

# COMPREHENSIVE FARMLAND PRESERVATION PLAN

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FRANKFORD TOWNSHIP  
SUSSEX COUNTY

MARCH 2023



**COMPREHENSIVE FARMLAND  
PRESERVATION PLAN UPDATE**  
**for**  
**Frankford Township**  
**County of Sussex**

**Prepared March 21, 2023 by:**  
**The Land Conservancy of New Jersey**  
*An accredited land trust*  
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This original document was appropriately signed and sealed  
in accordance with Chapter 41, Title 13 of the State Board of Professional Planners



# COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

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## for Frankford Township County of Sussex

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March 2023

# Acknowledgements

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## **Township Committee**

David Silverthorne, Jr., Mayor  
Edwin Risdon, Jr., Deputy Mayor  
Emery "Sam" Castimore, Committeeman  
Nicholas Civitan, Committeeman  
James Ayers, Committeeman

## **Agriculture Advisory Committee**

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Harold Pellow, Engineer

## **Township Staff**

Lori Nienstedt, Township Administrator, Clerk  
Sharon Yarosz, Chief Financial Officer/Treasurer

## **Sussex County**

Autumn M. Sylvester & Maggie Faselt, Division of Planning & Economic Development

## **State of New Jersey**

Steven Bruder, State Agriculture Development Committee

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*Cover Photograph:* Grande Farm

*Section Banners:*

- Executive Summary. Grande Farm
- Chapter 1. Bert Smith Sussex Farm
- Chapter 2. Jersey Girl
- Chapter 3. Grande Farm
- Chapter 4. Golden View Farm
- Chapter 5. Cerbo Farm
- Chapter 6. Jersey Girl
- Chapter 7. Williams Farm
- Chapter 8. Cerbo Nursery

All photographs were taken by Bob Canace, Conservation Advising



### *Executive Summary*

There are **10,928 acres** of farm assessed parcels in Frankford Township. As of July 2022, there are **23 farms** totaling **1,662 acres** preserved in Frankford Township. **Frankford Township has spent a total of \$65,767, or approximately 1% of the total cost share to preserve these farms.** The State of New Jersey, through the State Agriculture Development Committee, has provided \$4,237,523, or approximately 60% of the total cost share. The County has spent a total of \$2,441,815, or approximately 35% of the total cost share. Other sources like the Federal Farm Bill provided \$271,701.00, or 4% of the total cost share.

Since the completion of the *2012 Farmland Plan*, **8 farms** have been preserved, for a total of **570 acres** of additional farmland.

Frankford Township has 10,928 acres of farm assessed land. Of this, **4,525 acres** are in active agricultural land. Based upon the State’s Minimum Eligibility Criteria for productive soils and tillable land, **3,618 acres** are potentially eligible for farmland preservation in Frankford Township and are located within the ADA.

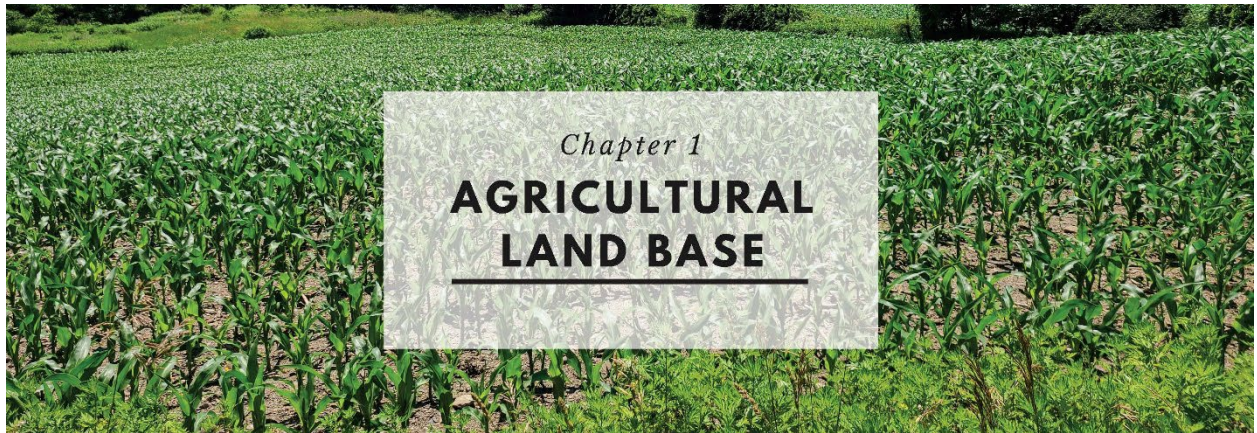
Based upon the available funding to purchase and preserve farmland, and the amount of farmland potentially eligible for preservation, the following preservation goals are identified for Frankford Township:

- One-year target: 100 acres, 1 farm
- Five-year target: 500 acres, 6 farms
- Ten-year target: 1,000 acres, 10 farms

### **Public Meetings**

Two public meetings were held on the *Comprehensive Farmland Preservation Plan Update* to share the draft *Update* with residents. The first public meeting was held as part of the regularly scheduled meeting of the Agricultural Advisory Committee in January 2023. The Land Use Board held the second public meeting in February 2023, to review the *Plan Update* prior to approving the *Update* as an Element of the Master Plan. The Board adopted the Plan at their meeting in March. The public meetings were announced on the municipal website.





## *Chapter 1. Agricultural Land Base*

### A. Location and Size of Agricultural Land Base

Frankford Township, Sussex County, is 34.8 square miles of farmlands, woodlands, lakes and residences. It is bordered by the rural communities of Sandyston, Hampton, Lafayette and Wantage Townships.

Frankford Township lies within the Ridge and Valley Physiographic Province, Frankford Township lies predominantly within the broad Kittatinny Valley, with a portion of the Kittatinny Ridge marking its western boundary. The Kittatinny Valley supports the largest concentration of agricultural operations in Sussex County, including hay and livestock farms and nursery operations in the rolling hills of Frankford Township.<sup>1</sup>

Frankford Township ranks second (behind Wantage Township) in total acres reported under farmland assessment, with 10% of the county's farm-assessed land. Of its 22,585 acres, **10,928 acres**, or 49%, is under farmland assessment in 2021 (**Map 1**).<sup>a 2</sup>

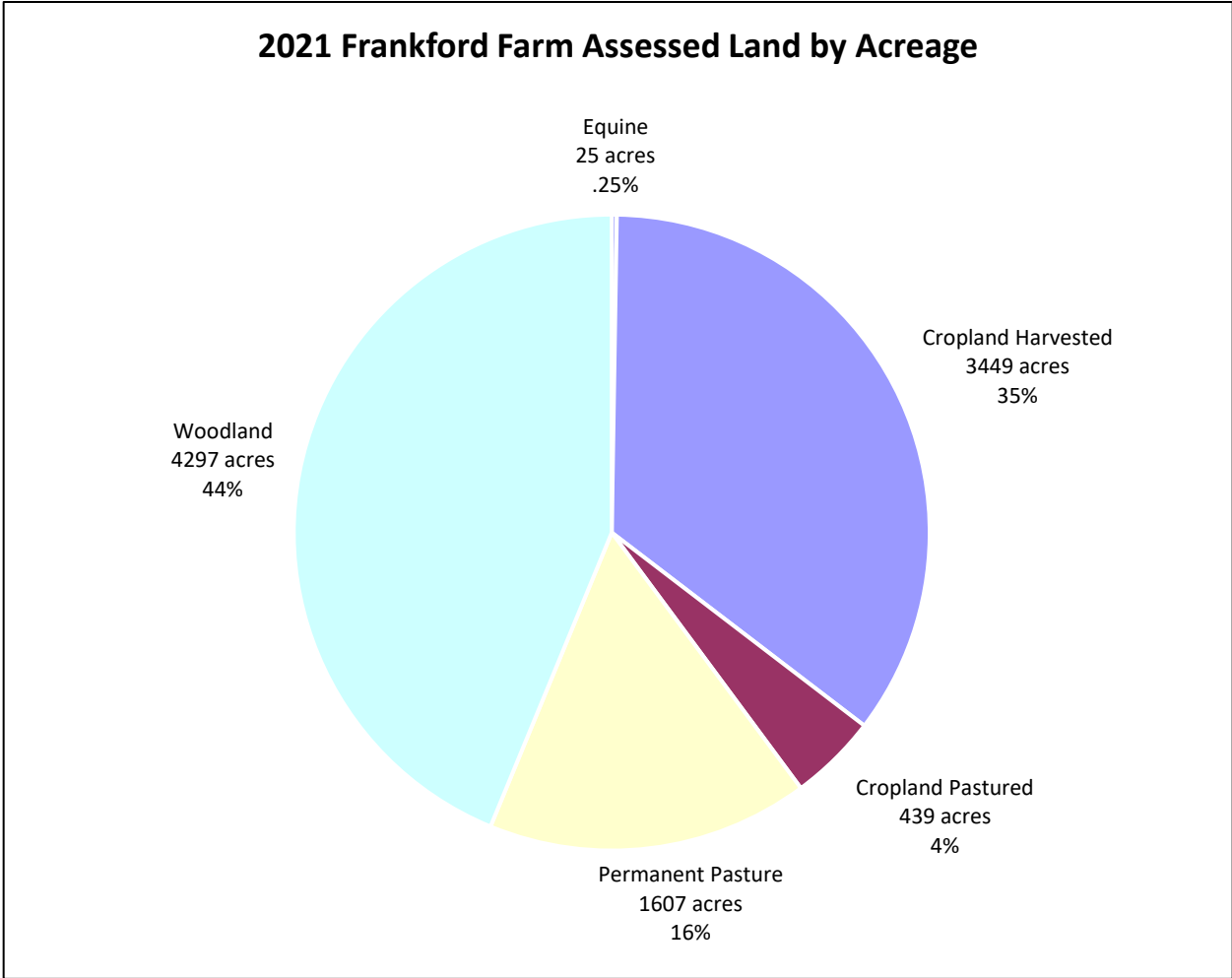
Of the land reported under farmland assessment for 2021, **9,817 acres** were devoted to agricultural or horticultural use: (**Figure 1**)

- 4,525 acres (46%) in active agricultural use (cropland and pasture);
- 4,297 acres (44%) of woodland;
- 25 acres (0.25%) to equine; and
- 231 acres were reported as non-agricultural (farmhouses or other structures).

Between 2007 and 2015, Frankford Township saw an increase of its total farm assessed acres by 53%. (**Table 1**) In comparison, Sussex County only lost 0.3% of farm assessed acres from 2009 to 2015. The largest increased occurred in the equine category, growing by 194 acres. The largest decrease occurred for pastured cropland, a loss of 32% of acreage. As of July 2022, there are **23 farms** totaling **1,662 acres** preserved in Frankford Township, the third highest number of farms in Sussex County.<sup>3</sup> (**Map 2**)

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<sup>a</sup> Assessment data for Chapter 1 is sourced from the Farmland Assessment data.



**Figure 1. Farm Assessed Land in Frankford Township (2021 Tax Assessment)**

	<b>Cropland Harvested</b>	<b>Cropland Pastured</b>	<b>Permanent Pasture</b>	<b>Active Ag</b>	<b>Woodland</b>	<b>Equine</b>	<b>Total</b>
2007	2,165	604	1,488	4,719	2,754	69	7,080
2015	3,577	411	2,176	4,525	4,439	263	10,889
% Change	65%	-32%	46%	-4%	61%	281%	53%

*Source: NJ Farmland Assessment*

According to the New Jersey Department of Environmental Protection (NJDEP) 2015 Land Use/Land Cover (LU/LC) data, forested land represents the largest proportion of Frankford Township land, at 46%, followed by agricultural land at 19%. Much of Frankford’s forest is in parkland such as Stokes State Forest. (Table 2, Figure 2)

The proportion of agricultural land in Frankford (19%) is double that for the entire County (9%), while the proportion of urban land (16%) and wetlands (14%) are the same as county wide.

	<b>Frankford Township</b>	<b>% of Total</b>	<b>Sussex County</b>	<b>% of Total</b>
Agricultural Land	4,353	19.3%	35,569	9.5%
Barren	45	0.2%	2,124	0.6%
Forested	10,309	45.6%	21,8741	58.2%
Urban	3,650	16.2%	55,671	14.8%
Water	1,007	4.5%	16,246	4.3%
Wetlands	3,219	14.2%	47,271	12.6%
Total	22,585	100%	375,622	100%

*Source: NJDEP 2015 Land Use/Land Cover*

Between 1995 and 2015, Frankford Township lost 14% of its agricultural land versus 20% for Sussex County. (Table 3) The Township lost 0.7% of its forest, while the County lost 2% of its forested lands. Urban land use increased by 29%, or 827 acres, in Frankford, slightly behind the Sussex County’s increase of 31%.









