	4	100	34	68	0		0	-100	-34	-68	-60	-200
Total	1				500	170	340	0	0	0	100				200
Total	1002				500	115	340	0	0	0					
2021	1021	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	1021	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	1021	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	1021	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	1021	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	1021				500	170	340	0	0	0					
2021	1022	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	1022	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	1022	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	1022	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	1022	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	1022				500	170	340	0	0	0					
2021	1023	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	1023	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	1023	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	1023	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	1023	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	1023				500	170	155	0	0	0					
2021	1033	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	1033	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	1033	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2024	1033	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	1033	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	1033				500	170	340	0	0	0					
2021	1035	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	1035	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	1035	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	1035	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	1035	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	1035				500	170	155	0	0	0					
Total	111				500	170	155	0	0	0					
2021	112	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	112	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	112	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	112	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	112	0.4	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	112				500	170	155	0	0	0					
2021	113	0.9	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	113	0.9	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	113	0.9	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	113	0.9	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	113	0.9	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	113				500	170	340	0	0	0					
2021	1151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	1151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	1151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	1151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	1151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	1151				500	170	340	0	0	0					
2021	1153	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	<sub>cs</sub> a	Nutri	ents App	liedb	Balar	ice After	Recs <sup>C</sup>	Balance Remo	e After
1001					N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	1153	ac 0.1	Orchardgrass	per ac 4	10s/ac 100	34	10s/ac 68	10s/ac 0	10s/ac 0	10s/ac	-100	-34	-68	-60	-200
2023	1153	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	1153	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	1153	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	1153				500	170	340	0	0	0					
Total	1169				500	170	340	0	0	0					
2021	143	0.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	143	0.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	143	0.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	143	0.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	143	0.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	143				500	170	340	0	0	0					
2021	151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	151	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	151				500	170	340	0	0	0					
Total	152				500	170	340	0	0	0					
2021	153	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	153	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	153	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	153	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	153	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	153				500	170	340	0	0	0					
2021	154	0.2	Orchardgrass	4	100	0	68	0	0	0	-100	0	-68	-60	-200
2022	154	0.2	Orchardgrass	4	100	0	68	0	0	0	-100	0	-68	-60	-200
2023	154	0.2	Orchardgrass	4	100	0	68	0	0	0	-100	0	-68	-60	-200
2024	154	0.2	Orchardgrass	4	100	0	68	0	0	0	-100	0	-68	-60	-200

Year	Field	Size	Crop	Yield Goal	Fer	tilizer Re	ecsa	Nutri	ents App	liedb	Balar	ice After	Recs <sup>C</sup>	Balance Remo	e After <sub>oval</sub> d
1 0 001		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2025	154	0.2	Orchardgrass	4 per ac	100/40	0		0	0		-100	0	-68	-60	-200
Total	154				500	0	340	0	0	0					
2021	156	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	156	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	156	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	156	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	156	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	156				500	170	340	0	0	0					
2021	157	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	157	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	157	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	157	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	157	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	157				500	170	340	0	0	0					
Total	163				735	0	640	0	0	0					
2021	171	0.5	Small grain cover		0	0	0								
2021	171	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	171	0.5	Small grain cover		0	0	0								
2022	171	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	171	0.5	Small grain cover		0	0	0								
2023	171	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	171	0.5	Small grain cover		0	0	0								
2024	171	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	171	0.5	Small grain cover		0	0									
2025	171	0.5	Corn for Silage, convent	23	147	61	72	0	0		-147	-61	-72	-115	-253
Total	171				735	305	360	0	0	0					
2021	2	0.1	Small grain cover		0	0									
2021	2	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	2	0.1	Small grain cover		0	0	0								

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	nce After ]	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	2	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	2	0.1	Small grain cover		0	0	0								
2023	2	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	2	0.1	Small grain cover		0	0	0								
2024	2	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	2	0.1	Small grain cover		0	0	0								
2025	2	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	2				735	305	360	0	0	0					
2021	21	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	21	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	21	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	21	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	21	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	21				500	170	340	0	0	0					
2021	22	0.3	Small grain cover		0	0	0								
2021	22	0.3	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2022	22	0.3	Small grain cover		0	0	0								
2022	22	0.3	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2023	22	0.3	Small grain cover		0	0	0								
2023	22	0.3	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2024	22	0.3	Small grain cover		0	0	0								
2024	22	0.3	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2025	22	0.3	Small grain cover		0	0	0								
2025	22	0.3	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
Total	22				735	0	360	0	0	0					
2021	28	0.3	Small grain cover		0	0	0								
2021	28	0.3	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2022	28	0.3	Small grain cover		0	0	0								
2022	28	0.3	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2023	28	0.3	Small grain cover		0	0	0								

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	ecsa	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	28	0.3	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2024	28	0.3	Small grain cover		0	0	0								
2024	28	0.3	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2025	28	0.3	Small grain cover		0	0	0								
2025	28	0.3	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
Total	28				735	305	640	0	0	0					
2021	29	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	29	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	29	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	29	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	29	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	29				500	170	340	0	0	0					
2021	301	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	301	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	301	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	301	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	301	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	301				500	170	155	0	0	0					
2021	302	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	302	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	302	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	302	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	302	0.3	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	302				500	170	340	0	0	0					
2021	311	0.6	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	311	0.6	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	311	0.6	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	311	0.6	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	311	0.6	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	nce After	Recs <sup>c</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	311				500	170	155	0	0	0					
2021	312	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	312	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	312	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	312	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	312	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	312				500	170	155	0	0	0					
2021	32	0.7	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	32	0.7	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	32	0.7	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	32	0.7	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	32	0.7	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	32				500	170	340	0	0	0					
2021	321	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	321	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	321	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	321	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	321	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	321				500	170	340	0	0	0					
2021	322	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	322	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	322	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	322	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	322	0.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	322				500	170	340	0	0	0					
2021	323	0.2	Small grain cover		0	0	0								
2021	323	0.2	Corn for Silage, convent	23	147	46	72	0	0	0	-147	-46	-72	-115	-253
2022	323	0.2	Small grain cover		0	0	0								
2022	323	0.2	Corn for Silage, convent	23	147	46	72	0	0	0	-147	-46	-72	-115	-253

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	cs <sup>a</sup>	Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Recs <sup>C</sup>	Balanc	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2023	323	0.2	Small grain cover		0	0	0								
2023	323	0.2	Corn for Silage, convent	23	147	46	72	0	0	0	-147	-46	-72	-115	-253
2024	323	0.2	Small grain cover		0	0	0								
2024	323	0.2	Corn for Silage, convent	23	147	46	72	0	0	0	-147	-46	-72	-115	-253
2025	323	0.2	Small grain cover		0	0	0								
2025	323	0.2	Corn for Silage, convent	23	147	46	72	0	0	0	-147	-46	-72	-115	-253
Total	323				735	230	360	0	0	0					
Total	324				500	170	340	0	0	0					
2021	326	0.1	Small grain cover		0	0	0								
2021	326	0.1	Corn for Silage, convent	23	147	46	128	0	0	0	-147	-46	-128	-115	-253
2022	326	0.1	Small grain cover		0	0	0								
2022	326	0.1	Corn for Silage, convent	23	147	46	128	0	0	0	-147	-46	-128	-115	-253
2023	326	0.1	Small grain cover		0	0	0								
2023	326	0.1	Corn for Silage, convent	23	147	46	128	0	0	0	-147	-46	-128	-115	-253
2024	326	0.1	Small grain cover		0	0	0								
2024	326	0.1	Corn for Silage, convent	23	147	46	128	0	0	0	-147	-46	-128	-115	-253
2025	326	0.1	Small grain cover		0	0	0								
2025	326	0.1	Corn for Silage, convent	23	147	46	128	0	0	0	-147	-46	-128	-115	-253
Total	326				735	230	640	0	0	0					
2021	33	0.2	Small grain cover		0	0	0								
2021	33	0.2	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2022	33	0.2	Small grain cover		0	0	0								
2022	33	0.2	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2023	33	0.2	Small grain cover		0	0	0								
2023	33	0.2	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2024	33	0.2	Small grain cover		0	0	0								
2024	33	0.2	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253
2025	33	0.2	Small grain cover		0	0	0								
2025	33	0.2	Corn for Silage, convent	23	147	0	72	0	0	0	-147	0	-72	-115	-253

Year	Field Size Crop Goal		Yield Goal	Fertilizer Recs <sup>a</sup>			Nutri	ents App	lied <sup>b</sup>	Balar	ice After	Balance After Removal <sup>d</sup>			
		ac	-	per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	33			- F	735	0	360	0	0	0					
2021	331	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	331	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	331	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	331	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	331	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	331				500	170	155	0	0	0					
2021	332	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	332	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	332	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	332	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	332	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	332				500	170	340	0	0	0					
Total	4				735	0	360	0	0	0					
Total	41				735	230	640	0	0	0					
2021	42	0.9	Small grain cover		0	0	0								
2021	42	0.9	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2022	42	0.9	Small grain cover		0	0	0								
2022	42	0.9	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2023	42	0.9	Small grain cover		0	0	0								
2023	42	0.9	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2024	42	0.9	Small grain cover		0	0	0								
2024	42	0.9	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
2025	42	0.9	Small grain cover		0	0	0								
2025	42	0.9	Corn for Silage, convent	23	147	61	128	0	0	0	-147	-61	-128	-115	-253
Total	42				735	305	640	0	0	0					
2021	51	0.3	Small grain cover		0	0	0								
2021	51	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	51	0.3	Small grain cover		0	0	0								

Year	Field	Size	Сгор	Yield Goal	Fertilizer Recs <sup>a</sup>			Nutri	ents App	lied <sup>b</sup>	Balar	nce After	Recs <sup>c</sup>	Balanc Remo	e After oval <sup>d</sup>
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	51	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	51	0.3	Small grain cover		0	0	0								
2023	51	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	51	0.3	Small grain cover		0	0	0								
2024	51	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	51	0.3	Small grain cover		0	0	0								
2025	51	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	51				735	305	360	0	0	0					
2021	52	0.7	Small grain cover		0	0	0								
2021	52	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	52	0.7	Small grain cover		0	0	0		-						
2022	52	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	52	0.7	Small grain cover		0	0	0								
2023	52	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	52	0.7	Small grain cover		0	0	0								
2024	52	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	52	0.7	Small grain cover		0	0	0								
2025	52	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	52				735	305	360	0	0	0					
2021	53	0.1	Small grain cover		0	0	0								
2021	53	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	53	0.1	Small grain cover		0	0	0								
2022	53	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	53	0.1	Small grain cover		0	0	0								
2023	53	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	53	0.1	Small grain cover		0	0	0								
2024	53	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	53	0.1	Small grain cover		0	0	0								
2025	53	0.1	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	53				735	305	360	0	0	0					