Land Use Type	<b>Frankford Township</b>				<b>Sussex County</b>			
	1995	2015	Net Change		1995	2015	Net Change	
			Acres	%			Acres	%
Agriculture	5,076	4,353	-723	-14%	43,199	34,629	-8,570	-20%
Barren Land	82	45	-37	-45%	2,197	2,125	-72	-3%
Forest	10,377	10,309	-68	-0.7%	195,023	191,119	-3,904	-2%
Urban Land	2,823	3,650	827	29%	42,463	54,837	12,374	29%
Water	1,020	1,007	-13	-1%	12,681	13,055	374	3%
Wetlands	3,221	3,219	-3	-0.08%	47,883	46,793	-1,090	-3%


*Source: 2015 & 1995 NJDEP Land Use/Land Cover<sup>4</sup>*



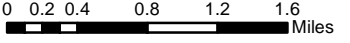
# 2015 Land Use/Land Cover

## Frankford Township, Sussex County

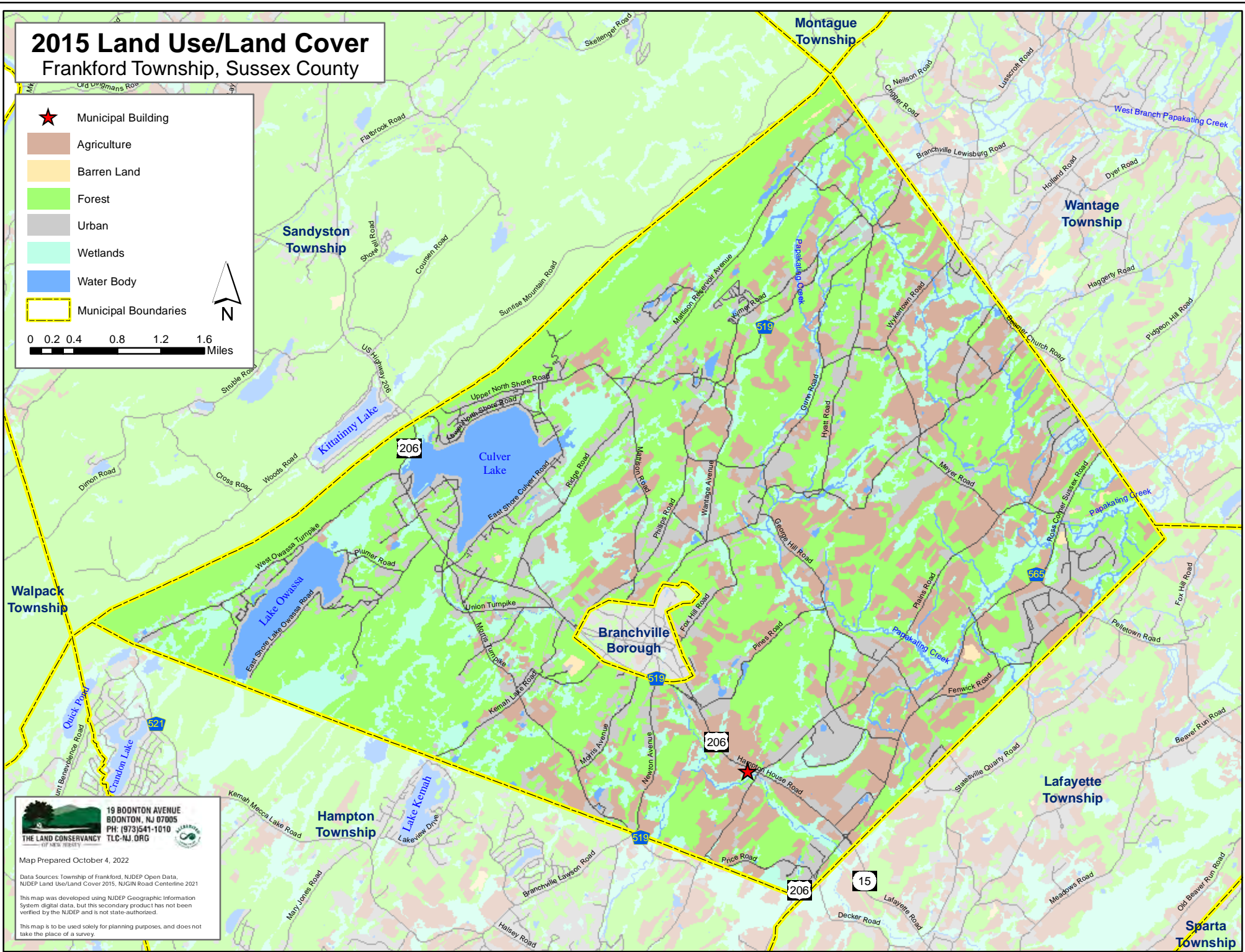
-  Municipal Building
-  Agriculture
-  Barren Land
-  Forest
-  Urban
-  Wetlands
-  Water Body
-  Municipal Boundaries



N



0 0.2 0.4 0.8 1.2 1.6 Miles





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Map Prepared October 4, 2022

Data Sources: Township of Frankford, NJDEP Open Data, NJDEP Land Use/Land Cover 2015, NJGIN Road Centerline 2021

This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

This map is to be used solely for planning purposes, and does not take the place of a survey.

## B. Soils

Soil types are determined by the parent bedrock material from which they were formed, the drainage characteristics they exhibit, and the steepness of the slopes on which they are found. Soil types are grouped into larger categories called soil series, which are based on the parent materials, chemical compositions, and profiles of their member soil types. Soil series are often grouped into broader categories, called soil associations or complexes, which occur in regularly repeating patterns.<sup>5</sup> The Natural Resources Conservation Service (NRCS) classifies certain soils as prime, of statewide importance, or unique based on their potential for agricultural productivity.

- ✓ *Prime farmland soils*, as defined by the United States Department of Agriculture (USDA), rest on land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. They have the quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed according to acceptable farming methods. Prime soils flood infrequently and are not excessively erodible or saturated with water for a long period of time. There are 3,879 acres of prime farmland soils in Frankford Township. These soils are located in the eastern portion of the town, along Papakating Creek, the Paulins Kill and their tributaries. Accounting for 17% of the total soils, they belong to the Hazen-Paulins complex series. which can be used for alfalfa hay, corn, grass (legume), wheat, soybeans and oats. 41% of these soils are in agricultural use.
- *Farmland soils of statewide importance* produce high crop yields when treated and managed according to acceptable farming methods. However, their yields are rarely as high as those of prime soils. There are no soils of statewide importance.
- *Unique soils or soils of local importance* exhibit specific qualities that may be favorable to the production of specialized crops. There are 362 acres of soils identified as of unique importance in Frankford Township (Catden mucky peat), representing 2% of the total soils. No soils of unique importance are in agricultural use. These soils are located mostly in Bear Swamp Wildlife Management Area and along tributaries or outlet streams associated with Lake Owassa and Culver Lake in the southwestern portion of the town.

The following major soil series, although not identified as farmland soil, may also play a role in Frankford Township's active agriculture:

- Nassau-Manlius (Nau), which is often very rocky but capable of growing corn, oats and wheat with more moderate yields than the Hazen-Paulins complex, 6,534 acres, or 30% of the Township's total acreage.<sup>6</sup>

Prime farmland soils represent 35% of the active agricultural land, with the other 65% made up of soils that are not considered prime farmland. **(Table 4)** In Frankford, 1,586 acres of the agricultural soils identified by the NRCS are mapped as land in active agricultural use.

<b>Table 4. Land Use/Land Cover Agricultural Land in Each Soil Category</b>				
<b>Soil Classification</b>	<b>Acres</b>	<b>Active Agriculture Acres</b>	<b>Percent of Soil Classification</b>	<b>Percent of Active Agriculture</b>
Prime Farmland Soil	3,879	1,586	41%	35%
Soils with Statewide Importance	0	0	0%	0%
Soils with Unique Importance	362	0	0%	0%
Not Prime Farmland	18,343	2,939	16%	65%
<b>Total</b>	<b>22,584</b>	<b>4,525</b>	<b>20%</b>	<b>100%</b>
<i>Source: NRCS Soil Data Mart; 2015 NJDEP Land Use/Land Cover</i>				

**Table 5** identifies the major soils in Frankford Township and **Map 3** illustrates their location.

<b>Table 5. Soils of Frankford Township</b>		
<b>Soil Abbr</b>	<b>Name</b>	<b>Acres</b>
Hd xpAb	Hazen-Paulins complex, 0 to 3 percent slopes, very stony	1,019
Hd xpBb	Hazen-Paulins complex, 3 to 8 percent slopes, very stony	2,860
<b>All Areas are Prime Farmland Total</b>		<b>3,879</b>
CatbA	Catden mucky peat, 0 to 2 percent slopes	362
<b>Farmland of Unique Importance Total</b>		<b>362</b>
AhbBc	Alden silt loam, 0 to 8 percent slopes, extremely stony	160
AruCh	Arnot-Lordstown complex, 0 to 15 percent slopes, very rocky	455
ArvD	Arnot-Lordstown-Rock outcrop complex, 15 to 35 percent slopes	406
ArvE	Arnot-Lordstown-Rock outcrop complex, 35 to 60 percent slopes	524
FrdAb	Fredon-Halsey complex, 0 to 3 percent slopes, very stony	1,282
PduoEb	Paulins Kill-Otisville complex, 25 to 60 percent slopes, very stony	1,658
NauBh	Nassau-Manlius very channery silt loams, 0 to 8 percent slopes, rocky	929
NauDh	Nassau-Manlius very channery silt loams, 15 to 35 % slopes, rocky	2,638
NauCh	Nassau-Manlius very channery silt loams, 8 to 15 %slopes, rocky	1,920
NavE	Nassau-Manlius very channery silt loams, 35-60% slopes, very rocky	1,047
PHG	Pits, sand and gravel	45
RnfD	Rock outcrop-Farmington-Galway complex, 15 to 35 percent slopes	216
RnfC	Rock outcrop-Farmington-Galway complex, 8 to 15 percent slopes	96
SwfBc	Swartswood loam, 0 to 8 percent slopes, extremely stony	9
SwfDc	Swartswood loam, 15 to 35 percent slopes, extremely stony	21
SwfCc	Swartswood loam, 8 to 15 percent slopes, extremely stony	7
UdaB	Udorthents, 0 to 8 percent slopes, smoothed	67
USHBPB	Urban land-Hazen-Paulins Kill complex, 0 to 8 percent slopes	74
USNAMC	Urban land-Nassau-Manlius complex, 0 to 15 percent slopes	11



<b>Table 5. Soils of Frankford Township</b>		
<b>Soil Abbr</b>	<b>Name</b>	<b>Acres</b>
VepBc	Venango silt loam, 0 to 8 percent slopes, extremely stony	13
VepCc	Venango silt loam, 8 to 15 percent slopes, extremely stony	2
WusBc	Wurtsboro-Swartswood complex, 0 to 8 % slopes, extremely stony	2,630
WusDc	Wurtsboro-Swartswood complex, 15 to 35 % slopes, extremely stony	820
WusCc	Wurtsboro-Swartswood complex, 8 to 15 % slopes, extremely stony	2,164
WATER	Water	841
	<b>Not Prime Farmland Total</b>	<b>18,035</b>
	<b>Total</b>	<b>22,538</b>

*Source: Natural Resource Conservation Service Soil Survey 2021*

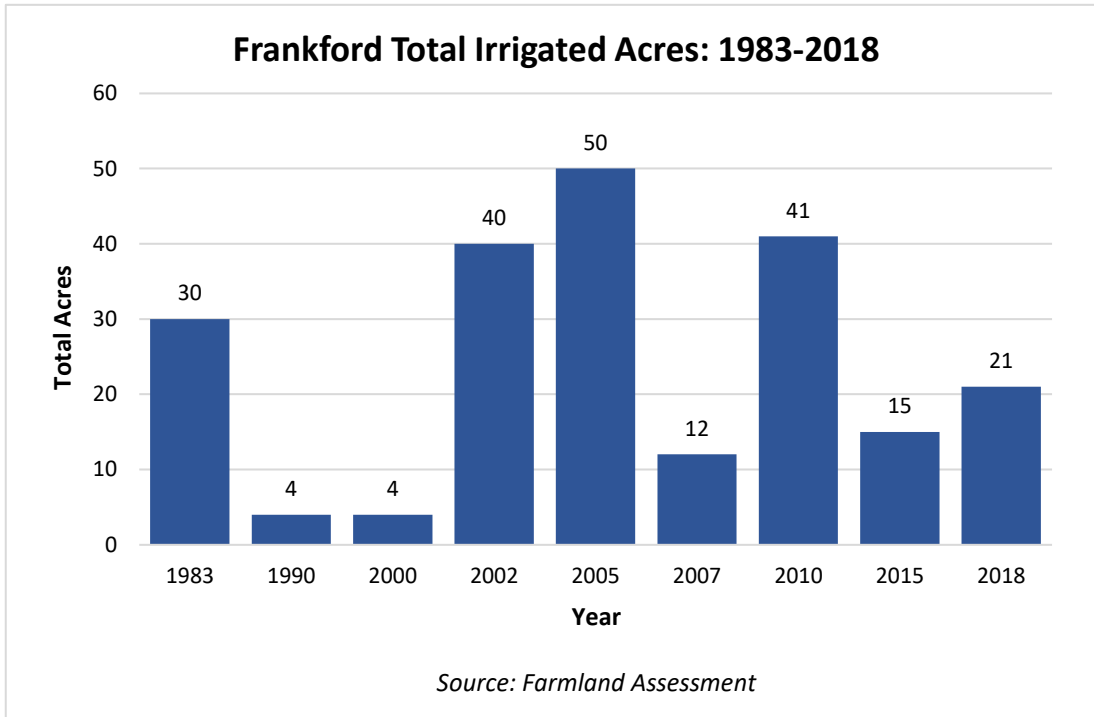
### C. Irrigated Land & Water Sources

Frankford Township relies on groundwater for its water supply. Groundwater sources are generally preferred to surface waters because they contain less sediment and particulates that may clog irrigation pipes and damage crops. Some of Frankford Township’s higher yielding aquifers are located in prime agricultural areas, such as in the vicinity of Papakating Creek as it travels alongside C.R. 565. These higher yielding aquifers, because of their porosity, are more easily affected by drought and more susceptible to contamination by pollutants.

Irrigated land averages at about 24 acres a year. **(Figure 3)** Irrigation has not been a significant source of water for farming in Frankford Township. Due to the nature of farming in Frankford and demand for water for other uses, this is unlikely to change. However, usage does fluctuate. 2005 reported the highest use of irrigation with field crops being the primary beneficiary (40 acres), followed by ornamentals (6 acres), and then vegetables (4 acres). In 2018, ornamentals had the highest number of irrigated lands (14 acres), then vegetables (4 acres) and field crops (3 acres). It is likely that farmers get adequate water for their small-scale irrigation needs from their own water supplies.

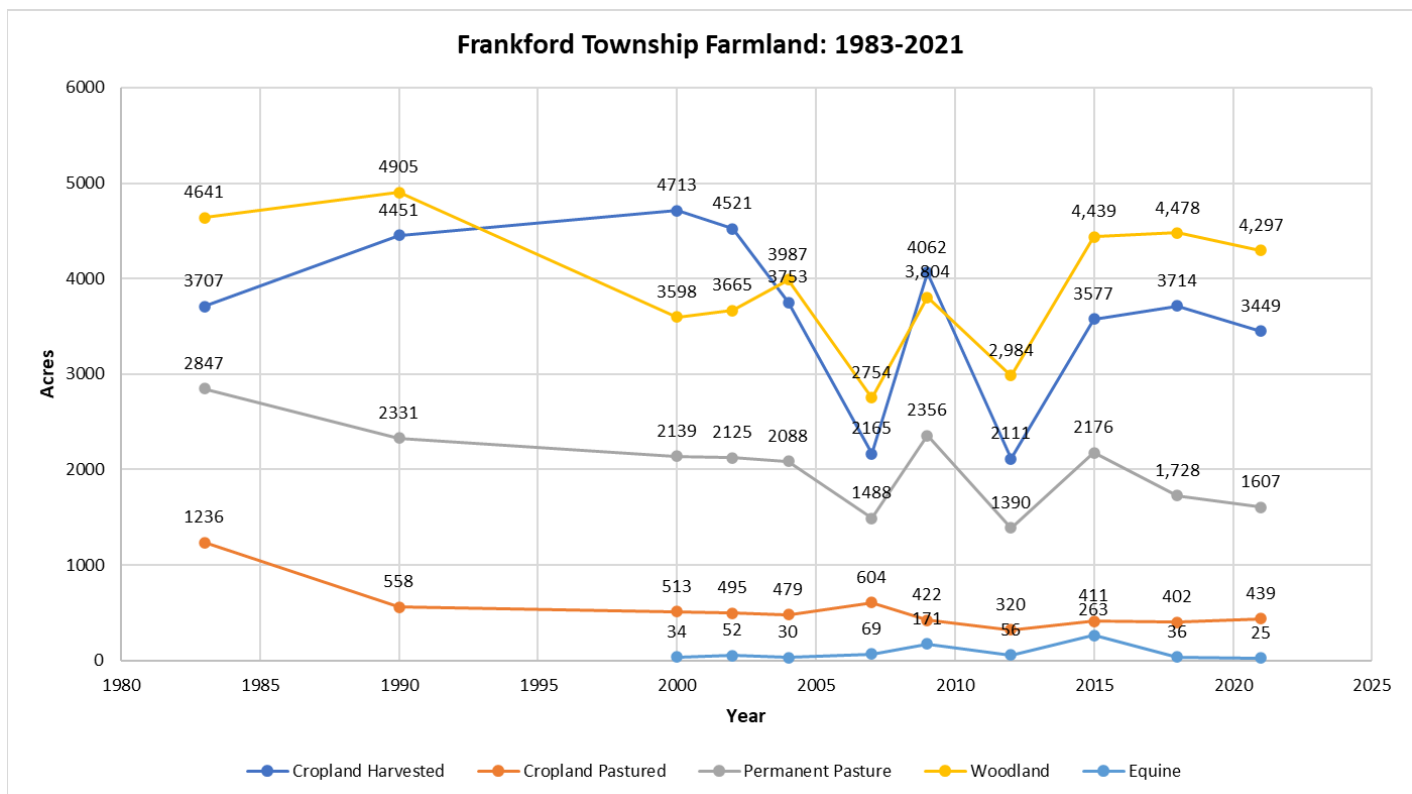
### D. Farmland Trends & Statistics

The overall size of the farm-assessed land base in Frankford, including active agricultural, woodland and equine uses, declined from by 18% from 1983 (12,430 acres) to 2021 (10,205 acres). **(Figure 4)** Sussex County’s agricultural land base declined 17% in the same time period, from 120,847 to 99,768 acres. Land devoted to active agriculture increased 8% since 1983, while woodland declined 7% since 1983. The equine category, added in 2000, has fallen and risen with a high of 69 acres in 2007. In 2021, there are 25 acres in Frankford dedicated to equine usage.



**Figure 3. Total Irrigated Acres (1983-2018)**

**Figure 4. Farmland Acreage (1983-2021)**



Agricultural land usage trends include:

- ✓ From 2007 to 2015, land in active agricultural use has declined 4% versus 9% for Sussex County.
- ✓ Harvested cropland, the largest category of active agricultural land in Frankford, has declined 7% between 1983 and 2021, from 3,707 to 3,449 acres.
- ✓ Permanent pasture declined from 2,847 to 1,607, or 45%.
- ✓ Pastured cropland declined between 1983 and 1990, rose between 2004 and 2007, and now remains relatively steady since 2015, reflecting an overall loss of 64%.
- ✓ Woodland has declined 41%, from 4,641 acres in 1983 to 2,754 acres in 2007.
- ✓ From 1983 to 2007, unattached woodland acres have risen slightly while attached woodland acres have declined.
- ✓ Total woodland wetland acreage has increased to 4,297 acres, or 56%, in 2021.

The trend towards smaller farm sizes has been prominent throughout New Jersey and Sussex County over the past thirty years. County wide there has been a 73% increase in number of farms between 1982 and 2007, but an 11% decrease in overall farm acres. From 2012 to 2017, the average size of a farm has declined from 119 to 62 acres.<sup>7</sup>

The definition of a farm used for the purposes of calculating farm size is not the individual parcels tracked in farmland assessment but a farm operation, which is composed of the total land area of the reporting farm and may include land rented from others.<sup>8</sup> In Sussex County in 2017, there were 696 farm operations. For 533 of the operators, farming was their primary occupation and 1,388 of the operators had their residences on the operation. Of those farms:

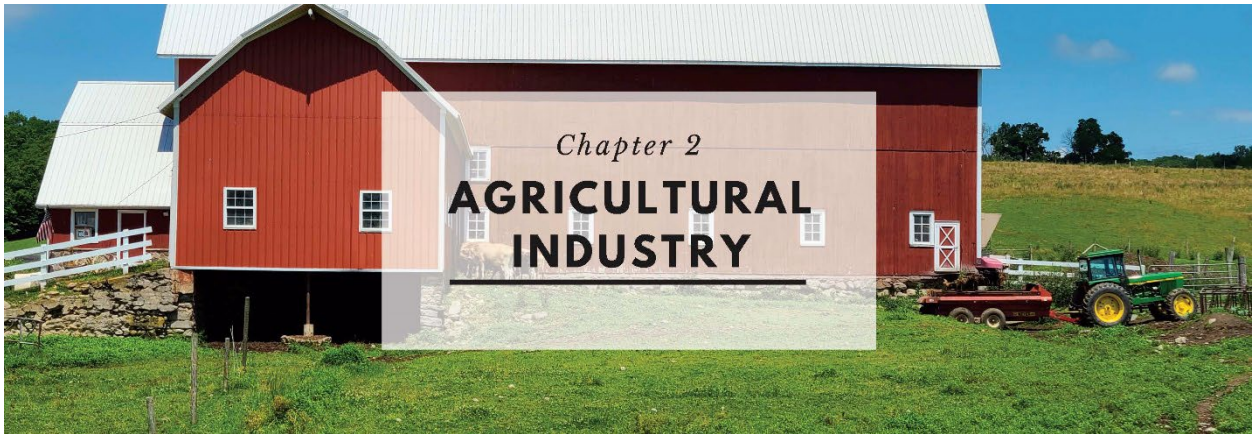
- 600 were operated by full owners (894 acres)
- 59 by part owners (66 acres)
- 37 by tenants (48 acres)

The 2017 Census of Agriculture indicates that for ZIP codes 07822 and 07826, which include most of Frankford as well Branchville and a portion of Sandyston Township, there were a total of 124 farm operations. Of these farms, 107 were operated by full owners, 12 were operated by part owners, and 5 were operated by tenants

In 2021, on a farm parcel basis, most were less than 50 acres. (**Table 6**) There were 374 farm parcels totaling 10,540 acres, with an average size of 28 acres and a median size of 14 acres.