Year	Field	Size	Сгор	Yield Goal	Fertilizer Recs <sup>a</sup>			Nutri	ents App	lied <sup>b</sup>	Balar	nce After	Recs <sup>c</sup>	Balance After Removal <sup>d</sup>	
		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	55				735	305	360	0	0	0					
2021	63	0.7	Small grain cover		0	0	0								
2021	63	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	63	0.7	Small grain cover		0	0	0								
2022	63	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	63	0.7	Small grain cover		0	0	0								
2023	63	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	63	0.7	Small grain cover		0	0	0								
2024	63	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	63	0.7	Small grain cover		0	0	0								
2025	63	0.7	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	63				735	305	360	0	0	0					
2021	64	0.3	Small grain cover		0	0	0								
2021	64	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	64	0.3	Small grain cover		0	0	0								
2022	64	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	64	0.3	Small grain cover		0	0	0								
2023	64	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	64	0.3	Small grain cover		0	0	0								
2024	64	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	64	0.3	Small grain cover		0	0	0								
2025	64	0.3	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	64				735	305	360	0	0	0					
2021	65	0.2	Small grain cover		0	0	0								
2021	65	0.2	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	65	0.2	Small grain cover		0	0	0								
2022	65	0.2	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	65	0.2	Small grain cover		0	0	0								
2023	65	0.2	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253

Year	Field	Size	Сгор	Yield Goal	Fertilizer Recs <sup>a</sup>			Nutri	ents App	lied <sup>b</sup>	Balar	ce After	Recs <sup>c</sup>	Balance After Removal <sup>d</sup>	
		ac	•	per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2024	65	0.2	Small grain cover		0	0	0								
2024	65	0.2	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	65	0.2	Small grain cover		0	0	0								
2025	65	0.2	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	65				735	305	360	0	0	0					
2021	66	0.5	Small grain cover		0	0	0								
2021	66	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2022	66	0.5	Small grain cover		0	0	0								
2022	66	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2023	66	0.5	Small grain cover		0	0	0								
2023	66	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2024	66	0.5	Small grain cover		0	0	0								
2024	66	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
2025	66	0.5	Small grain cover		0	0	0								
2025	66	0.5	Corn for Silage, convent	23	147	61	72	0	0	0	-147	-61	-72	-115	-253
Total	66				735	305	360	0	0	0					
2021	8	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2022	8	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	8	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	8	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	8	0.1	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	8				500	170	155	0	0	0					
2021	81	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	81	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	81	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	81	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	81	0.2	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	81				500	170	340	0	0	0					
2021	82	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200

Year	Field	Size	Сгор	Yield Goal	Fertilizer Recs <sup>a</sup>			Nutrients Applied <sup>b</sup>			Balar	ice After	Recs <sup>c</sup>	Balance After Removal <sup>d</sup>	
		ac	•	per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
2022	82	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2023	82	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2024	82	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
2025	82	0.2	Orchardgrass	4	100	34	31	0	0	0	-100	-34	-31	-60	-200
Total	82				500	170	155	0	0	0					
2021	147	5.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	147	5.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	147	5.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	147	5.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	147	5.6	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	147				500	170	340	0	0	0					
2021	148	1.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	148	1.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	148	1.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	148	1.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	148	1.1	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	148				500	170	340	0	0	0					
2021	173	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	173	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	173	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	173	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	173	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	173				500	170	340	0	0	0					
Total	174				500	170	340	0	0	0					
2021	1155	0.8	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	1155	0.8	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	1155	0.8	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	1155	0.8	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	1155	0.8	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200

Year	Field	Size	Сгор	Yield Goal	Fer	tilizer Re	csa	Nutri	ents App	<sub>lied</sub> b	Balan	ce After ]	Recs <sup>C</sup>		e After oval <sup>d</sup>
1.000		ac		per ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	N lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac	P <sub>2</sub> O <sub>5</sub> lbs/ac	K <sub>2</sub> O lbs/ac
Total	1155				500	170	340	0	0	0					
2021	1156	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2022	1156	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2023	1156	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2024	1156	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
2025	1156	0.4	Orchardgrass	4	100	34	68	0	0	0	-100	-34	-68	-60	-200
Total	1156				500	170	340	0	0	0					

<sup>a</sup> Fertilizer Recs are the crop fertilizer recommendations. The N rec accounts for any N credit from previous legume crop.

<sup>b</sup> Nutrients Applied are the nutrients expected to be available to the crop from that year's manure applications plus nutrients from that year's commercial fertilizer applications and nitrates from irrigation water. With a double-crop year, the total nutrients applied for both crops and the year's balances are listed on the second crop's line.

<sup>c</sup> For N, Nutrients Applied minus Fertilizer Recs for indicated crop year. Also includes amount of residual N expected to become available that year from prior years' manure applications. For  $P_2O_5$  and  $K_2O$ , Nutrients Applied minus Fertilizer Recs *through* the indicated crop year, with positive balances carried forward to subsequent years. Negative values indicate a potential need to apply additional nutrients.

<sup>d</sup> Nutrients Applied minus amount removed by harvested portion of crop through the indicated year. Positive balances are carried forward to subsequent years.

<sup>e</sup> Custom fertilizer recommendation.

f Legume crop is assumed to utilize some or all of the supplied N.

g Includes residual N expected to become available that year from prior years' manure applications.

## 6.9. Manure Inventory Annual Summary (Optional)

Manure Source	Plan Period	On Hand at Start of Period	Total Generated	Total Imported	Total Transferred In	Total Applied	Total Exported	Total Trans- ferred Out	On Hand at End of Period	Units
Home Lagoon 1	Oct '20 - Sep '21	0	0	0	0	0	0	0	0	gal
Home Lagoon 2	Oct '20 - Sep '21	0	0	0	0	0	0	0	0	gal
Heifer Lagoon	Oct '20 - Sep '21	0	835,000	0	0	485,730	0	0	349,270	gal
Manure Stack	Oct '20 - Sep '21	0	0	0	0	0	0	0	0	tons
Proposed Digester	Oct '20 - Sep '21	0	0	0	0	0	0	0	0	gal
Proposed Separator	Oct '20 - Sep '21	0	0	0	0	0	0	0	0	tons
Proposed Mix Tanks	Oct '20 - Sep '21	0	0	0	0	0	0	0	0	gal
Proposed Round Tank	Oct '20 - Sep '21	0	11,104,000	0	0	6,366,780	0	0	4,737,220	gal
All Sources (liquid)	Oct '20 - Sep '21	0	11,939,000	0	0	6,852,510	0	0	5,086,490	gal
All Sources (solid)	Oct '20 - Sep '21	0	0	0	0	0	0	0	0	tons
Home Lagoon 1	Oct '21 - Sep '22	0	0	0	0	0	0	0	0	gal
Home Lagoon 2	Oct '21 - Sep '22	0	0	0	0	0	0	0		gal
Heifer Lagoon	Oct '21 - Sep '22	349,270	835,000	0	0	836,640	0	0	347,630	gal
Manure Stack	Oct '21 - Sep '22	0	0	0	0	0	0	0	0	tons
Proposed Digester	Oct '21 - Sep '22	0	0	0	0	0	0	0	0	gal
Proposed Separator	Oct '21 - Sep '22	0	0	0	0	0	0	0	0	tons
Proposed Mix Tanks	Oct '21 - Sep '22	0	0	0	0	0	0	0	0	gal
Proposed Round Tank	Oct '21 - Sep '22	4,737,220	11,104,000	0	0	11,213,370	0	0	4,627,850	gal
All Sources (liquid)	Oct '21 - Sep '22	5,086,490	11,939,000	0	0	12,050,010	0	0	4,975,480	gal
All Sources (solid)	Oct '21 - Sep '22	0	0	0	0	0	0	0	0	tons
Home Lagoon 1	Oct '22 - Sep '23	0	0	0	0	0	0	0	0	gal
Home Lagoon 2	Oct '22 - Sep '23	0	0	0	0	0	0	0	0	gal
Heifer Lagoon	Oct '22 - Sep '23	347,630	835,000	0	0	834,750	0	0	347,880	gal
Manure Stack	Oct '22 - Sep '23	0	0	0	0	0	0	0	0	tons
Proposed Digester	Oct '22 - Sep '23	0	0	0	0	0	0	0	-	0
Proposed Separator	Oct '22 - Sep '23	0	0	0	0	0	0	0		tons
Proposed Mix Tanks	Oct '22 - Sep '23	0	0	0	0	0	0	0	0	gal
Proposed Round Tank	Oct '22 - Sep '23	4,627,850	11,104,000	0	0	11,087,370	0	0	4,644,480	gal
All Sources (liquid)	Oct '22 - Sep '23	4,975,480	11,939,000	0	0	11,922,120	0	0	4,992,360	gal
All Sources (solid)	Oct '22 - Sep '23	0	0	0	0	0	0	0	0	tons
Home Lagoon 1	Oct '23 - Sep '24	0	0	0	0	0	0	0	0	gal
Home Lagoon 2	Oct '23 - Sep '24	0	0	0	0	0	0	0	0	gal
Heifer Lagoon	Oct '23 - Sep '24	347,880	835,000	0	0	835,380	0	0	347,500	gal
Manure Stack	Oct '23 - Sep '24	0	0	0	0	0	0	0		tons
Proposed Digester	Oct '23 - Sep '24	0	0	0	0	0	0	0	0	gal

Manure Source	Plan Period	On Hand at	Total	Total	Total	Total Applied	Total	Total	On Hand at	Units
		Start of	Generated	Imported	Transferred		Exported	Trans-	End of Period	
		Period			In			ferred Out		
Proposed Separator	Oct '23 - Sep '24	0	0	0	0	0	0	0	0	tons
Proposed Mix Tanks	Oct '23 - Sep '24	0	0	0	0	0	0	0	0	gal
Proposed Round Tank	Oct '23 - Sep '24	4,644,480	11,104,000	0	0	11,120,130	0	0	4,628,350	gal
All Sources (liquid)	Oct '23 - Sep '24	4,992,360	11,939,000	0	0	11,955,510	0	0	4,975,850	gal
All Sources (solid)	Oct '23 - Sep '24	0	0	0	0	0	0	0	0	tons
Home Lagoon 1	Oct '24 - Sep '25	0	0	0	0	0	0	0	0	gal
Home Lagoon 2	Oct '24 - Sep '25	0	0	0	0	0	0	0	0	gal
Heifer Lagoon	Oct '24 - Sep '25	347,500	835,000	0	0	834,120	0	0	348,380	gal
Manure Stack	Oct '24 - Sep '25	0	0	0	0	0	0	0	0	tons
Proposed Digester	Oct '24 - Sep '25	0	0	0	0	0	0	0	0	gal
Proposed Separator	Oct '24 - Sep '25	0	0	0	0	0	0	0	0	tons
Proposed Mix Tanks	Oct '24 - Sep '25	0	0	0	0	0	0	0	0	gal
Proposed Round Tank	Oct '24 - Sep '25	4,628,350	11,104,000	0	0	10,977,120	0	0	4,755,230	gal
All Sources (liquid)	Oct '24 - Sep '25	4,975,850	11,939,000	0	0	11,811,240	0	0	5,103,610	gal
All Sources (solid)	Oct '24 - Sep '25	0	0	0	0	0	0	0	0	tons

#### Short Term Nutrient Management Strategy

- 1. This initial plan will account for all of the projected post digested manure and heifer lagoon manure to be applied to the current cropland managed by Hytone Farms. This will in some cases result in phosphorus application that exceed crop removal rates.
- 2. The actual nutrient content of the post digested manure will be analyzed over time to generate a baseline of actual nutrient content. This plan may then be modified to reflect the actual nutrient content of the post digested manure.
- 3. Soil phosphorus levels will be monitored through regular soil testing to determine that rate at which soil phosphorus is increasing.