<b>Table 6. Farm Parcels in Frankford Township (2021)</b>	
Size	# of Farms
Under 1 acre	5
1-9 acres	137
10-49 acres	166
50-179 acres	64
180+ acres	2
<i>Sources: NJ Association of County Tax Boards/GIS Parcel Data</i>	



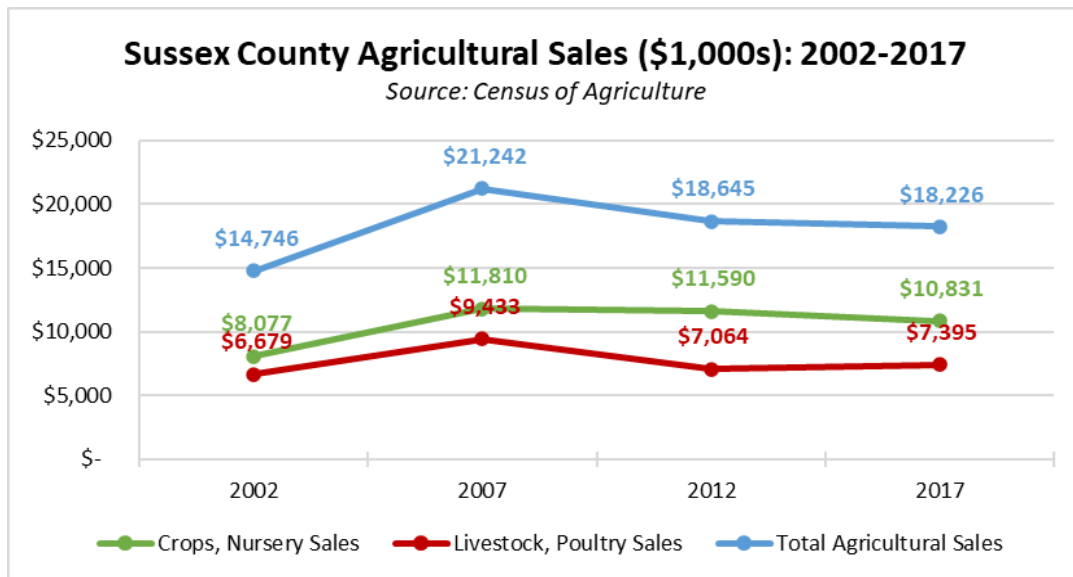


**Chapter 2. Agricultural Industry**

**A. Trends in Market Value of Agricultural Products Sold**

Agriculture in Frankford is oriented to traditional field crops, including hay and corn. Residents place high value on their agricultural lands and rural character. The nature of farming has evolved. The trend is to more, smaller farms, and to increased diversity in farming operations. Frankford is home to the annual New Jersey State Fair, Sussex Farm & Horse Show at the Sussex County Fairgrounds. Sales figures and crop production figures are not available at the municipal level but can be analyzed for the county. Total agricultural sales in Sussex County dropped slightly since 2007:

- Decrease in livestock sales to \$7.1 million in 2017, a 25% drop from \$9.4 million in 2007, but a 6% increase above 2002.
- Crop sales, including nursery and greenhouse products, fell 8% from \$11.8 million in 2007 to \$10.8 million in 2017. (Figure 5)



**Figure 5. Agricultural Sales in Sussex County**

As of 2017, Sussex County ranked 15<sup>th</sup> in the state in total agricultural sale revenues. (**Table 7**)

<b>Table 7. Total Agricultural Market Value (\$1,000s) by County</b>	
<b>County</b>	<b>Sales</b>
Cumberland	\$ 212,649
Atlantic	\$ 120,673
Gloucester	\$ 102,454
Salem	\$ 102,342
Burlington	\$ 98,580
Warren	\$ 93,217
Hunterdon	\$ 92,246
Monmouth	\$ 80,633
Middlesex	\$ 38,359
Mercer	\$ 24,981
Morris	\$ 24,824
Ocean	\$ 24,640
Camden	\$ 22,893
Somerset	\$ 20,118
<b>Sussex</b>	<b>\$ 18,226</b>
Cape May	\$ 9,838
Passaic	\$ 2,863

*Source: U.S. Census of Agriculture, 2017*

Average sales per farm in Sussex County dropped 14% from 2012 to 2017, the fourth-fastest rate of decline in New Jersey, and to a quicker degree than the two neighboring counties. (**Table 8**)

*Dairy and Livestock Operations:* In 2002, Sussex County had the third largest concentration of dairy and livestock operations in New Jersey (230 farms). In 2017, with 212 farms in dairy and livestock, it is now second in the state.

- ✓ *Dairy Sales and Farms:* Dairy sales have declined 21% in Sussex County from \$5.6 million in 1997 to \$4.4 million in 2017. This is accompanied by a 71% decrease in dairy farms, from 41 in 1997 to 12 in 2017.
- ✓ *Livestock:* As of 2017, laying chickens (10,863) are the most common livestock in Sussex County. The second most abundant livestock are cattle and calves (3,952), with beef cows (1,225 head) more prominent than dairy cows (1,128 head). Sheep and lambs as fourth highest (1,636 count).

*Crops:* Crops in Sussex County sold for a total of \$8.7 million in 2017, a 3% decrease from 2012. (**Figure 6** and **Table 9**)

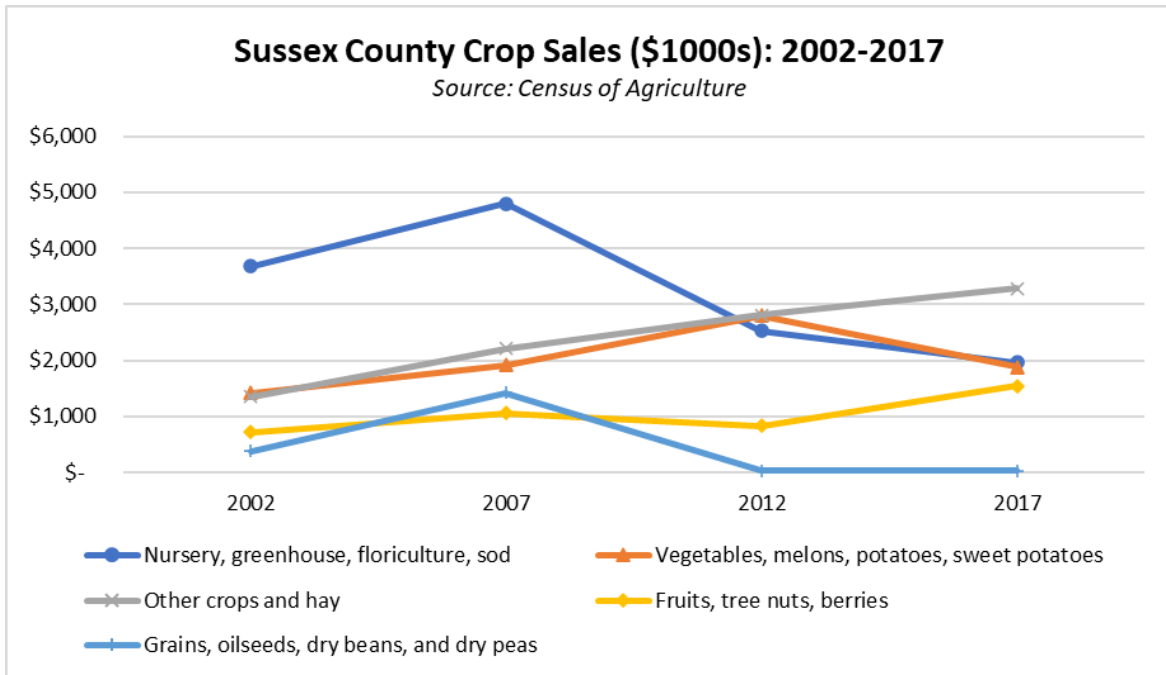
- ✓ *Hay and Other Crops:* Since the steep decline of nursery and greenhouse crops in 2007, hay and other crops exceeds other crop types in Sussex County. Annual hay and other

crop sales comprised 19% of total agricultural revenue in 2007 (\$2.2 million) and, by 2012, it comprised 39% of total revenue (\$3.3 million).

**Table 8. Average Sales per Farm by New Jersey Counties (2012-2017)**

Rank	County	2012	% Change	2017
1	Ocean	\$ 64,885	46.06%	\$ 94,769
2	Cumberland	\$ 292,216	29.95%	\$ 379,730
3	Camden	\$ 91,528	26.97%	\$ 116,210
4	Hunterdon	\$ 46,445	23.82%	\$ 57,510
5	Middlesex	\$ 147,733	19.66%	\$ 176,772
6	Gloucester	\$ 150,154	17.64%	\$ 176,644
7	Cape May	\$ 52,810	13.59%	\$ 59,988
8	Mercer	\$ 72,534	6.63%	\$ 77,341
9	Salem	\$ 135,749	-3.47%	\$ 131,040
10	Monmouth	\$ 102,565	-6.19%	\$ 96,221
11	Burlington	\$ 120,390	-10.51%	\$ 107,738
12	Warren	\$ 116,333	-12.71%	\$ 101,543
13	Atlantic	\$ 312,040	-14.06%	\$ 268,163
<b>14</b>	<b>Sussex</b>	<b>\$ 21,078</b>	<b>-14.22%</b>	<b>\$ 18,081</b>
15	Somerset	\$ 58,016	-23.28%	\$ 44,508
16	Morris	\$ 77,560	-23.43%	\$ 59,389
17	Passaic	\$ 44,045	-26.97%	\$ 32,168

*Source: Census of Agriculture, 2012, 2017*



**Figure 6. Crop Sales (\$1,000s) in Sussex County (2002-2017)**

<b>Table 9. Sussex County Crop Sales (\$1000s) (2002-2017 )</b>				
	<b>2002</b>	<b>2007</b>	<b>2012</b>	<b>2017</b>
Nursery, greenhouse, floriculture, sod	\$3,677	\$4,800	\$2,523	\$1,960
Vegetables, melons, potatoes, sweet potatoes	\$1,418	\$1,911	\$2,794	\$1,877
Other crops and hay	\$1,356	\$2,215	\$2,812	\$3,290
Fruits, tree nuts, berries	\$723	\$1,060	\$834	\$1,545
Grains, oilseeds, dry beans, and dry peas	\$382	\$1,418	\$25	\$26
<b>Total</b>	<b>\$7,556</b>	<b>\$11,404</b>	<b>\$8,988</b>	<b>\$8,698</b>
<i>Source: Census of Agriculture 2002-2017</i>				

- ✓ *Nursery and Greenhouses:* Nursery and greenhouse crops were the second highest-grossing crop in 2017, generating more than \$2 million in sales.
- ✓ *Vegetables:* Including melons, potatoes, and sweet potatoes, ranked third in sales in 2017.
- ✓ *Fruits, Tree Nuts, Berries:* A small but significant portion of Sussex County’s agricultural sales come from fruits, tree nuts, and berries. Sales revenue for this category increased by 114% between 2002 and 2017.
- ✓ *Grains, Beans, Peas:* Making up the smallest contribution to total revenue are grains, oilseeds, dry beans, and dry peas (\$26,000). Sales were highest in 2007 (\$1.4 million) but have since fallen 98% by 2017.

## B. Agricultural Production Trends

From 2000 to 2018, agricultural production in Frankford declined for both beef cattle (25%) and mature dairy (74%). (**Figure 7**)

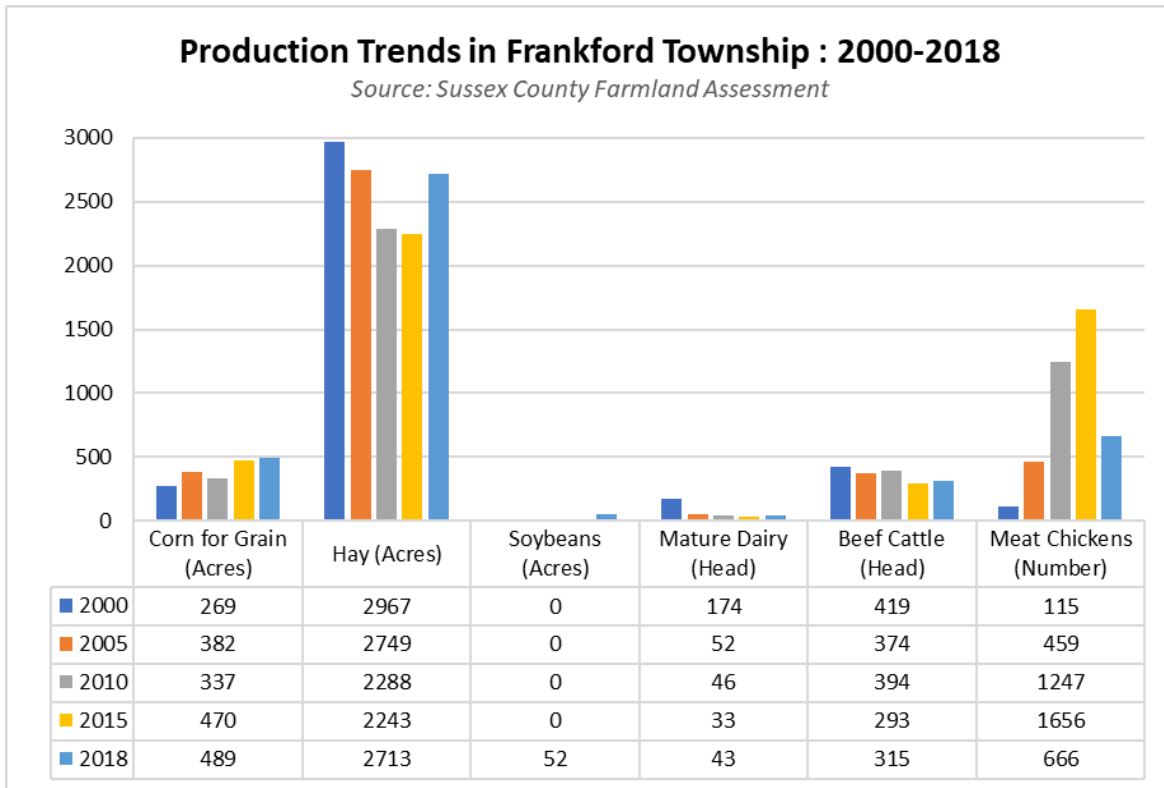
- ✓ *Beef Cattle:* The number of beef cattle fluctuates, but maintains an range from 400-200 head with a high of 419 head in 2000 and a low of 293 in 2015.
- ✓ *Meat Chickens:* Meat chickens rose by more than 100% from 115 head in 2000 to 1,247 head by 2010. The highest year for meat chickens was 2015 with 1,656 head. (**Table 10**)

*Corn for Grain:* Increased from 269 acres in 2000 to 489 in 2018, growing by 82%. (**Figure 8**)

*Hay:* Hay has long been in high production and stayed relatively stable, decreasing by 254 acres (9%) from 2000 to 2018. (**Figure 9**)

*Soybean:* Soybean production remained at zero until 2018. (**Figure 10**)

*Milk Sales:* The decrease in milk sales has contributed to a dwindling dairy output. From 2000 to 2018, mature dairy decreased by 74%. The biggest drop occurred between 2000 and 2015, when dairy production fell by 81%.

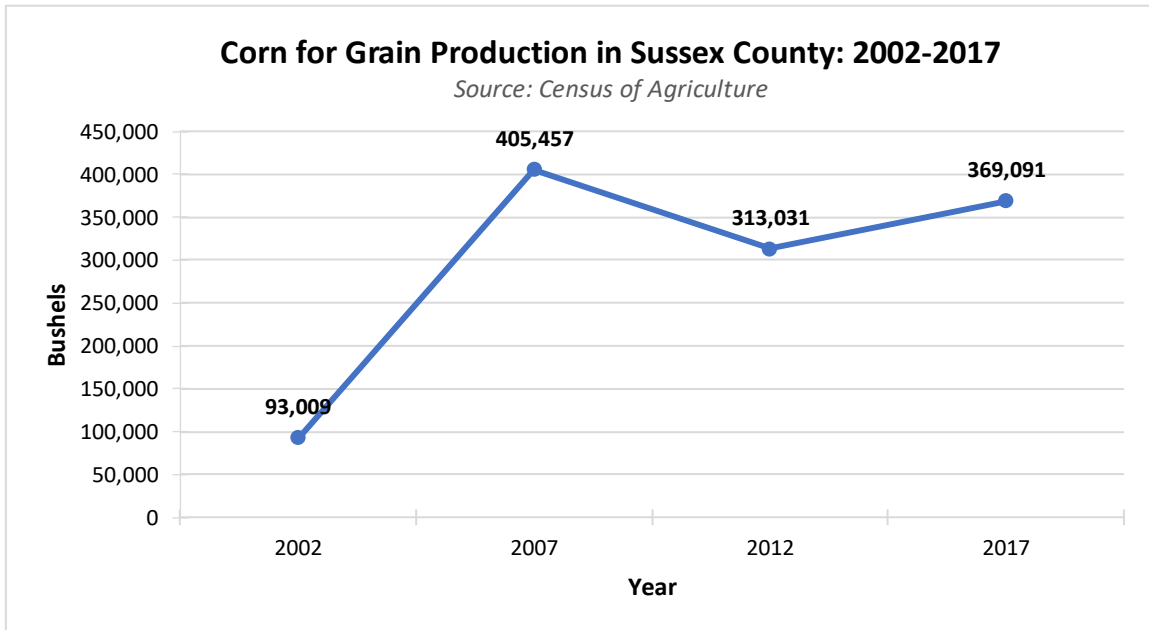


**Figure 7. Production Trends in Frankford Township**

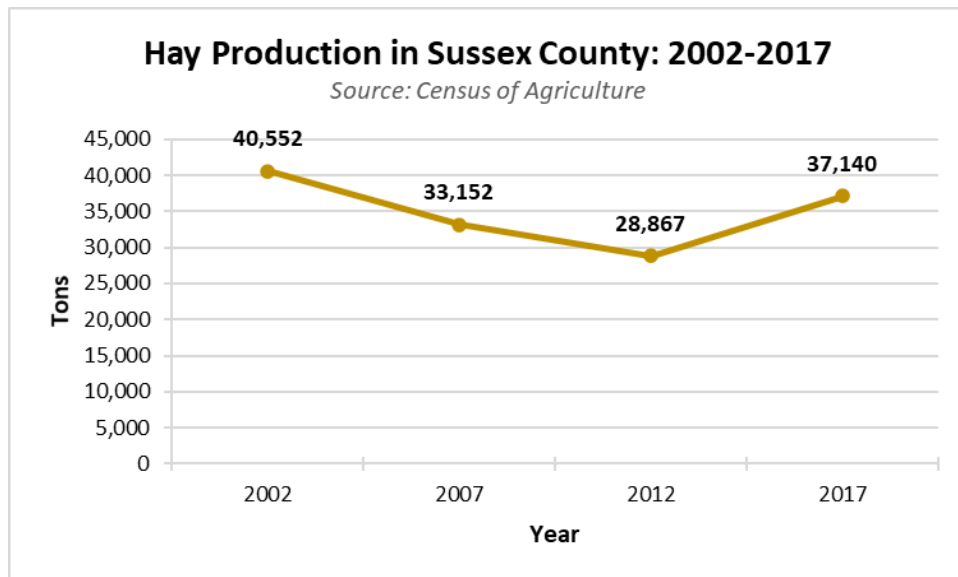
<b>Table 10. Dominant Crops in Frankford Township</b>		
<b>Top 10 Dominant Crops</b>	<b>2018</b>	<b>% Change Since 2005</b>
Corn for Grain	489	28%
Other Hay	1,817	-0.80%
Soybeans	52	52%
Alfalfa Hay	896	-2%
Christmas Trees	204	-42%
Wheat	-	-
Corn for Silage	151	-27%
Apples	48	140%
Other Mixed Vegetables	34	48%
Cut Flowers	67	458%
<b>Total</b>	<b>3,758</b>	
		<b>% of Total</b>
Field Crops	3,499	87%
Nursery Crops	370	9%
Fruits & Berries	76	2%
Vegetables	75	2%

*Source: 2005 & 2019 Sussex County Farmland Assessment Data*





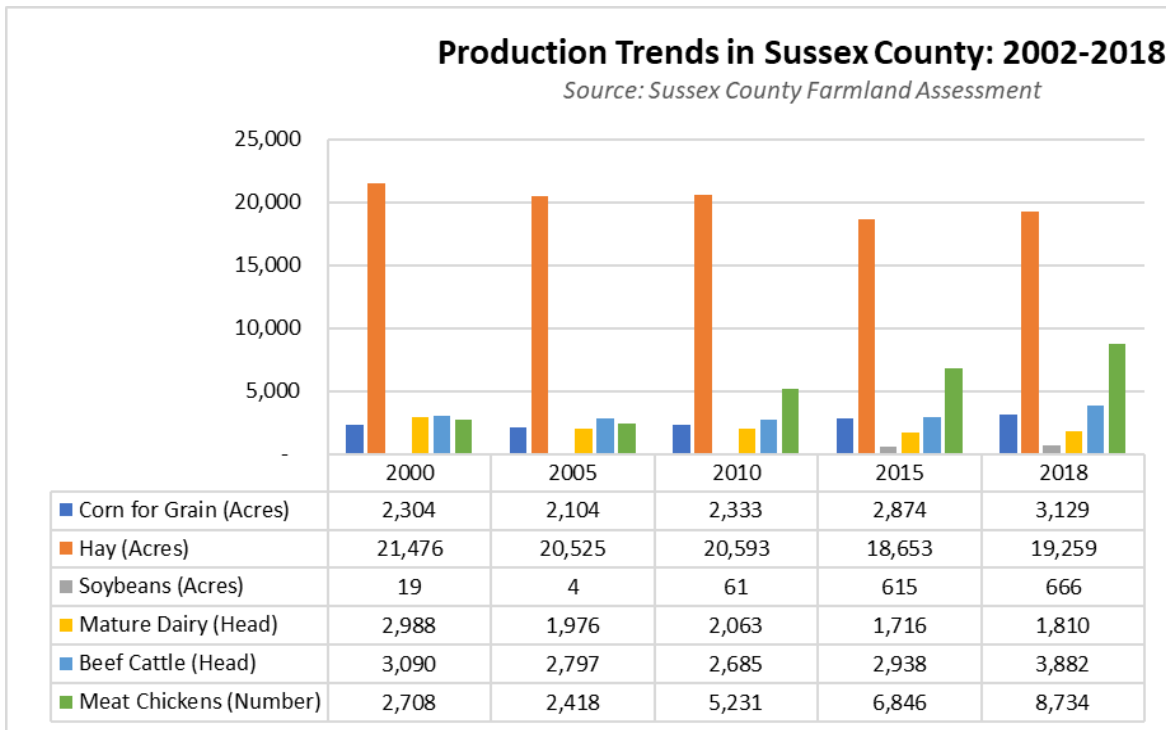
**Figure 8. Corn for Grain Production in Sussex County**



**Figure 9. Hay Production in Sussex County**

*Meat Chicken:* Since 2000, meat chicken production has increased over 100% by 2018. Chicken production ramped up between 2005 and 2010, growing by 116%, and it has been increasing since then.

*Beef Cattle:* The high of 2,090 head of beef cattle in 2000 fell by 9% to 2,797 in 2005. The number of beef cattle remained relatively stable from 2005 to 2015 before rising by 32% in 2018. Beef cattle reached a new record high of 3,882 head in 2018. **(Figure 10)**

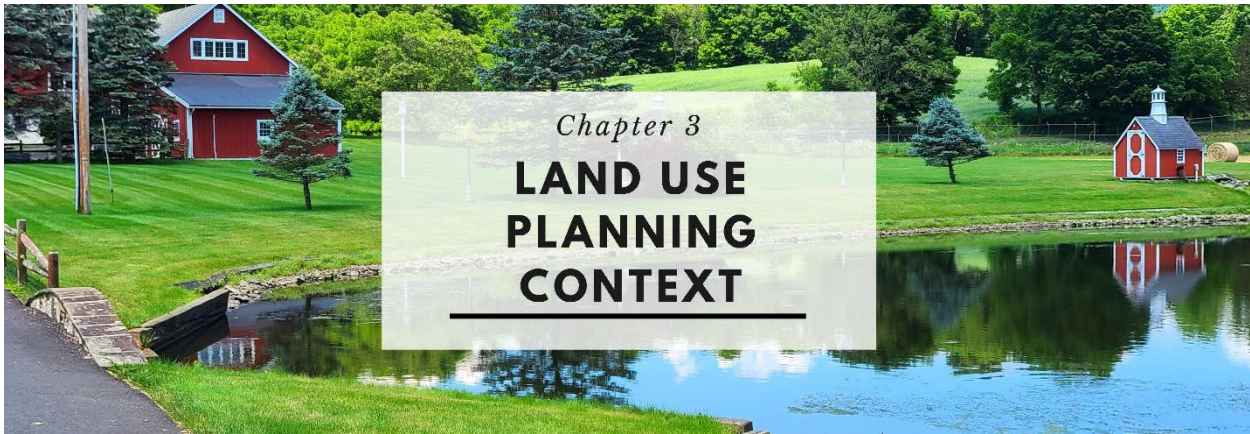


**Figure 10. Production Trends in Sussex**

### C. Agricultural Support Services and Related Industries

Agricultural support services in Sussex County and Frankford Township include tractor sales and supply stores, feed vendors, and hardware/equipment retailers. Local retailers include Tractor Supply Co. in Sussex and feed vendors such as Tickner’s in Hackettstown. Farmers take advantage of retailers, large animal veterinarians, and feed suppliers located outside of the county and in eastern Pennsylvania. A comprehensive list of farm related businesses, organizations, and services in New Jersey is available through the Rutgers Cooperative Extension of Salem County Green Pages. **(Appendix A)**

Township’s farmers rely heavily upon mail order and out-of-state retailers for their agricultural supplies. Some farmers have found that reliance upon out-of-state suppliers and non-local processing facilities imposes transportation costs that cut deeply into their operations’ profitability.