#### Long Term Nutrient Management Strategy

- 1. If it is determined that the majority of the fields have reached optimum soil phosphorus levels then any of the following 4 options, or any combination of the options can be used to further manage phosphorus on this operation. New technologies and new ideas may be substituted as they become available.
  - a. The operation may rent additional crop acres to spread out the phosphorus load.
  - b. The operation may export manure to other farming operations that have a need for additional nutrients
  - c. The operation may install additional technologies to remove phosphorus from the manure
  - d. The operation may decrease the amount of food waste being received and/or modify the ratio of SSOM/FOG to reduce the amount of phosphorus being imported onto the operation.

#### 6.10. Fertilizer Material Annual Summary (Optional)

Additional commercial fertilizer options shall be done in accordance with a pre-sidedress nitrogen test. Additional Phosphorus and Potassium should not be needed.

#### 6.11. Plan Nutrient Balance (Manure-spreadable Area)

#### Manure-spreadable Area

	N (lbs)	$P_2O_5$ (lbs)	K <sub>2</sub> O (lbs)
Total Manure Nutrients on Hand at Start of Plan <sup>a</sup>	0	0	0
Total Manure Nutrients Collected <sup>b</sup>	1,024,000	435,400	503,445
Total Manure Nutrients Imported <sup>c</sup>	0	0	0
Total Manure Nutrients Exported <sup>d</sup>	0	0	0
Total Manure Nutrients Gained/Lost in Transfer <sup>e</sup>	0	0	0
Total Manure Nutrients on Hand at End of Plan <sup>f</sup>	87,528	37,188	42,989
Total Manure Nutrients Applied <sup>g</sup>	933,598	399,020	459,783
Available Manure Nutrients Applied (Utilized by plan's crops) <sup>h</sup>	268,608	399,020	459,783
Available Manure Nutrients Applied (Not utilized by plan's crops) <sup>i</sup>	25,684	0	0
Commercial Fertilizer Nutrients Applied (Utilized by plan's crops)	0	0	0
Commercial Fertilizer Nutrients Applied (Not utilized by plan's crops)k	0	0	0
Available Nutrients Applied (Manure and fertilizer; utilized by plan's crops)	268,608	399,020	459,783
Nutrient Utilization Potential <sup>m</sup>	445,277	309,043	826,487
Nutrient Balance of Spreadable Acres <sup>n p</sup>	-176,669	89,977	-366,704
Average Nutrient Balance per Spreadable Acre per Year <sup>o p</sup>	-48	24	-99

a. Total manure nutrients present in storage at the beginning of the plan.

b. Total manure nutrients collected on the farm.

c. Total manure nutrients imported onto the farm.

d. Total manure nutrients exported from the farm to an external operation.

e. Net change in total manure nutrients due to transfers between storage units with differing analyses.

f. Total manure nutrients present in storage at the end of plan.

g. Total nutrients present in land-applied manure. These values do not account for losses due to rate, timing, and method of application.

h. Manure nutrients applied and available to crops in the plan. These values are based on the total manure nutrients applied after accounting for nutrient losses due to rate, timing, and method of application. Nutrients which will not be utilized by crops in the plan are excluded from these values.

i. Manure nutrients applied that will be utilized by crops outside the plan. This usually results from Fall nutrient applications at the end of the plan intended for crops in subsequent years.

j. Nutrients applied as commercial fertilizers and nitrates contained in irrigation water. Nutrients that will not be utilized by crops in the plan are excluded from these values.

k. Nutrients applied as commercial fertilizer which will be utilized by crops outside the plan.

1. Sum of available manure nutrients applied and commercial fertilizer nutrients applied.

m. Nutrient utilization potential of crops grown. For N the value is based on the N recommendation for non-legume crops and N uptake or other state-imposed limit for N application rates for legumes.  $P_2O_5$  and  $K_2O$  values are based on fertilizer recommendations or crop removal (whichever is greater).

n. Available nutrients applied minus crop nutrient utilization potential. Negative values indicate additional nutrient utilization potential and positive values indicate over-application.

o. Average per acre-year nutrient balance. Values are calculated by dividing nutrient balance of spreadable acres by the number of spreadable acres in the plan and by the length of the plan in years. Negative values indicate additional nutrient utilization potential and positive values indicate over-application.

p. Non-trivial, positive values for N indicate that the plan was not properly developed. Negative values for N indicate additional nutrient utilization potential which may or may not be intentional. For example, plans that include legume crops often will not utilize the full N utilization potential for legume crops if manure can be applied to non-legume crops that require N for optimum yield. Positive values for  $P_2O_5$  and/or  $K_2O$  do not necessarily indicate that the plan was developed improperly. For example, producers may be allowed to apply N-based application rates of manure to fields with low soil test P values or fields with a low potential P-loss risk based on the risk assessment tool used by the state. Negative values for  $P_2O_5$  and  $K_2O$  indicate that planned applications

#### Non-manure-spreadable Area

	N	$P_2O_5$	K <sub>2</sub> O
	(lbs)	(lbs)	(lbs)
Commercial Fertilizer Nutrients Applied <sup>a</sup>	0	0	0
Nutrient Utilization Potential <sup>b</sup>	12,661	4,391	7,704
Nutrient Balance of Non-spreadable Acres <sup>c e</sup>	-12,661	-4,391	-7,704
Average Nutrient Balance per Non-spreadable Acre per Year <sup>d e</sup>	-112	-39	-68

a. Nutrients applied as commercial fertilizers and nitrates contained in irrigation water.

b. Nutrient utilization potential of crops grown based on crop fertilizer recommendations.

c. Commercial fertilizer nutrients applied minus crop nutrient utilization potential. Negative values indicate additional nutrient utilization potential and positive values indicate over-application.

d. Average per acre-year nutrient balance. Values are calculated by dividing nutrient balance of non-spreadable acres by number of non-spreadable acres in plan and by the length of the plan in years. Negative values indicate additional nutrient utilization potential and positive values indicate over-application.

e. Non-trivial, positive values for N indicate that the plan was not properly developed. Negative values for N indicate additional nutrient utilization potential which may or may not be intentional. Positive values for  $P_2O_5$  and/or  $K_2O$  do not necessarily indicate that the plan was developed improperly. For example, multiple year applications may have been planned during the final plan year(s) and these nutrients will not be utilized by crops in the current plan. Negative values for  $P_2O_5$  and  $K_2O$  indicate that applications to some fields may have been delayed to allow the producer to apply the nutrients in accordance with their fertilization schedule.

#### Section 7. Feed Management

**Feed management is an optional component of a CNMP**, but it can be an effective approach to reducing nutrient excretion and should be encouraged. Reduction of manure nutrient content can result in the requirement for less land to effectively utilize the manure produced at a facility. However, adoption of feed management strategies may not be a viable or acceptable alternative for all animal feeding operations. The Natural Resource Conservation Service Feed Management Standard (Code 592) describes activities that can be considered to achieve the desired effects. Within the CNMP, feed management can be dealt with as a planning consideration; it does not have to reflect specifics of a feed management plan developed by a nutritionist. But, when the feed management plan is implemented, the nutrient management element of the CNMP should reflect the changes, and the feed management plan should be amended to the CNMP. Changes to a facility's current feed management strategy will affect the nutrient management plan. If achieved, a reduction in excreted nutrients may reduce the required land application area.

Examples of the effect implementation of a feed management plan could have on manure nutrient utilization at a production facility are provided. The CNMP provider has a critical role in the early stages of feed management planning, as they likely have the most knowledge about the operation's nutrient management planning needs. After identifying the opportunity for implementing a feed management plan, the CNMP developer should contact the facility owner/operator to discuss what can be achieved through feed management and the possible advantages and disadvantages of altering the current feeding plan. The facility may have a nutritionist with whom they prefer to work or they may look to the CNMP plan provider for advice on selecting one. After the feed consultant develops a feeding plan to reduce manure nutrient content, the CNMP plan provider should interact with the nutritionist to understand the effects of the new feeding strategy. The nutrient management element of the CNMP should then be modified to reflect the reduced manure nutrients.

#### How can modifying the feeding strategy at an animal operation affect manure nutrient utilization?

Changing ration components:

- may reduce the nutrients excreted in manure which in-turn will reduce the nutrients available as fertilizer
- may increase or decrease the volume of manure that must be stored and applied
- could lead to a change in the cropping system of the farm

Changing the farms cropping system to produce different types or quantities of feedstuffs:

- may increase/decrease land requirements for manure application
- may alter the timing of manure applications
- may alter erosion potential due to a change in crop cover or management

# \*It is highly recommended that you consult a species specific nutritionist before you make any modifications to your feed ration and methods\*

#### Section 8. Other Utilization Options

Separated manure solids will be recycled as livestock bedding. The digestion process sterilizes the material of pathogens which provides a clean bedding source for the cattle. As an additional option the material could also be exported to other dairy operation to utilize as bedding. At this time that is not planned.



# Section 9. Record Keeping Forms Inspection/Monitoring Records

Date	Activity Description	Operator/ Inspector	Activity Data
	▼		

# Crop Records

			<u> </u>					
Field	Crop	Planting Date	Hybrid or Variety	Pop- ulation Planted	Crop Residue (%) (1)	Tillage and Dates	Harvest Date	Yield/ Acre
(1) <b>D</b> (1)	10010		•		•		•	

(1) Percent residue cover left after planting

Field	Date	Manure Source	Equipment	Days to Incorp.	Rate/A gal or tons	Loads	Total Applied gal or tons	Acres Cov.
						•		
					•			
		•						

# Manure Application Records Form 1

Hauler's Name (1)	Ground Cover % (2)	Soil Condition (3)	Air Temp. (4)	Wind Speed (5)	Wind Dir. (6)	Weath- er (7)	Rain Before (8)	Rain After (9)	Notes/Comments
		(-)					(-)	(-)	
-									
(1) NI : :/: 1									

# Manure Application Records Form 2

(1) Name or initials of the person who applied the manure.

(2) Percent residue or ground cover at time of application.

(3) Soil condition at time of application: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.

(4) Air temperature at time of application.

(5) Wind speed at time of application: Calm (0-2 mph), Light (2-5 mph), Breezy (5-15 mph), Windy (>15 mph).

(6) Wind direction at time of application: N, NE, E, SE, S, SW, W, NW.

(7) Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

(8) Amount of rainfall during the 24 hours prior to application.

(9) Amount of rainfall during the 24 hours after application.

Field	Date	Analysis (1)	Form Dry or Liquid	Application Method	Material Rate/A lbs or gal	Total Applied lbs or gal	Acres Cov.	Notes/Comments
			1		103 01 gai	103 01 gai		
						)		
	1							
				of N PoOr KoO (exami				

# Commercial Fertilizer and Irrigation Water Application Records

(1) With commercial fertilizers, enter the analysis in the form of N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O (examples: anhydrous ammonia is 82-0-0, diammonium phosphate is 18-46-0). With irrigation water, enter the nitrate concentration in ppm.