### ***Chapter 3. Land Use Planning Context***

#### **A. State Development and Redevelopment Plan**

The State Development and Redevelopment Plan outlines general policy objectives concerning land use and future development in the State. The combination of Planning Areas and Designated Centers establishes a comprehensive framework for pursuing land use and development regulation throughout New Jersey. Land in Frankford Township is included within the Rural Planning Area (PA4), the Rural Environmentally Sensitive Planning Area (PA4B) and the Environmentally Sensitive Planning Area (PA5) (**Figure 11**):

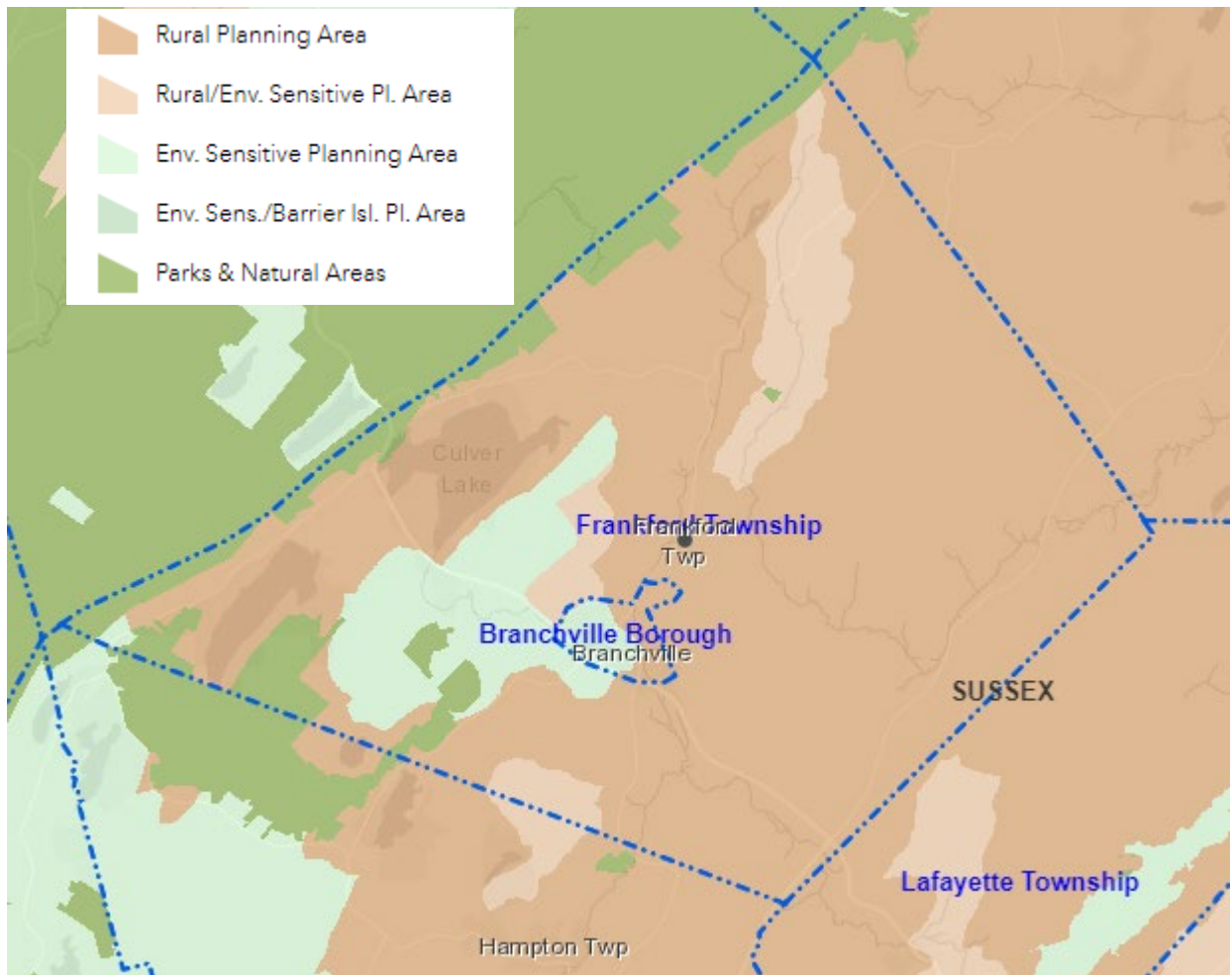
*Rural Planning Areas (PA4A)*: Lands within the Rural Planning Area in Frankford Township total approximately 17,142 acres (76% of the town). Of these, 3,988 acres (23%) are identified as land in active agricultural use by the NJDEP Land Use/Land Cover data and represent 88% of the lands in the Township identified being in active agricultural use.

*Rural-Environmentally Sensitive Planning Area (PA4B)*: Approximately 1,802 acres (8%) in Frankford Township are PA4B and are located along the Hampton Township border, to the west of Branchville Borough and in a long swath that cuts across Rt. 519 in the northwest sector of the Township. Of these, 468 acres (26%) are identified as land in active agricultural use, representing 10% of the Township's lands identified as being in active agricultural use.

*Environmentally Sensitive Planning Areas (PA5)*: These lands occupy an area that straddles Rt. 206 and include much of the area in and around Bear Swamp Wildlife Management Area as well as lands between Culver Lake and Branchville. This Planning Area occupies approximately 1,992 acres (9%) of the Township. Of these, 68 acres (3%) are identified as land in active agricultural use, representing just over 1.5% of all lands in the Township identified as being in active agricultural use

*Parks and Natural Areas*: These lands total 1,643 acres (7%) of Frankford and do not include any active agricultural lands.

Branchville Borough, and the proposed sewer service area that extends into Frankford Township, has been identified by the State Plan as a Village Center.



**Figure 11. State Planning Map for Frankford Township**

## B. Special Resource Area: Highlands Region

The New Jersey State Legislature enacted the Highlands Water Protection and Planning Act on August 10, 2004. The Highlands region covers 13% of New Jersey’s land area. Situated in northwestern New Jersey, the Highlands area includes communities in eastern Sussex County, but stops short of Frankford and its neighbors. The impact for Frankford is twofold: the Township has the advantage of being near areas defined as high priority for agriculture, and the pressures of being outside the Highlands region and thus potentially more easily accessible to developers.

## C. Municipal Master Plan

First adopted in 2000, the Frankford Township Master Plan set out several general goals related to open space preservation and its availability for public use. The 2016 Master Plan Amendment noted the Township’s varied natural landscapes including wetlands, steep slopes,

stream corridors, and forested areas. Additionally, Frankford Township is a farming community where the majority of the land has been preserved or used for agricultural purposes.<sup>9</sup> The goals of the original Master Plan pertain to preserving the Township's rich natural lands. They are still in effect today:

- Preserve the Township's natural resources and ecological balance within the context of permitting appropriate development based on sound planning and engineering principles.
- Maintain the rural character.
- Preserve the remaining farmland to enhance the rural character.
- Promote the conservation of the historic resources of the Township.

## D. Land Use Trends

The land use patterns of Frankford Township were first established during the eighteenth century when it was settled by early Europeans. Settlements such as Augusta and Branchville, Frankford Plains, Pellettown and Wykertown began as hubs or trading posts to support the agricultural community. The railroad hubs, including Branchville, that once served the mining operations transitioned to the New York markets, getting dairy products and other perishables to their destinations before they spoiled. The growth of the dairy market in Frankford and other Sussex County communities, spurred the growth of field crops to support the dairy industry. In Frankford, the lake communities became year-round homes, and much of its character is farms and single-family homes along rural roads. Commercial development has been largely restricted to the Route 206 corridor, and large areas remain woodlands and fields.

According to the 2015 NJDEP LU/LC data, forested areas make up the largest percent of Frankford's lands (46%), with agricultural and urban uses are second and third at 19% and 16% respectively. (Figure 12)

## E. Public Infrastructure – Sewer and Water

The Township is largely unsewered, depending upon septic systems maintained by Sussex County Municipal Utilities Authority (SCMUA).<sup>10</sup> Several private or County wastewater treatment systems discharge to ground or surface water for waste treatment.<sup>11</sup>

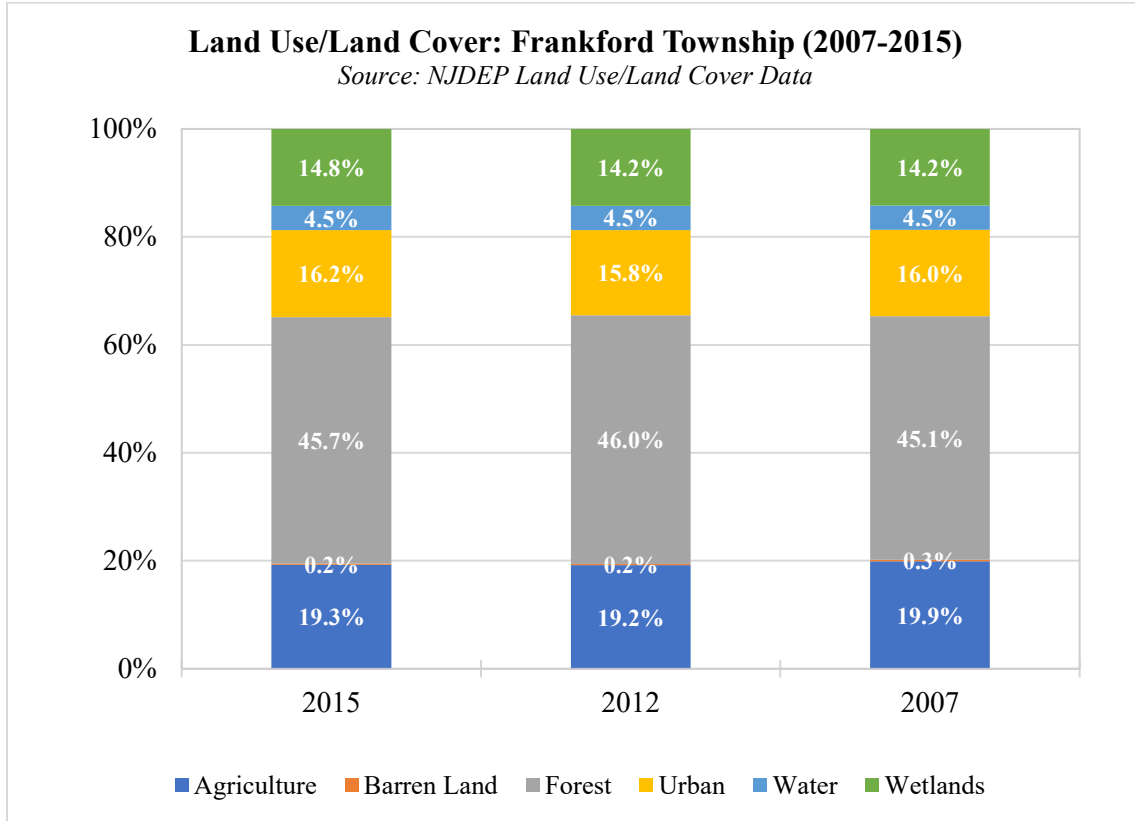
There are three public water supply systems within Frankford Township:<sup>12</sup>

- Branchville Water Department
- Culver Lake Water Company
- The Pines Inn/Pines Retirement

Four NJDEP-regulated wastewater treatment plants are located within the municipality:<sup>13</sup>

- Branchville / SCMUA Paulins Kill Facility
- Frankford Town Center
- Frankford Township - Skylands Park Management
- Sussex County/ Homestead Complex





**Figure 12. Land Use/Land Cover (2007-2015)**

## F. Municipal Zoning

### 1. Types, Lot Size, and Distribution in the Municipality

The majority of Frankford Township is zoned AR, Single-Family Residential, with a minimum lot size of 5 acres, as a method to maximize low density and thereby preserve the rural character of the Township. The other officially adopted zones in Frankford include three commercial zones, one light industrial zone, and one agriculture park zone. The commercial and light industrial zones are primarily along Routes 206 and 565 (**Figure 12**). The *Frankford Township Zoning Districts* table shows the minimum lot size and their permitted uses. (**Table 11**)

Within Frankford Township, agriculture is permitted in all zones except Frankford Center Recreation (FCR) and Rural Reserved Areas / Utility Areas (RRU). 89% of the Township is identified as Agricultural Residential District (AR), the purpose of which is:

*“to protect the rural character and conserve environmentally sensitive land or critical wildlife habitat, while permitting a harmoniously integrated residential development.”<sup>14</sup>*

The Township offers three options in its AR zone:

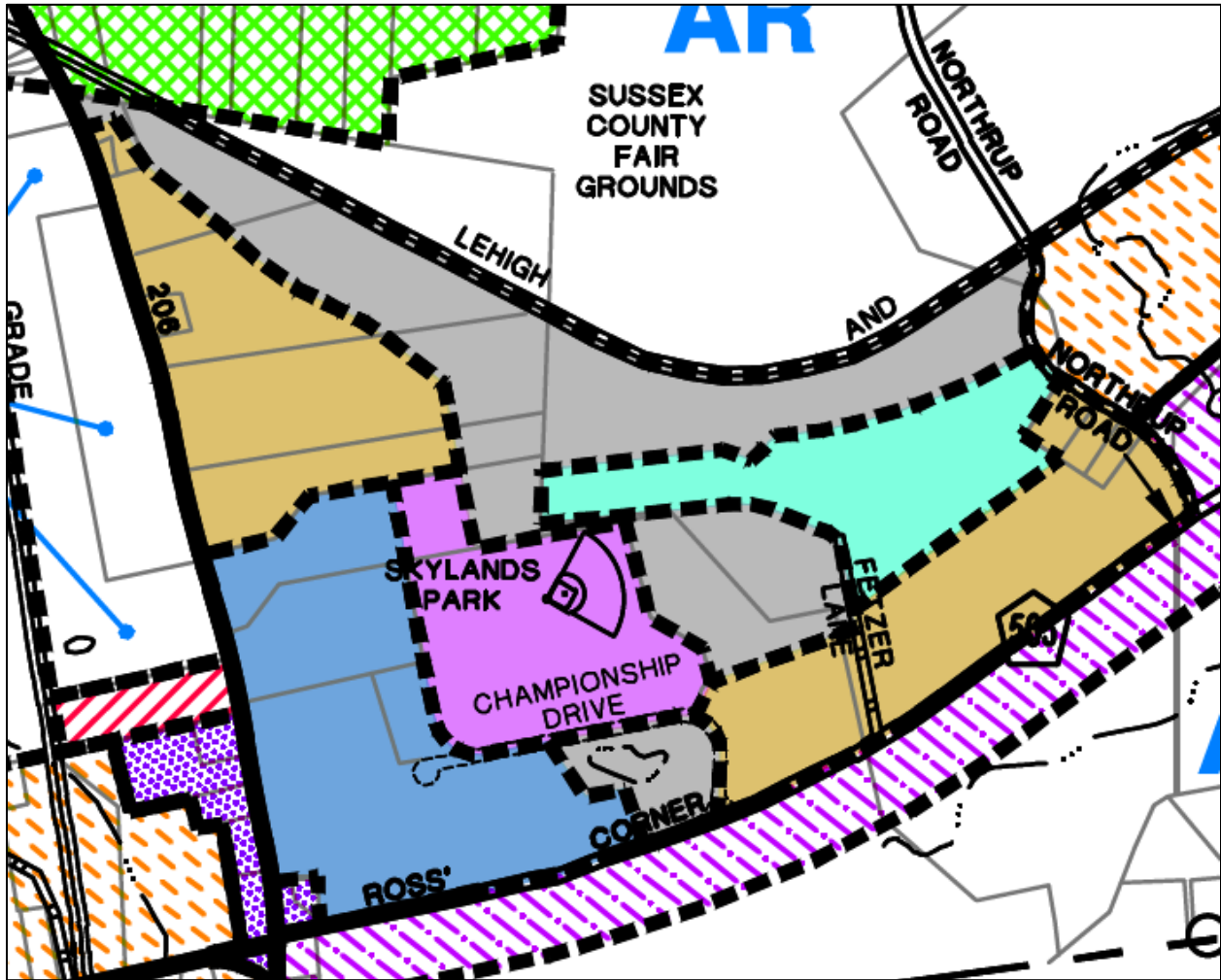
- *Traditional Development Option (TDO)*: Minimum lot size of 5 acres without environmental sensitive area calculations.
- *Environmental Conservation Option (EPCO)*: Same gross density of 1 unit per 5 acres, but a minimum lot size of 2% acres, with environmental sensitive area calculations (density adjustment factors).
- *Open Space/Agricultural Preservation Option (Clustering/Lot Averaging)*:
  - ✓ Gross density of 1 unit per 5 acres;
  - ✓ Minimum tract size of 40 acres;
  - ✓ Minimum lot size: 1.5 acres; maximum 2.5 acres; overall average of 2 acres per lot with environmental sensitive area calculations;
  - ✓ Minimum of 45% of tract deed restricted as open space under a homeowner's association or preserved farmland under the clustering option only;
  - ✓ Preserved farmland under lot averaging option may have one or two of the permitted dwelling units consist of the main and farmland related tenant residences;
  - ✓ 80% of the lots must be adjacent to or directly across the street from open space; no portion of the open space may be isolated from or noncontiguous with the majority of the open space; and
  - ✓ 25% of the open space must be non-environmentally sensitive area (clustering option).

## 2. Adopted Redevelopment Areas

In 2006 the Frankford Township's Land Use Plan included a Town Center at Ross Corner at the location for Skylands Stadium. (**Figure 13**) Part of the 2013 Zoning Map, the Town Center Zone includes residential, recreation (Skylands Stadium), utility, mixed-use, and commercial. It is not a Redevelopment Area and as of yet, it has not been developed. The adopted zoning supports it as a town center.

### **TOWN CENTER ZONE LEGEND**

<b>FCC</b>	FRANKFORD CENTER CORE
<b>FCED</b>	FRANKFORD CENTER ECONOMIC DEVELOPMENT
<b>FCNS</b>	FRANKFORD CENTER NEIGHBORHOOD SERVICE
<b>FCR</b>	FRANKFORD CENTER RECREATION
<b>RRU</b>	RURAL RESERVED AREAS/UTILITY AREAS



**Figure 13. Land Use Plan (2006) for Frankford Center at Ross Corner**

Details on the zoning and allowable uses are detailed in **Table 11**. The Sussex County Fair Grounds, agricultural lands, and commercial properties on Ross Corner adjoin the Town Center section of the municipality.

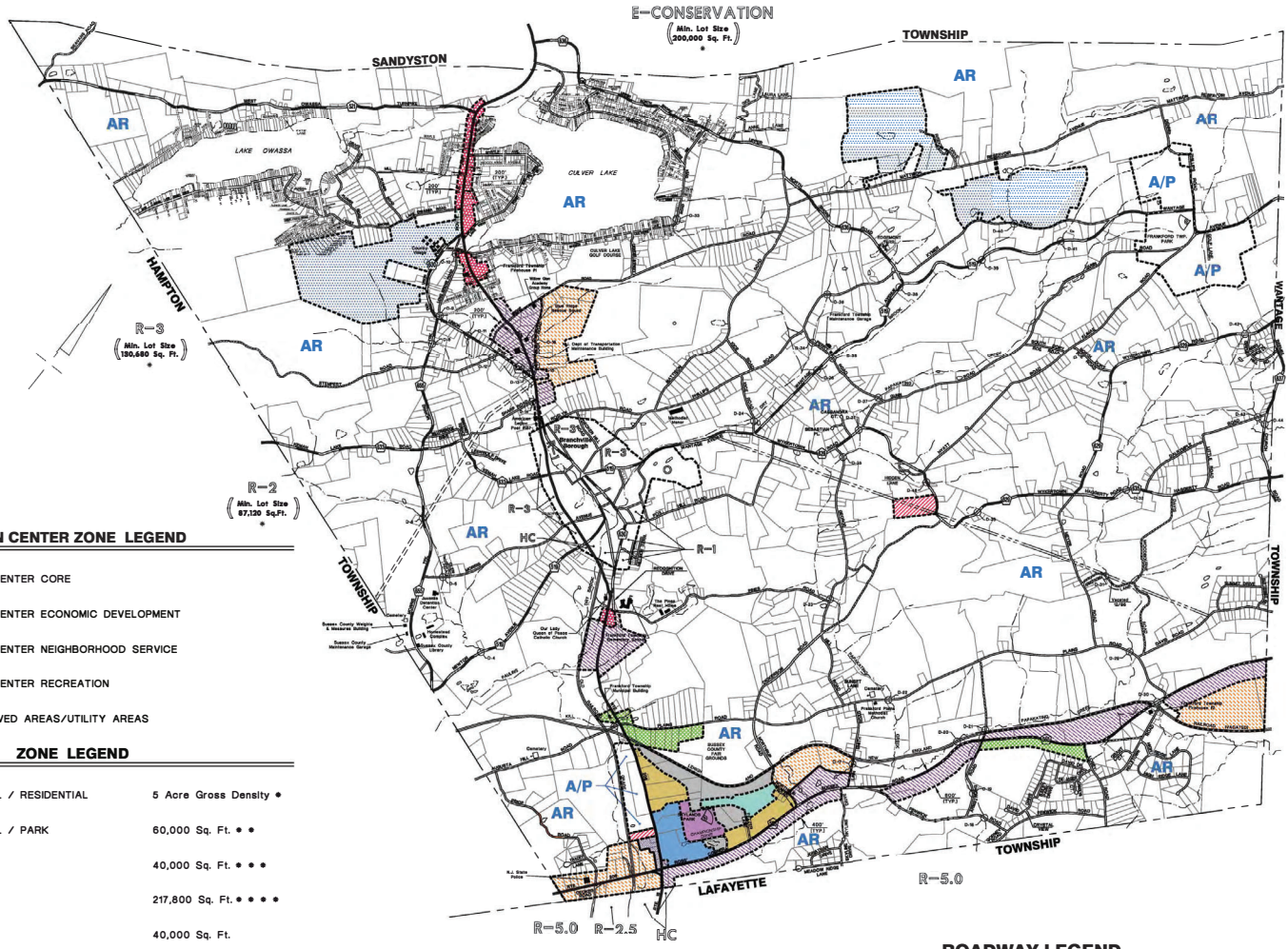
**Table 11. Frankford Township Zoning Districts by Lot Size, Acres and Parcels**

<b>Zone</b>	<b>Min. Lot Size (acres or square feet)</b>	<b>Permitted Uses</b>	<b>Description</b>
<b>A/P</b> Agricultural/Park	5 acres	Agriculture, Single-Family Residential	promote agriculture and planned recreation facilities
<b>AR</b> Single Family Residential and Agriculture	60,000 sq ft	Agriculture, Home Occupations, Home Professional Offices, Boarding Stables, Accessory Dwelling Units	protect the rural character and conserve environmentally sensitive land or critical wildlife habitat, while permitting a harmoniously integrated residential development.
<b>C-1</b> Commercial	40,000 sq ft	Repair Garages	provide opportunities for smaller scale retail, business, and office uses on smaller existing lots at the outer core of the proposed Town Center and at other crossroad locations on Route 206.
<b>C-2</b> General Business	217,800 sq ft	Shopping Centers, Accessory Dwelling Units	provide opportunities for larger scale planned commercial and office development in the outer core of the proposed Town Center and at other crossroad locations on Route 206.
<b>C-3</b> Office Commercial	40,000 sq ft	-	encourage smaller scale office uses and office parks in a residential character in the outer core of the proposed Town Center and in areas of transition between commercial and single family residential.
<b>CED-1</b> Center Enhancement District 1	40,000 sq ft	Repair Garages	provide opportunities for existing commercial business and office uses on smaller existing lots at the outer core of the proposed town center and along other crossroad locations along Route 206; many of the retail and service establishments double as neighborhood commercial areas for adjacent residential areas, particularly around the

<b>Zone</b>	<b>Min. Lot Size (acres or sf)</b>	<b>Permitted Uses</b>	<b>Description</b>
<b>CED-2</b> Center Enhancement District 2	217,800 sq ft	Shopping Centers	provide opportunities for moderately sized, commercial, office and light industrial development in the outer core of the proposed town center and at other crossroad locations along Route 206; permits all existing uses located in the previous C-2 Zone to continue on "as of right" as permitted uses
<b>C-R</b> Commercial Recreation	100 acres	Recreational Facilities, Hotels, Accessory Dwelling Units	promote planned resort and hotel conference centers in a rural setting.
<b>FCC</b> Frankford Center Core	-	-	provide opportunities for larger scale planned commercial and office development and mixed uses in the core of the proposed Frankford Town Center at the crossroads location on Route 206.
<b>FCED</b> Frankford Center Economic Development	-	Permitted, Conditional and Accessory Uses and Structures	provide for light industrial, storage and office uses in a campus like planned development manner in a portion of the Frankford Center to encourage economic development uses.
<b>FCNS</b> Frankford Center Neighborhood Service	-	Apartments, Condominiums, Care Facilities, Medical Offices	provide for smaller scale mixed use and commercial activities of a more neighborhood character than the Center Core Area, and to incorporate more residential uses.
<b>FCR</b> Frankford Center Recreation	-	Permitted, Conditional and Accessory Uses and Structures	allow the existing baseball park to continue with its accessory and subordinate uses.
<b>LI</b> Light Industry	130,680 sq ft	Repair Garages, Accessory Dwelling Units	provides opportunities for businesses connected to manufacturing, warehousing, assembly, disassembly, fabrication or processing of materials and product or information inside the confines of a building, which do not utilize any hazardous materials as defined under N.J.A.C.
<b>RRU</b> Rural Reserved Area/Utility Areas	-	-	provide opportunities for open spaces, walkways, pathways, parks, essential services, and public utilities excluding sewage treatment plants and discharge fields and water systems and facilities, including wells, well houses, and water tanks.