# Manure Exports

Manure Source	Date	Amount	Receiving Operation	Address	Contact	Phone
Manure Source	Date		Receiving Operation	Address	Contact	Filone
		gal or tons				

# Manure Imports onto the Farm

Manure's Animal	Date	Amount	Originating	Address	Contact	Phone
Type and Form		gal or tons	Operation			
	•			•	•	

# Internal Transfers of Manure

	-	-	J	J
Manure Source	Date	Amount gal or tons	Manure Destination	Purpose of Transfer
		8		

# Section 10. References

### **10.1. Publications List**

The Ohio State University - Guidelines for Applying Liquid Animal Manure to Cropland with Subsurface and Surface Drains [Online WWW]. Available URL: "https://ohioline.osu.edu/factsheet/ANR-21"

Illinois Environmental Protection Agency - Considerations for Manure Application Setbacks [Online WWW]. Available URL: "http://www.epa.state.il.us/water/permits/cafo/documents/show/602"

Natural Resources Conservation Service – Web Soil Survey [Online WWW]. Available URL: "https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm"

#### 10.2. Software and Data Sources

Manure Management Planner 0.38

ArcGIS 10.0





## 10.3. Checklists

# Comprehensive Nutrient Management Plan (CNMP) Checklist

Comprehensive Nutrient Management Plan						
County/State: Connecticut / Tolland	Date Plan Submitted:					
Producer/Owner: Hyton Farm, LLC	Technical Service Provider: 03-2022					

Cover	Cover and Signature Page:								
Yes	No								
Х		All required signatures for acceptance of a CNMP in the State							
Х		Name of operator, facility location and mailing address							
Х		Plan period							

Sectio	Section 1 - Background and Site Information:								
Yes	No								
Х		Latitude and longitude of the production address							
Х		General description of Operation							
Х		Type and size of the AFO							
Х		Sampling, calibration and other statements							
Х		Identified Natural Resource Concerns							
	•								

Sectio	Section 2 - Manure and Wastewater Handling and Storage Element:								
Yes	No								
Х		Map(s) of the Production Area							
Х		Production Area Conservation Practices							
Х		Manure Storage							
Х		Animal Inventory							
Х		Normal Animal Mortality Management							
Х		Planned Manure Exports off the Farm							
Х		Planned Manure Imports onto the Farm							
Х		Planned Internal Transfers of Manure							

Sectio	Section 3 - Farmstead Safety and Security:		
Yes	No		
Х		Emergency Response Plan	
Х		Biosecurity measures including protocol for farm visitors & disposal of animal veterinary waste	
Х		Catastrophic animal mortality management	
Х		EPA agreed-to Chemical Handling checklist when the CNMP will be utilized for an NPDES	
		permit	

Sectio	n 4 - La	nd Treatment Conservation Practices:
Yes	No	Maps documenting fields and conservation practices including:
Х		Aerial maps of land application areas
Х		Fields delineated with setbacks, buffers, waterways and conservation practices planned
Х		Sensitive areas such as sinkholes, streams, springs, ponds and drinking water sources
Х		Other site information or features like property boundaries and occupied dwellings
Х		Land Treatment Conservation Practices in accordance with NRCS conservation practice
		standards

Sectio	Section 5 - Soil and Risk Assessment Analysis:		
Yes	No		
Х		Soil information	
Х		Predicted Soil Erosion	
Х		Nitrogen and Phosphorus Risk Analyses	
Х		Additional field data required by risk assessment procedure(s)	

Sectio	n 6 - Nu	trient Management:
		This shall meet the technical criteria for the Nutrient Management conservation practice code
Yes	No	(590) standard including:
Х		Field Information
Х		Manure application setback distances
Х		Soil test data
Х		Manure nutrient analysis
Х		Planned crops and fertilizer recommendations
Х		Manure application planning calendar
Х		Planned nutrient applications
Х		Field nutrient balance
Х		Manure inventory annual summary
Х		Fertilizer material annual salary
Х		Whole farm nutrient balance

Section	7 - Fee	ed Management (Optional):
		Include only if Feed Management Plan is required to reduce the total nutrients excreted by the
		livestock on the Farm.
Yes	No	Should not include discussions of optional feed management strategies.
Х		Feed Management element should be developed by a professional animal scientist, independent
		professional nutritionists, or other comparably qualified individual.
Х		Nutritionist shall be State certified if required by Policy or Regulation.

Section	Section 8 - Other Utilization Options (Optional):	
Yes	No	
Х		Included if manure utilization is different from land application.

Sectio	Section 9 - Recordkeeping:	
Yes	No	
Х		Producer Activity Document (PAD)
Х		Inspection/monitoring records
Х		Annual crop records
Х		Manure application records
Х		Other nutrient applications (commercial fertilizer)
Х		Manure exports / imports
Х		Internal transfers of manure
Х		Other records required by State and/or local regulations

Section	Section 10 - References:		
Yes	No		
Х		Publications	
Х		Software and Data Sources, including pertinent version information	
	·		

Yes	No	Checklist Approval
Х		I have reviewed this Comprehensive Nutrient Management Plan (CNMP) and it meets all the
		criteria of the Conservation Activity Plan 102 in accordance with Section 2508 of the Food,
		Conservation, and Energy Act of 2008.
NRCS	Represe	entative Name and Title:
NRCS	Represe	entative Signature: Date:
Notes (	(If "No"	is checked, include reasons for denial, comments, missing items that need to be added, etc.):

### **CNMP Producer Activity Document (PAD) Checklist**

Comprehensive Nutrient Manageme	ent Plan Producer Activity Document
County/State: Connecticut / Tolland	Date Plan Submitted:
Producer/Owner: Hytone Farm, LLC	Technical Service Provider: 03-2022

Cover	Cover and Signature Page:	
Yes	No	
Χ		Name of operator, facility location and mailing address
Χ		Latitude and longitude of the production address
Χ		Plan period

## Section 1 - Background and Site Information (see CNMP document)

Yes	No	
Х		Map(s) of the Production Area: Sketch or aerial photo of confinement areas, production buildings,
		manure storage and treatment locations, and feed storage areas.
Х		Production Area Conservation Practices: Documentation of the conservation practice decisions and
		O&M requirements
X		Planned Manure Exports off the Farm
X		Planned Manure Imports onto the Farm
Χ		Planned Internal Transfers of Manure

Section	Section 3 - Farmstead Safety and Security:		
Yes	No		
Χ		Emergency Response Plan (sample)	
Χ		Biosecurity measures including protocol for farm visitors & disposal of animal veterinary waste	
Χ		Catastrophic mortality management including State required procedures and contact information	

Section 4 - Land Treatment Conservation Practices:			
Yes	No	Maps documenting fields and conservation practices including:	
Χ		Map(s) of fields including land treatment conservation practices	
Χ		Land Treatment Practices: documentation of the conservation practice decisions and O&M	
		requirements	

# Section 5 - Soil and Risk Assessment Analysis (see CNMP document)

Section	Section 6 - Nutrient Management:		
Yes	No	This shall meet the technical criteria for the Nutrient Management conservation practice code (590) standard including:	
X		Field Information	
Χ	X         Manure application setback distances		

X	Manure application planning calendar
Χ	Planned nutrient applications
Χ	Fertilizer material annual summary

Section 7 - Feed Management (Optional) (see CNMP document, if applicable)

### Section 8 - Other Utilization Options (Optional) (see CNMP document, if applicable)

Section	Section 9 - Recordkeeping:		
	Planners shall work with the producer and provide guidance regarding advantageous and required		
		recordkeeping. The PAD Recordkeeping items include the following tables and forms:	
Yes	No		
Χ		Producer activity checklist	
Χ		Inspection/monitoring records	
Χ		Annual crop records	
Χ		Manure application records	
Χ		Other nutrient applications (commercial fertilizer and irrigation water records)	
Χ		Manure exports off the farm	
Χ		Manure imports onto the farm	
Χ		Internal transfers of manure	
Χ		Other records required by State and/or local regulations	

Section 10 - References:		
Yes	No	
Χ		References include State-based technical information in support of farming activities.
		Publications - provide a list of electronically executable reference materials (urls)

Yes	No	Checklist Approval
X		I have reviewed this Comprehensive Nutrient Management Plan (CNMP) and it meets all the criteria of the Conservation Activity Plan 102 in accordance with Section 2508 of the Food, Conservation, and Energy Act of 2008.

 NRCS Representative Name and Title:

 NRCS Representative Signature:
 Date:

 Notes (If "No" is checked, include reasons for denial, comments, missing items that need to be added, etc.):



# **Connecticut Comprehensive Nutrient Management Plan**

(Format v2.1)

**Prepared For** 

Hytone Farm, LLC c/o Greg Peracchio 2047 Boston Turnpike Coventry, CT 06238 860-742-6745

Plan period October 2020 – September 2025

> Plan written or revised: December 3, 2020

# Prepared By

Jedd Moncavage TSP#: 03-2022 TeamAg Inc. 120 Lake Street Ephrata, PA 17522 717-721-6795



**ONRCS** 

The Comprehensive Nutrient Management Plan (CNMP) is an important part of the conservation management system (CMS) for your Animal Feeding Operation (AFO). This CNMP documents the planning decisions and operation and maintenance for the animal feeding operation. It includes background information and provides guidance, reference information, and Web-based sites where up-to-date information can be obtained. Refer to the Producer Activity Document (PAD) for information about day-to-day management activities and recordkeeping. Both this CNMP document and the PAD document shall remain in the possession of the producer/landowner.

Prepared by: Jedd Moncavage, CPSS

Date: 2/4/2021

**Title: Certified Nutrient/Conservation Planner** 

TSP 03-2022

Signature:

Jedd Monung

As a Conservation Planner, I certify that I have prepared both the *Comprehensive Nutrient Management Plan* and *Producer Activity Document* for technical adequacy and that the elements of the documents are technically compatible, reasonable and can be implemented.

#### **Reviewed by:**

Date:

#### Signature:

USDA Natural Resources Conservation Service or TSP CT Certified Conservation Planner per CT GM-180, Part 409.9

**Certified Conservation Planner:** As a Certified Conservation Planner, I certify that I have reviewed both the *Comprehensive Nutrient Management Plan* and *Producer Activity Document* for technical adequacy and that the elements of the documents are technically compatible, reasonable and can be implemented.

#### **Owner/Operator:** Greg Peracchio

Signature:

Date:

Name:

As the owner/operator of this CNMP, I, as the decision maker, have been involved in the planning process and agree that the items/practices listed in each element of the CNMP are needed. I understand that I am responsible for keeping all the necessary records associated with the implementation of this CNMP. It is my intention to implement/accomplish this CNMP in a timely manner as described in the plan.

State of Connecticut Department of Energy and Environmental Protection (DEEP)

Approved by: (printed name)

Date:

Signature:

CT Dept of Energy and Environmental Protection (CT DEEP) in accordance with the approval issued on Date.

This Comprehensive Nutrient Management Plan was developed in accordance with the USDA, Natural Resources Conservation Service Conservation Planning Policy and the USDA NRCS Comprehensive Nutrient Management Planning Technical Guidance contained in GM-190, Part 620, Subparts A and B.

#### **Reviewed by Certified CNMP Planner**

NRCS Eng	gineering Review:	
Section 2.	Manure and Wastewater Handling and Storage	

<b>a</b> '	
Signature	3.
Signature	

Name:

Title:

Certification Credentials:

Date:

#### NRCS Agronomic Review:

Sections 4. Land Treatment

**Section 6. Nutrient Management:** The Nutrient Management component of this plan meets the state Nutrient Management 590 and Waste Utilization 633 Conservation Practice Standards.

Section 7. Feed Management (if applicable)

Section 8. Other Utilization Options (if applicable)

Signature:	Date:
Name:	
Title:	
Certification Credentials:	

Sensitive data as defined in the Privacy Act of 1974 (5 U.S.C. 552a, as amended) is contained in this report, generated from information systems managed by the USDA Natural Resources Conservation Service (NRCS). Handling this data must be in accordance with the permitted routine uses in the NRCS System of Records at <u>http://www.nrcs.usda.gov/about/foia/408\_45.html</u>. Additional information may be found at

http://www.ocio.usda.gov/qi\_request/privacy\_statement.html.

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#### **Purpose of the Comprehensive Nutrient Management Plan (CNMP):**

A CNMP is a conservation plan specific to your operation. The plan is a system of conservations practices and/or management activities which, when fully implemented, will work towards maintaining or enhancing the production and natural resource goals of your operation. A CNMP incorporates practices to use animal wastes and other organic by-products as a beneficial source or nutrients and soil amendment. Your CNMP addresses natural resource concerns dealing with the management of these nutrients to reduce their potential impacts on water quality.

A NMP is a conservation plan specific to your operation. Nutrient management manages the source, amount (rate), placement (method of application), and timing of plant nutrients and soil amendments. The goal is to effectively and efficiently provide nutrients, typically in the form of manures, composts, or fertilizers, to soils and crops in order to produce food, forage, fiber, and ground cover while minimizing environmental impacts from nutrient loss or over-application. This plan will develop a nutrient budget for soil nitrogen, phosphorus, and potassium based on field specific soil test results and recommendations from the University of Connecticut Soil Nutrient Analysis Laboratory or equivalent soil testing laboratory.

It is understood that compliance with this CNMP is voluntary, not mandatory. However, if nutrient management related practices (Nutrient Management and/or Waste Utilization) are funded or contracted through NRCS programs, the plan may have to be implemented and maintained according to the Nutrient Management (590) or Waste Management (633) standards as a condition for receiving those funds.

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Refer to Producer Activity Document (PAD)

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- 10.3 Checklists

#### Appendix A

Photographs of farm and resource concerns

### Section 1. Background and Site Information

### 1.1. General Description of Operation

Farm Headquarters Latitude/Longitude:

41.798096 / -72.35933

#### **Operation Description:**

This farm operates as a dairy that will house 360 Holstein milk cows with 50 dry/freshening cows and 60 calves housed at Farmstead 1 and 150 weaned calves and 150 heifers housed at Farmstead 2. The existing facilities at Farmstead 1 include the Milking Barn and New Barn which house the majority of the milking herd as well as the Old Barn, Silver Barn and Fresh Barn which house mainly dry/freshening cows and the Calf Barn which houses calves from 0-4 month of age. Manure from the majority of the herd is handled as a liquid which is stored in an existing 1 million gallon earthen manure storage lagoon (Lagoon 1). Some manure is also handled as a solid bedded pack from the Calf Barn, Fresh Barn, Old Barn and Silver Barn which is cleaned from the barns and stacked south of the bunker silos until it can be land applied. Milking wash water is currently stored in a second 344,000 gallon earthen storage lagoon (Lagoon 2). Runoff from the paved areas around the main barns and bunker silo area is directed to a lot collection system that directs the runoff to a vegetated treatment area south of the wash water storage lagoon. Farmstead 2 is rented, Hytone Farm houses weaned calves and heifers in the Lean To, Silver Shed and Morton Barn. Manure generated at this facility is scraped and stored in an existing 526,000 gallon concrete lined manure storage lagoon (Heifer Lagoon).

The operators intend to install an anaerobic methane digester system. The manure stream will first pass through a separator unit where sand will be separated to be recycled as bedding. Separated sand will be stored on a 50ft x 50ft stacking pad. The manure stream will then be directed to a set of mixing tanks where food waste will be received and blended with the manure stream prior to entering a 90ft x 20ft (904,000gal) circular concrete digester tank. Food waste will consist of a mixture of roughly 50% source separated organic material (SSOM) and 50% fats, oils and grease (FOG). Post digested liquid will then be stored in a new 260ft x 16ft (5,957,000gal) circular concrete manure storage. The existing earthen storages will be decommissioned. Lot runoff was previously directed to a vegetated treatment area. Lot Runoff will be managed long term with a new free-stall barn and the old barns, with outside yards, will be decommissioned. Manure handling and storage at Farmstead 2 will remain the same. Silage storage at Farmstead 2 will be re-located to Farmstead 1 as part of a bigger pad with leachate collection and stormwater management for 25-yr/24-hr storm events.

The farm consists of 318.09 acres of corn silage with cover crop (312.40 spreadable acres) and 448.24 acres of grass hay (437.15 spreadable acres). This provides a total of 766.33 acres of cropland (749.55 spreadable acres) for the land application of manure.

#### County(s): Tolland

<u>Name of Receiving Stream(s)/Watershed(s)</u>: Ash Brook, Baker Brook, Blackledge River, Bolton Pond Brook, Conantville Brook, Coventry Brook, French Brook, Hemlock Brook, Hop River, Knowlton Brook, Lipps Brook, Lowry Brook, Massinger Brook, Mitterholtzer Brook, Olsons Brook, Post Brook, Reed Brook, Skungamaug River, Straddle Brook, Tankerhoosen River, Tunnel Brook, Willimantic River

#### 1.2. Sampling, Calibration, and Other Statements

#### **Soil Testing Procedure**

# Soil tests should be kept current within 3 years to monitor pH, Organic Matter, Phosphorus and Potassium levels

- □ Late October or early November (after crop harvest) is usually the best time to sample, but samples may be taken at any time during the year when temperature (lack of frost) and moisture conditions permit.
- □ Areas differing in topography, drainage, soil texture, manure additions, or intended crop usage should be sampled and tested separately.
- □ Combined samples (fields) should not represent more than 20 acres.
- □ Avoid sampling unusual spots such as former sites of manure piles and areas where lime or fertilizer has been spilled in previous years.

To obtain a representative sample, take a uniform core or thin slice of soil from 15-20 evenly distributed places within a given fields at a depth of 8-10 inches. Put the subsamples in a clean container and thoroughly mix them. One cup of this soil mixture constitutes the soil sample.

#### Manure and Wastewater Testing/Analysis Plan

Manure shall be analyzed on an annual basis from each storage structure for: % Solids, Total N, Organic N, NH<sub>4</sub> or NH<sub>3</sub>, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O, and pH.

#### Solid Manure

Collect a composite sample by following one of the procedures listed below. A method for mixing a composite sample is to pile the manure and then shovel from the outside to the inside of the pile until well mixed. Fill a one-gallon plastic heavy-duty zip lock bag approximately one-half full with the composite sample, squeeze out excess air, close, and seal. Store sample in freezer if not delivered to the laboratory immediately.

**Procedure 1**. Sampling while loading - *Recommended method for sampling from a stack or bedded pack.* Take at least ten samples while loading several spreader loads and combine to form one composite sample. Thoroughly mix the composite sample and take an approximately one pound sub sample using a one-gallon plastic bag. *Sampling directly from a stack or bedded pack is not recommended.* 

**Procedure 2**. Sampling during spreading - Spread a tarp in field and catch the manure from one pass. Sample from several locations and create a composite sample. Thoroughly mix the composite sample together and take a one-pound sub sample using a one-gallon plastic bag.

#### Liquid Manure

To obtain the best possible results, the sample should be taken while you are hauling manure. The manure storage should be agitated thoroughly. As you take loads out of the manure storage, take a sub-sample of about 2-4 cups from each load and place them in a bucket. Do not use a metal bucket because it may alter the results of the analysis. Once manure hauling has been completed for the day, mix the contents of the sample bucket thoroughly and take a sample of this composite. Fill the sample bottle but leave approximately a <sup>3</sup>/<sub>4</sub> inch air space. Place the sample bottle, place the bottle in the zip-lock bag and seal the bag. Store sample in freezer if not delivered to the laboratory immediately.

#### **Manure Sample Identification and Delivery**

Identify the sample container with information regarding the farm, animal species and date. This information should also be included on the sample information sheet along with application method, which is important in determining first year availability of nitrogen.

Keep all manure samples frozen until shipped or delivered to a laboratory. Ship early in the week (Mon.-Wed.) and avoid holidays and weekends.

#### Manure and/or Commercial Fertilizer Application Equipment Calibration

#### Manure Spreader/Tanker Calibration

There are several methods that can be used to calibrate the application rate of a manure spreader. The two best methods are the load-area method and the plastic sheet method. It is desirable to repeat the calibration procedure 2 to 3 times and average the results to establish a more accurate calibration. Before calibrating a manure spreader, the spreader settings such as splash plates should be adjusted so that the spread is uniform. Most spreaders tend to deposit more manure near the spreader than at the edge of the spread pattern. Overlapping can make the overall application more uniform. Calibrating application rates when overlapping is involved requires measuring the width of two spreads and dividing by two to get the effective spread width.

Calibration should take place annually or whenever manure is being applied from a different source or consistency.

#### Load-Area Method

The load-area method is the most accurate and can be used for most types of manure handling. This method consists of determining the amount (volume or weight) of manure in a spreader and the total area over which it is applied. The most accurate method to determine the amount of manure in a spreader is to weigh the spreader when it is full of manure and again when it is empty (portable pad scales work well for this). The difference is the quantity of manure applied over the area covered. Spreader capacities listed by the manufacturers can be used to determine the amount of manure type may vary considerably from what is listed by manufacturers of box and side delivery manure spreaders. Spreader capacities for liquid tankers are accurate provided the tanker is filled to the manufactures recommended levels, and no foam is present in the tank.

The area of spread is determined from measuring the length and width of the spread pattern. Measuring can be done with a measuring wheel, measuring tape or by pacing.

The application rate is calculated using the following formula:

Spreader capacity (tons or gallons) X 43560 sq. ft/acre = Application Rate tons or Gallons/Acre Distance traveled X Spreading width

#### Plastic Sheet Method

The plastic sheet method can only be used with solid or semi-solid manure. This method of calibrating spreader application rates involves 1) cutting a plastic sheet to the specified dimensions (56 inches X 56 inches), 2) weighing the clean plastic sheet, 3) laying out the plastic sheet on the ground and driving the manure spreader (applying manure at a recorded speed and spreader setting) over the sheet, 4) weighing the plastic sheet with the manure on it, and 4) determine the net weight of the manure on the sheet (weight of manure and sheet - weight of the clean sheet), and 5) the net pounds of manure equals tons per acre applied.

When calibrating manure spreaders, all details regarding tractor speed and manure spreader settings and date(s) of each calibration should be recorded with manure application information, and directly on the equipment. Mark equipment to ensure a known application rate is applied each time the referenced tractor speed and spreader settings are used. Manure spreader settings can include such things as: fast and slow settings on some box spreaders, gate position on side delivery spreaders and splash plate position and fill levels on liquid tankers

#### **Commercial Fertilizer Application Equipment Calibration**

Nitrogen applicators, commercial broadcast spreaders, and planters will be set per the manufacturers recommendations then filled with a known amount and checked over known acreage. Adjustments will be made to achieve the planned rates.

#### 1.3. Natural Resource Concerns

<u>General Concerns</u>: Potential contaminants of surface water and ground water include nutrients (especially nitrogen and phosphorus), free ammonia, sediments, oxygen demanding substances, pathogens and other infectious organisms, heavy metals, hormones, antibiotics, and other potentially toxic compounds such as cleaning agents.

#### Specific Concerns

- 1. **Existing Manure Storage (Farmstead 1):** The existing manure storage facilities have reached the end of their useable lifespan. These structures are earthen storages designed and installed according to NRCS specifications at the time. Earthen structures are not ideal as they clay liners tend to get disturbed and leaching or groundwater intrusions can occur. This resource concern will be addressed by decommissioning these structure and installing a new methane digester / manure handling system as described earlier in this plan.
- 2. Existing Barnyard and Bunker Silo Runoff and Collection System: Currently runoff from the paved areas around the barns as well as the bunker silo area at Farmstead 1 is directed to lot collection boxes that then discharges liquid to a vegetated treatment area. Likewise this system has reached the end of its useable lifespan and the planned anaerobic digester system will be installed in the location of these existing structures. Resource concerns with lot runoff at Farmstead 1 will be addressed with the construction of a new free-stall barn for full manure capture and the decommissioning of the older barns and lots. Resource concerns for silage runoff at both Farmstead 1 and 2 will be addressed by decommissioning silage storage at Farmstead 2 and expanding silage storage at Farmstead 1 as well as installing a low-flow leachate collection system that will also include a high-flow stormwater diversion system to a permeable detention basin, or equivalent management design, sized to manage storm events up to and including 25-year/24-hr storm volumes.
- 3. **Mortality Management**: mortalities are currently composted in open piles at an un-improved location. A properly designed mortality composting area shall be installed with appropriate run-on and runoff controls and should be located in a convenient location with all-weather access and taking into account bio-security concerns.

Soil Erosion Concerns	Fields
Gully Erosion	Fields 22 and 144: existing waterways should be monitored regularly
Sheet and Rill Erosion	Fields 1024, 52, 53, 55, 61, 31, 159, 164

#### The following soil erosion and water quality concerns have been identified on your farm:

Water Quality Concerns	Fields
Nutrients in Groundwater	Existing Facility Farmstead 1 & 2
Facility Wastewater Runoff	Existing Facility Farmstead 1 & 2

Other Concerns	Fields	
Soil Compaction	All Fields	
Biosecurity	Proposed Facility Mortality Management	

Concern	Fields	Activities to Address Concerns
Water Quality	Existing Facility Farmstead 1 & 2	Decommission existing lagoons and replace with new methane digester / manure handling system. Replace existing barnyard and bunker silo runoff collection and distribution system with low flow / high flow system and move all silage storage to Farmstead 1
Water Quality	Proposed Facility	Install proper mortality management/ composting facility, install silage leachate high flow/ low flow collection system
Soil Quality	1024, 52, 53, 55, 61, 31, 159, 164	Contour farming required to meet "T"
Soil Quality	All	Monitor all other fields for soil nutrient levels and adjust management according to avoid elevated soil nutrient levels for N-P-K
Soil Quality	All	Monitor penitential soil compaction from multiple manure hauling events and adjust management and equipment if necessary

#### Activities to Address Resource Concerns

#### 1.4. CNMP Statement, Alternatives, and Summary

#### **Comprehensive Nutrient Management Plan**

This Comprehensive Nutrient Management Plan (CNMP) addresses the production, collection, transfer, storage, and utilization of manure and barnyard runoff to minimize the risk of pollution to the groundwater and the Ash Brook, Baker Brook, Blackledge River, Bolton Pond Brook, Conantville Brook, Coventry Brook, French Brook, Hemlock Brook, Hop River, Knowlton Brook, Lipps Brook, Lowry Brook, Massinger Brook, Mitterholtzer Brook, Olsons Brook, Post Brook, Reed Brook, Skungamaug River, Straddle Brook, Tankerhoosen River, Tunnel Brook, Willimantic River with bacteria, solids, dissolved organic matter (BOD), and nutrients. The CNMP addresses the following as outlined below:

- Manure and Wastewater Collection, Handling, Storage, Treatment, and Transfer (from all sources)
- Management of Dead Animals
- Evaluation and Treatment of Sites Proposed for Land Application
- Land Application of Manure
- Waste Utilization (633)
- Nutrient Management (590)
- Record of CNMP Implementation
- Other Utilization Options or Activities

The following planning practices are recommended for this comprehensive nutrient management plan (CNMP) to address existing resource concerns.

- 1. Decommission the existing manure storage lagoons at Farmstead 1 and install new methane digester / manure handling system.
- 2. Replace the existing barnyard at Farmstead 1 with new free-stall barn for full manure capture. Expand silage storage at Farmstead 1 and install low flow/ high flow system and decomssion silage storage at Farmstead 2.
- Maintain all existing supporting practices such as Heavy Use Area Protection (paved barnyards), Roof Runoff Structures (getters, downspouts, etc...), Structures for Water Control (drop boxes), Underground Outlets and Subsurface Drain Systems.

The following planning practices are recommended for this comprehensive nutrient management plan (CNMP) to document new practices planned for this dairy facility

- 1. Utilize the nutrient management developed plan in accordance with NRCS standards to adequately address nitrogen and phosphorus loading for the soils. A record keeping system shall be used to document that wastes are being used in a sound manner. Field records shall be kept to document plan implementation. As a minimum, these include records for manure application rates and dates, soil tests, crop yield, dates of planting, dates of harvest and dates of cover crop application.
- 2. Install an anaerobic methane digester system consisting of sand separator, manure/food waste mixing tanks, circular anaerobic digester tank and generator building. Combustion of methane gas through the generator will help manage odor to allow for additional spreading acres in the populated areas, and improve greenhouse gas capture from the manure system.
- 3. Install a manure handling and storage system comprised of a sand separation unit and 5.957 million gallon circular concrete manure storage structure.
- 4. Install supporting practices such as access roads, storm water runoff controls and stabilized loading and unloading pads to facilitate the movement of farm equipment, feed delivery and food waste delivery vehicles. Install an improved feed storage area sized for Farmstead 1 and Farmstead 2 and manages leachate capture and stormwater runoff for 25-yr/24-hr storm volume. Install a mortality compost facility to manage estimated annual numbers, with the potential to expand if manure solid separation is wanted or needed in the future farm plans.

These recommendations have been presented for landowner decision and completion of the Comprehensive Nutrient Management Plan. Design considerations and time frames as well as cost estimates of the selected alternatives should be discussed with a qualified engineer and/or contractor.

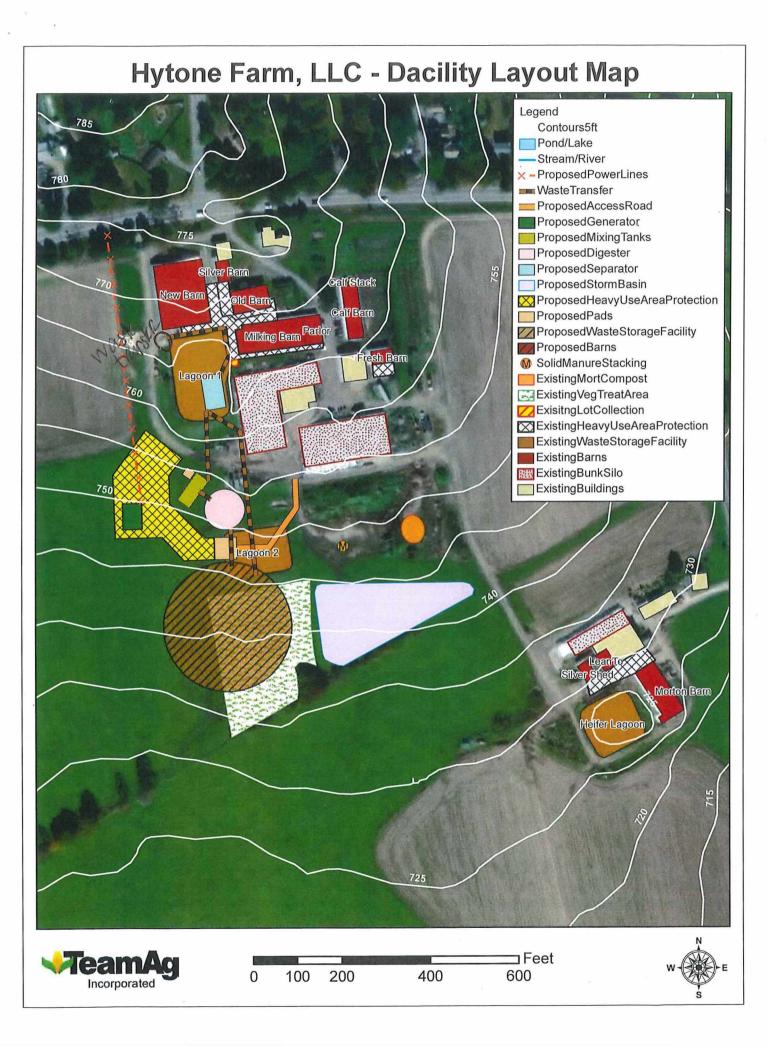
### **Practice Implementation Schedule**

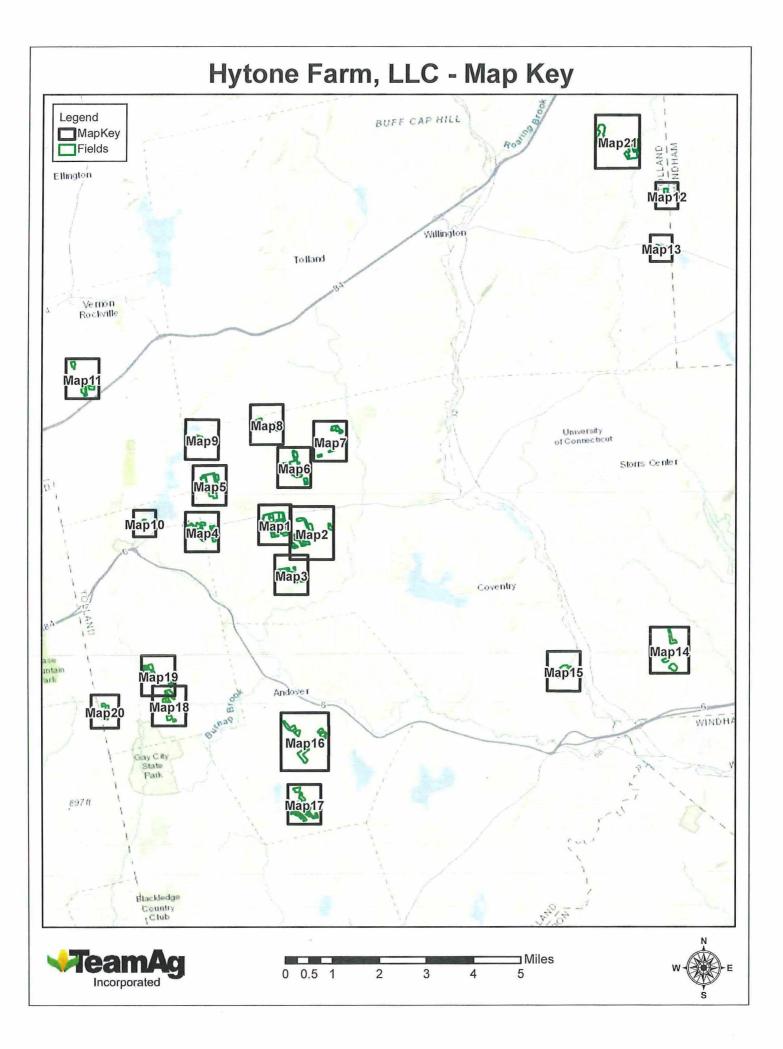
Item - All items shall be developed in accordance with current NRCS standards. All permits to be obtained by the operator.	Planned Year
Heavy Use Area Protection (561) – Maintain the existing payed barnyards and scrape alleys at the existing dairy facility (Farmstead 1) to collect manure and direct runoff to the proposed manure handling system until the new free-stall can be constructed. There is approximately 20,433sqft of existing HUA.	2022
<b>Roof Runoff Structure (558)</b> – Maintain the existing roof gutters and downspouts on any roof that allows water access to the heavy use area to convey clean water to a safe outlet.	2022
Structure For Water Control (587) – Maintain the existing drop boxes to further collect clean runoff to be directed to the underground outlet system	2022
Underground Outlets (620) – Maintain the existing underground outlet system to convey storm water away from the production facility to a clean and stabilized outlet	2022
Waste Utilization/Nutrient Management - Develop and implement a Nutrient Management Plan (633, 590) and a record keeping system with the technical and educational assistance of the Cooperative Extension System. Ensure that the nutrient management plan adequately addresses nitrogen and phosphorus loading for the soils. A record keeping system shall be used to document that wastes are being used in an environmentally sound manner. Field records should be kept for manure application dates and rates, soil tests for phosphorus and potassium, crop yield, date of planting, date of harvest and date of cover crop application.	2022
<b>Waste Facility Closure (360)</b> – Decommission the manure storage lagoons at the main dairy facility (Farmstead 1)	2024
Waste Transfer (634) – install a reception pit and piping at the main dairy facility to allow the transfer of manure from the existing facility to the proposed manure handling system. Install a system to transfer milkhouse waste water and low-flow silage leachate to sand separator	2024
Anaerobic Digester (366) – install a methane digester tank in order to generate methane gas	2024
<b>Waste Separation (632)</b> – install a sand separation unit and storage pad to separate sand to be recycle as bedding for the dairy cattle	2024
Waste Storage Facility (313)– Install a 5.9 million gallon circular concrete manure storage facility in order to store post digested liquid, milk house waste and low flow silage leachate for land application as a soil amendment in accordance with this nutrient management plan	2024

Item - All items shall be developed in accordance with current NRCS standards. All permits to be obtained by the operator.	Planned Year
Heavy Use Area Protection (561) – install loading and unloading pads at the Mixing Tanks, Solids Separator Building, Digester Tank and Manure Storage Structure and any other area where needed. Approximately34,600sqft will be needed.	2024
Access Road (560) – install an access road to the proposed mixing tanks, separator building, digester tank and manure storage structure.	2024
<b>Roofs &amp; Covers (367)</b> - Construct a new barn to house livestock previously kept on the open lots	2025
<b>Waste Transfer (634)</b> – install a reception pit and piping at the new barn to transfer manure to the digester/waste storage system	2025
<b>Stormwater Management (570)</b> – install a high flow/low flow runoff management system at the expanded and improved bunker silo area. High flow runoff will be directed to a proposed infiltration basin.	2026
<b>Animal Mortality Facility (316)</b> - install a properly designed facility to properly compost mortalities.	2027

# Section 2. Manure and Wastewater Handling and Storage

2.1. Map(s) of Production Area(s) and Map Key (all fields)





#### 2.2. Production Area Conservation Practices

List and describe the planned treatment to address the resource concerns and producer goals. One can also use the NRCS Planning Record of Decisions to document the planned treatment and management in place of this narrative description. The following list of Operation & Maintenance (O & M) Plans shall be used when the Production Area Conservation Practices have been installed:

### Operation & Management (O&M) Plan

Planned Practices	Year of Installation
<b>Heavy Use Area Protection (561)</b> – Structure should be checked after major storms and at least semi-annually and any necessary maintenance should be performed. Refer to the final engineered design of the best management practices for specific operation and maintenance details.	2022
<b>Roof Runoff Structure (558)</b> – Gutters & Downspouts shall be periodically checked for: (1) Blockages/debris – Material shall be removed, (2) Loose/unconnected hangers – Shall be made secure, (3) Leakage – Patching or replacement made, (4) Downspouts shall be shielded from livestock access. Downspouts shall be periodically checked for: (1) Damage – Crushed sections shall be removed and replaced, (2) Guards/shields shall be maintained, (3) Outlets – Water from gutters and downspouts shall be directed away from feedlots and animal holding areas, (4) Outlets shall be maintained to prevent pooling of water or the occurrence of excessive erosion. Refer to the final engineered design of the best management practices for specific operation and maintenance details.	2022
<b>Structure For Water Control (587)</b> – Structure should be checked and necessary maintenance, including removal of debris, should be performed after major storms and at least semi-annually. Refer to the final engineered design of the best management practices for specific operation and maintenance details.	2022
<b>Underground Outlets (620)</b> – Check outlet and animal guard to ensure proper functioning. Keep adequate backfill over pipe. Repair any leaks, broken or crushed pipes, and/or eroded areas at outlet as necessary. Refer to the final engineered design of the best management practices for specific operation and maintenance details.	2022
Waste Utilization/Nutrient Management Manage the amount, source, placement, form, and timing of the application of nutrients and soil amendments to minimize agricultural non-point source pollution to surface and ground water resources. Lime and fertilize all fields to soil tests, taking into account the nutrient value of manure and leguminous crops when figuring the amount of fertilizer to be applied. Nitrogen and phosphorous should be managed to meet crop nutrient needs, as well as to prevent excess nutrient loading in the soil. Nutrient management plan recommendations will integrate phosphorus considerations using the current phosphorous index. Any manure applied to this operation should be done so following state recommended guidelines, setbacks and restrictions. All commercial fertilizers, pesticides and herbicides shall be applied according to proper label instructions. Nutrient application should be calculated and monitored in order to prevent the over application of nutrients. Records shall be kept on all material applied to the fields. Yield records shall be recorded to guide fertilizer applications. Soil samples shall be taken every three years.	2022
Waste Facility Closure (360) – The proper decommissioning and rehabilitation of a waste facility should require little or no operation and maintenance. However, if it is converted to another use, such as a fresh water facility, operation and maintenance shall be in accordance with the needs as set forth in the appropriate NRCS conservation practice standard for the intended purpose. Refer to the final engineered design of the best management practices for specific operation and maintenance details.	2024

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Waste Transfer (634) – Refer to the final engineered design of the best management practices for	2024
specific operation and maintenance details.	
Anaerobic Digester (366) – An operation and maintenance (O&M) plan shall be developed and	2024
reviewed with the owner prior to construction. The operation and maintenance plan shall be	
consistent with the purposes of the practice, its intended life, safety requirements, and the criteria	
for its design. Refer to the final engineered design of the best management practices for specific	
operation and maintenance details.	
Waste Separation (632) – Refer to the final engineered design of the best management practices	2024
for specific operation and maintenance details.	
Waste Storage Facility - Waste Storage Facilities experience some biological activity and can	2024
generate extremely toxic gases. Extreme care should be exercised when working around a waste	
storage facility that contains animal wastes. Signs should be posted and adequate ventilation is	
mandatory, particularly when the facility is being emptied. Prior to emptying the storage, it should	
be adequately agitated. Additional agitation may be needed during the emptying process. The	
viewable portions of the storage shall be periodically checked for deterioration and the need for	
any repairs. Monitor the manure elevation in the pit at least weekly. Immediately investigate any	
inexpected level changes which could indicate leakage. Keep pumping ports gated and locked	
when not in use to prevent accidental or unauthorized access. All pumping ports shall be gated	
and locked to keep animals and humans from entering the pit. Refer to the final engineered design	
of the best management practices for specific operation and maintenance details.	
Heavy Use Area Protection (561) – Structure should be checked after major storms and at least	2024
semi-annually and any necessary maintenance should be performed. Refer to the final engineered	
design of the best management practices for specific operation and maintenance details.	
Access Road (560) – Access roads should be inspected, as a minimum, once per year and after	2024
najor storms. Items to be checked should include: obstructions in the road and road ditches, and	
excessive erosion or degradation of the road surface, road ditches, and side slopes. Remove	
bstructions and repair damage as needed. Remove undesirable trees and shrubs from the side	
lopes. Mow and maintain a good vegetative stand on berms, ditches, and the side slopes. Repair	
nd maintain wearing surface as needed. Refer to the final engineered design of the best	
nanagement practices for specific operation and maintenance details.	
Roofs & Covers (367) - Refer to the final engineered design of the best management practices for	2025
pecific operation and maintenance details.	h sou sur
Waste Transfer (634) – Refer to the final engineered design of the best management practices for	2025
pecific operation and maintenance details.	
Stormwater Management (570) – Periodic inspections, especially immediately following	2026
ignificant rainfall events. Prompt repair or replacement of damaged components especially	
surfaces that are subjected to wear or erosion. Regular inspection of settling basins, trash guards	
and other practices to collect and remove accumulated sediment and debris. Where vegetation is	
specified, periodic mowing, fertilization and control of vegetation.	
Animal Mortality Facility (316) - Inspect the facility regularly when it is empty. Replace or	2027
repair any damaged structural components. Refer to the final engineered design of the best	2021
nanagement practices for specific operation and maintenance details	
nanagement practices for specific operation and maintenance details	

All NRCS conservation practices shall be installed, operated and maintained according to NRCS conservation practice standards and associated technical specifications.

#### 2.3. Manure Storage

Storage ID	Type of Storage	Pumpable or Spreadable Capacity	Annual Manure Collected	Maximum Days of Storage
Heifer Lagoon	Earthen storage	526,779 gal	835,000 gal	
Proposed Digester	Outside prefab liquid storage	904,000 gal	0 gal	
Proposed Separator	Dry stack	450 tons	0 tons	8
Proposed Mix Tanks	Outside prefab liquid storage	117,000 gal	0 gal	
Proposed Round Tank	Outside prefab liquid storage	5,957,000 gal	11,104,000 gal	196

Note: the Digester, Separatror and Mixing Tanks show no annual manure collected because all material passed through those system will be store in the Round Tank.

The Round Tank annual manure volume includes all manure generated at Farmstead 1 as well as the following:

1000gpd milkhouse wash water

1500gpd sand separator water

18,000gpd food waste

#### 2.4. Animal Inventory

Animal Group	Type or Production Phase	Number of Animals <sup>a.</sup>	Average Weight (lbs)	Confinement Period	Manure Collected (%) <sup>b</sup>	Manure Storage
Milking Cows	Milk cow (dairy)	360	1,400	Jan Early - Dec Late	100	Proposed Round Tank
DrCows&Replacmnts	Dry cow (dairy)	50	1,400	Jan Early - Dec Late	100	Proposed Round Tank
Calves 0-4mo	Calf (dairy)	60	300	Jan Early - Dec Late	100	Proposed Round Tank
Calves 4-12mo	Weaned heifer/steer (dairy)	150	650	Jan Early - Dec Late	100	Heifer Lagoon
Heifers	Growing heifer/steer (dairy)	150	900	Jan Early - Dec Late	100	Heifer Lagoon

a. The average number of animals present in the production facility at any one time.

b. If manure collected is less than 100%, this indicates that the animals spend a portion of the day outside of the production facility or the production facility is unoccupied one or more times during the confinement period.

#### 2.5. Normal Animal Mortality Management

To decrease non-point source pollution of surface and ground water resources, reduce the impact of odors that result from improperly handled animal mortality, and decrease the likelihood of the spread of disease or other pathogens, approved handling and utilization methods shall be implemented in the handling of normal mortality losses. If on-farm storage or handling of animal mortality is done, NRCS Standard 316, Animal Mortality Facility, will be followed for proper management of dead animals.

#### Plan for Proper Animal Mortality Management

The following narrative describes how normal animal mortality will be managed in a manner that protects surface and ground water quality.

#### Static Pile Composting Management

Carcass composting at the farm will use a new roofed building and adhere to the guidelines for static composting detailed in the DACF Best Management Practices for Animal Carcass Composting (2011). Specifically, the composting media will be made of a combination of spent hay/silage and heavily bedded manure from the calf greenhouse and calf hutches. A combination of approximately 2 parts spent hay/silage and 1 part bedded manure by volume should provide a good carbon to nitrogen ratio and adequate porosity to provide readily available food, oxygen and water for the microbes driving the composting process. As compost piles are completed, some finished compost will be left on site to provide inoculum for new piles and to provide a 6" cover of the top of new piles. Blending will be accomplished using a skid steer or front-end loader. Mortalities will be hauled to the composting location using a skid steer or front-end loader.

Underneath each carcass, a bed of the compost blend will be placed approximately 18" thick. The carcasses will be placed on their side, at least 2' from the outside edge of the blend. If more than one carcass is started in the composting process at one time, the carcasses will be placed feet to back, again on their sides. An additional 18" of the blend of feedstocks will be placed over the top of the carcasses, and approximately 6" of finished compost over the top of the pile.

The piles will then remain undisturbed for a minimum of 21 days. The piles will be left to cure for a minimum of six months prior to using the finished compost as a soil amendment on the fields of the farm.

#### 2.6. Planned Manure Exports

This plan has been developed to apply all of the projected manure to the land currently farmed by Hytone Farms. This will result in a farmwide mass balance which slightly over applies phosphorus. Once soil test levels reach optimum the operator will need to export manure or farm additional lands, import less food waste, or change the ratio of the food waste so as to reduce the total amount of phosphrous in the resulting post digested liquids (increase FOG/decreas SSOM).

#### 2.7. Planned Manure Imports

There are no plans to import manure at this time. Approximately 18,000gal/day of food waste (50%SSOM / 50% FOG) from various sources will be imported and blended with the manure prior to entering the methane digester

#### 2.8. Planned Internal Manure Transfers

There are no internal manure transfers planned at this time. In the future the operator may consider transferring the manure generated at Farmstead 2 to the methane digester and manure storage system planned at Farmstead 1.

### Section 3. Farmstead Safety and Security

#### 3.1. Emergency Response Plan

#### In Case of an Emergency Storage Facility Spill, Leak or Failure

#### Implement the following first containment steps:

- a. Stop all other activities to address the spill.
- b. Stop the flow. For example, use skid loader or tractor with blade to contain or divert spill or leak.
- c. Call for help and excavator if needed.
- d. Complete the clean-up and repair the necessary components.
- e. Assess the extent of the emergency and request additional help if needed.

#### In Case of an Emergency Spill, Leak or Failure during Transport or Land Application

#### Implement the following first containment steps:

- a. Stop all other activities to address the spill and stop the flow.
- b. Call for help if needed.
- c. If the spill posed a hazard to local traffic, call for local traffic control assistance and clear the road and roadside of spilled material.
- d. Contain the spill or runoff from entering surface waters using straw bales, saw dust, soil or other appropriate materials.
- e. If flow is coming from a tile, plug the tile with a tile plug immediately.
- f. Assess the extent of the emergency and request additional help if needed.

#### **Emergency Contacts**

Department / Agency	Phone Number
Fire	911 or (local non emergency number)
Rescue services	911 or (local non emergency number)
State veterinarian	860-713-2505
Local or State police	911 or (local non emergency number)

#### Nearest available excavation equipment/supplies for responding to emergency

Equipment Type	Contact Person	Phone Number	
Backhoe/Trackhoe	Ed Toth Excavating	(860) 875-8056	
Backhoe/Trackhoe	BCL Excavating	(860) 742-2399	

#### Contacts to be made by the owner or operator within 24 hours

Organization	Phone Number
DEEP Emergency Spill Hotline	1-866-337-7745 or
	860-424-3338
Local Health Department	(860) 872-1501

#### Be prepared to provide the following information:

- a. Your name and contact information.
- b. Farm location (driving directions) and other pertinent information.
- c. Description of emergency.

- d. Estimate of the amounts, area covered, and distance traveled.
- e. Whether manure has reached surface waters or major field drains.
- f. Whether there is any obvious damage: employee injury, fish kill, or property damage.
- g. Current status of containment efforts.

## 3.2. Biosecurity Measures

Biosecurity is critical to protecting livestock and poultry operations. Visitors must contact and check in with the producer before visiting the operation or entering any production or storage facility.

The following narrative describes how animal veterinary wastes (including medical equipment, empty containers, sharps and expired medications) will be managed at the operation.

### **Biosecurity: Protecting Your Livestock and Poultry\***

Biosecurity means doing everything you can to reduce the chances of an infectious disease being carried onto your farm by people, animals, equipment, or vehicles. It also means doing everything you can to reduce the chance of disease leaving your farm. Healthy herds and flocks contribute to the health of U.S. animal agriculture as a whole.

### Common Sense Biosecurity Measures You Can Follow

The following do's and don'ts provide some basic tips for you to help prevent foreign animal disease outbreaks.

- 1. **Keep Your Distance** Restrict access to your property and your livestock or poultry, and post a sign. Have one area where visitors can enter. Do not allow visitors near livestock or poultry unless absolutely necessary, and then make sure visitors have clean footwear (disposable boots work well) and clothes (supply these for them). Have an area where visitors can change clothes and provide shower-in, shower-out facilities if possible. Discourage handling of animals by all visitors. Require and teach biosecurity to family, employees, and all visitors coming into, or involved with, your livestock or poultry production area.
- Keep It Clean You, your staff, and your family should follow bio-security procedures for cleanliness. Wear clean clothes, scrub your shoes/boots with disinfectant, and wash hands thoroughly. Keep equipment and vehicles clean and insist that all machinery and vehicles must be cleaned before entering your property. Maintain programs to control birds and rodents that can carry and spread diseases.
- 3. **Don't Haul Disease Home -** If you, your family, or employees have been on other farms, at feed lots, petting zoos, auctions, or other places where there is livestock and poultry, clean and disinfect your truck or car tires and equipment before going home. If you have shown livestock or birds at a fair or exhibition, or are bringing in new animals, keep them separated from the rest of your herd or flock for 30 days after the event. Always change clothes and wash your hands before returning to your animals.
- 4. **Don't Borrow Disease From Your Neighbor** Do not share equipment, tools, or other supplies with your neighbors or other livestock or poultry owners. If you do share these items be sure to clean and disinfect them before they reach your property.
- 5. Look for Signs of Infectious Diseases You should know what diseases are of concern for your herd or flock and be on the lookout for unusual signs or behavior, severe illness and/or sudden deaths. When possible, assess the health of your animals daily. Early detection is important to pre-vent the spread of disease.
- Report Sick Animals Don't wait. Report serious or unusual animal health problems to your veterinarian, local extension office, or State or Federal animal health officials. USDA operates a toll-free hotline (1–866–536–7593) with veterinarians to help you. There is no charge for this service.

\*excerpted from Biosecurity: Protecting Your Livestock and Poultry, USDA APHIS Veterinary Services Factsheet, March 2007

### 3.3. Catastrophic Animal Mortality Management

Refer to NRCS standards, or state guidance, regarding appropriate catastrophic animal mortality handling methods.

### Plan for Catastrophic Animal Mortality Management

Surface composting is acceptable with appropriate bedding materials (high carbon such as woodchips, sawdust, leaves) for leachate management and erosion controls. See previous description in Mortality Management and consult with emergency contacts listed below (CT State Vet and DEEP).

*Important!* In the event of catastrophic animal mortality, contact the following authority before beginning carcass disposal:

Authority name: Connecticut Department of Agriculture, State Veterinarian Contact name: Dr. Mary Jane Lis Phone number: 860-713-2505

Connecticut Department of Energy and Environmental Protection (DEEP) Water Permitting and Enforcement Division Phone number: 860-424-3018

## 3.4. Chemical Handling

If checked, the indicated measures will be taken to prevent chemicals and other contaminants from contaminating process waste water or storm water storage and treatment systems. Typical best management practices for basic chemical handling include keeping the chemical storage area free of clutter and debris, stored off the ground and away from contact with water, in the chemicals original containers with properly marked labels and safety information, a spill containment kit, ready access to a means of fresh water or eye wash, or similar safety equipment.

$\overline{\mathbf{v}}$ This is not a regulatory-agency permitted facility. This section does not apply.	
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	Measure
Ē	All chemicals are stored in proper containers. Expired chemicals and empty containers are properly disposed of in accordance with state and federal regulations. Pesticides and associated refuse are disposed of in accordance with the FIFRA label.
г	Chemical storage areas are self-contained with no drains or other pathways that will allow spilled chemicals to exit the storage area.
г	Chemical storage areas are covered to prevent chemical contact with rain or snow.
r.	Emergency procedures and equipment are in place to contain and clean up chemical spills.
Г	Chemical handling and equipment wash areas are designed and constructed to prevent contamination of surface waters and waste water and storm water storage and treatment systems.
<b>1</b>	All chemicals are custom applied and no chemicals are stored at the operation. Equipment wash areas are designed and constructed to prevent contamination of surface waters and waste water and storm water storage and treatment systems.

## Section 4. Land Treatment

4.1. Map(s) of Fields and Conservation Practices

## **Field Maps**