Source: Frankford Township Zoning Map 2013<sup>15</sup>





**TOWN CENTER ZONE LEGEND**

- FCC** FRANKFORD CENTER CORE
- FCED** FRANKFORD CENTER ECONOMIC DEVELOPMENT
- FCNS** FRANKFORD CENTER NEIGHBORHOOD SERVICE
- FCR** FRANKFORD CENTER RECREATION
- RRU** RURAL RESERVED AREAS/UTILITY AREAS

**ZONE LEGEND**

- AR** AGRICULTURAL / RESIDENTIAL 5 Acre Gross Density \*
- A/P** AGRICULTURAL / PARK 60,000 Sq. Ft. •••
- C-1** COMMERCIAL 40,000 Sq. Ft. •••••
- C-2** COMMERCIAL 217,800 Sq. Ft. •••••
- CED-1** COMMERCIAL 40,000 Sq. Ft. •••••
- CED-2** COMMERCIAL 217,800 Sq. Ft. •••••
- C-R** COMMERCIAL / RECREATION RESORT 100 Acres
- LI** LIGHT INDUSTRY 130,680 Sq. Ft.

- THREE (3) OPTIONS PERMITTED BY ORDINANCE NO. 2003-07
- NO RESIDENTIAL BUILDINGS PERMITTED, FARMS MINIMUM OF 5 ACRES
- MAY BE REDUCED TO 20,000 SQ. FT. WITH SERVICE ROAD
- MAY BE REDUCED TO 130,680 SQ. FT. WITH SERVICE ROAD

NOTE: Zoning Designations in open space lettering (i.e., R-3) represents Zoning in adjacent Municipalities.

**ROADWAY LEGEND**

- | ROADS                                  | IMPROVED | UNIMPROVED |
|--|----------|------------|
| STATE                                  | —————    | —————      |
| COUNTY                                 | —————    | —————      |
| TOWNSHIP                               | —————    | —————      |
| PRIVATE                                | —————    | —————      |
| ROADS NOT PLOWED IN WINTER             | —————    | —————      |
| TOWNSHIP ROADS VACATED FOR WANT OF USE | —————    | —————      |

**Wantage**  
**R-1**  
 (Min. Lot Size 40,000 Sq. Ft. plus Constraints 150' Frontage)

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12	REVISED ZONING AND ADDED TOWN CENTER ZONES	10/16/13
12	ADDED HIGH RIDGE LANE EXT., GRANT COURT AND AMERICAN LEGION	09/28/12
11	ADDED CED-1 & CED-2 ZONES TO MAP	04/28/10
10	REVISED C-2, & A/P ZONES	06/05/08
9	REVISED C-1, C-3 & C-R ZONES	06/27/07
8	REVISED AR DESIGNATION IN LEGEND	01/27/06
7	CHANGED BL 82, LOTS 7 & 8 FROM AR ZONE TO C-1 ZONE IORD # 2005-19	06/27/05
6	REVISED AREA FOR AR ZONE FROM 43,560 S.F. TO 87,120 S.F.	05/14/02
5	CHANGED THOMAS DRIVE TO JOHNATHAN DRIVE	03/08/01
4	ADDED ADDITIONAL STREETS AND LOTS AS PER TAX MAP REVISIONS	06/16/00
3	REVISED AS PER TAX MAP REVISIONS	4/29/00
2	REVISED & ADDED ADJOINING MUNICIPALITIES ZONING REQUIREMENTS	3/29/00
1	REVISED C2 & LI ACREAGES	5/15/97

**FRANKFORD TOWNSHIP ZONING MAP**

SUSSEX COUNTY - NEW JERSEY

<b>HFA</b>	HAROLD E. FELLOW & ASSOCIATES, INC. CONSULTING ENGINEERS 17 PLAIN ROAD - AUGUSTA, N.J. 08520 PH 973/845-8463 Fax 973/848-2999	DRAWN BY: R.P.C. CHECKED BY: H.E.P. FIELD BOOK: NONE FILE NO: 92-027	DATE: MARCH 1998 SCALE: AS NOTED SHEET No. 1 of 1
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**HAROLD E. FELLOW, P.E. & L.S.**  
 PROFESSIONAL ENGINEER & LAND SURVEYOR N.J. LIC. NO. 13229

DATE

### 3. Innovative Planning Techniques

There are mandatory and volunteer options for a municipality to use to set aside land for farmland and/or open space. Voluntary options are ones a town can use when determining maximum lot sizes and mandatory set asides for resource protection. If the municipality turns to mandatory cluster provisions or a mandatory *transfer of development rights* (TDR) program, the Agricultural Advisory Committee will work with the Land Use Board to ensure agriculture resources and land are set aside in a manner to ensure viability of the farm in the future.

Contiguous clustering, noncontiguous clustering and lot size averaging are planning tools municipalities can use to control density. Frankford Township offers both contiguous clustering and lot size averaging options.

In general, *lot size averaging* maintains the net allowable zoning density on a site but does not enforce uniform lot size requirements or setbacks. This allows for some development lots to be very small in order to accommodate affordable housing units, neighborhood commercial stores, or “village” development densities, while other lots can be very large in order to encompass active farms or natural areas. Lot size averaging is a permissible option in Frankford’s AR district; however, the only permitted uses are single family residential.

*Cluster zoning* allows development to occur on a smaller percentage of a site while retaining the net development density permitted by local zoning. A common cluster zoning provision would allow (or require) 50% of a site to be preserved in its natural or agricultural state and would permit the other half of the site to be developed at twice the allowable zoning density. Some clustering ordinances require that certain sensitive natural areas or prime farmlands on a development site be preserved. Cluster zoning provides both the ability to develop a site to its full extent based on zoning and the preservation of contiguous agricultural lands.

This option is often attractive to builders because there tends to be fewer infrastructure costs associated with roadway construction, power lines, and sewage connections in more compact developments. Clustering is attractive to residents and farmers because it retains some agricultural areas and the rural character they create. Additionally, the undeveloped portions of clustered developments are permanently deed restricted, which helps to ensure the permanence of local farming. Clustering has added effectiveness when open space set-asides on adjacent properties are linked in a coordinated fashion. This requires pre-planning on the part of the municipality. Cluster zoning is not currently used in Frankford Township, where there is minimal opportunity for new development in the higher density zones that accommodate residential development.

*Non-contiguous cluster zoning*, in contrast to regular cluster zoning, permits the transfer of development density *between* parcels instead of only within parcels. First, a “sending” parcel (where the permitted development density is reduced) and a “receiving” parcel (where the permitted development density is increased) are designated. Then, the total development potential on both properties is calculated. In a case where two fifty-acre parcels are undergoing non-contiguous clustering under ten-acre zoning, there are five permitted units on each lot and ten permitted units overall. Finally, the overall development potential (10 units in this case)

is applied to the receiving parcel while the sending parcel is permanently protected from future development. Non-contiguous clustering allows for development to be moved out of prime agricultural areas and concentrated into more appropriate and desirable locations. This is not currently an option in Frankford Township.

Transfer of Development Rights (TDR) is a growth management tool that allocates development rights from one location (the preservation or “sending” area) to another (the development or “receiving” area). These development rights are purchased by developer and allow them to build at higher densities within the receiving zone than existing zoning permits. Viewed as an equity protection mechanism, transfer-of-development rights provides for the preservation of important agricultural lands while fully compensating landowners and minimizing public expenditures. To date, this program has not been utilized by Frankford Township to preserve farmland.

#### 4. Buffer Requirements

In accordance with state and county regulations, there are multiple mechanisms through which agricultural uses are separated from other uses. At the state level, both the NJDEP and the NJDA offer guidelines. NJDEP’s Freshwater Wetlands Protection Act Rules provide permit and other administrative exemptions for a range of farming activities, which helps to protect inland water resources. Similarly, NJDEP’s Flood Hazard Area Control Act Rules, most recently amended in February 2015, now include numerous agricultural permits-by-rule. The following agricultural activities are included:

- Continuing ongoing agricultural activities that result in no fill,
- Commencing new agricultural activities that result in no fill,
- Undertaking soil conservation practices outside a floodway, and
- Constructing an agricultural building of no more than 1,000 square feet outside a floodway.

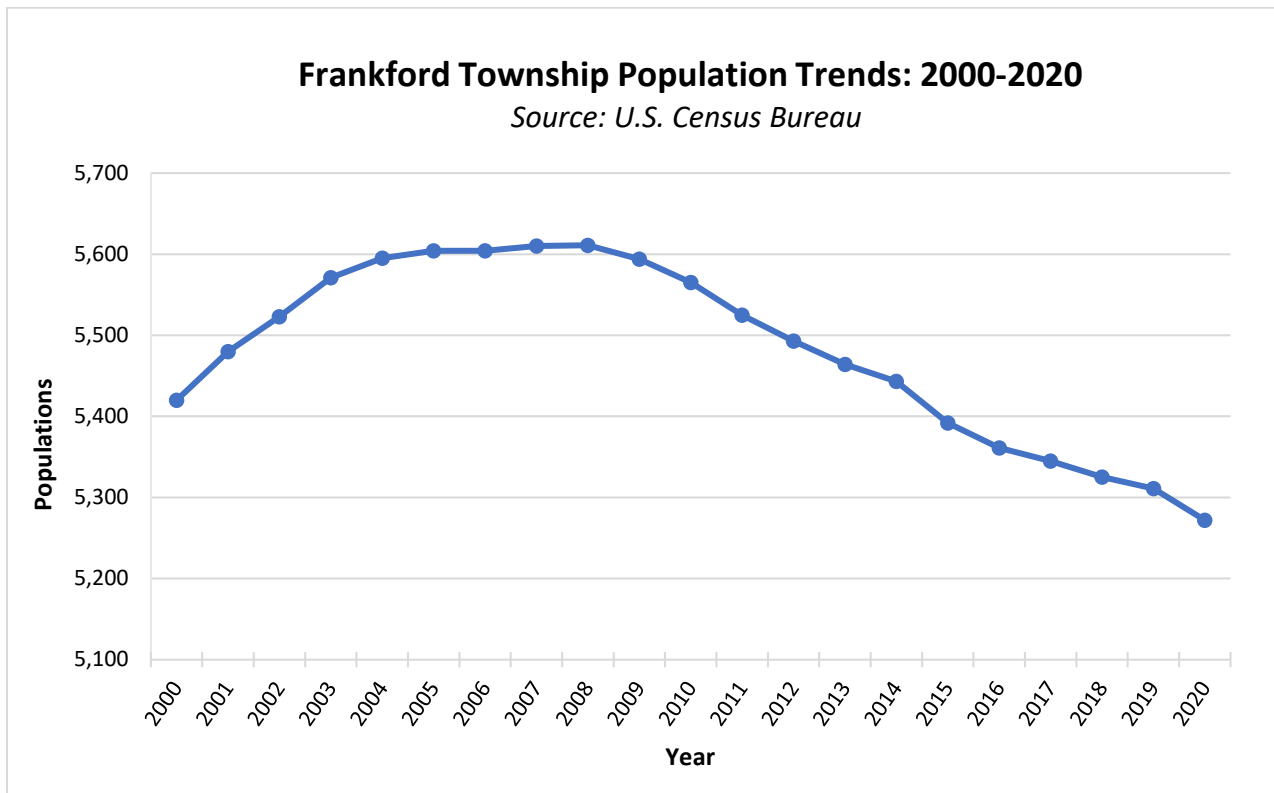
There are seven general permits which allow the continuation of agriculture activities, including soil erosion control, bank stabilization or bank restoration; channel cleaning, constructing a roadway across a water body, filling a manmade water body for freshwater wetlands restoration, creating a ford across a water body to manage livestock, constructing a fence across or along a water body to manage livestock, and constructing a pump or water intake for livestock, in otherwise regulated areas.

There are no ordinances in place that require buffers between agricultural land and non-agricultural land.<sup>16</sup> According to Section 30-513, buffers are only required in C2 and L1 zones when development abuts a zone boundary line or change in use, at the perimeter of all parking lots, and garbage collection areas, buffered by vegetation or greenery.<sup>17</sup>

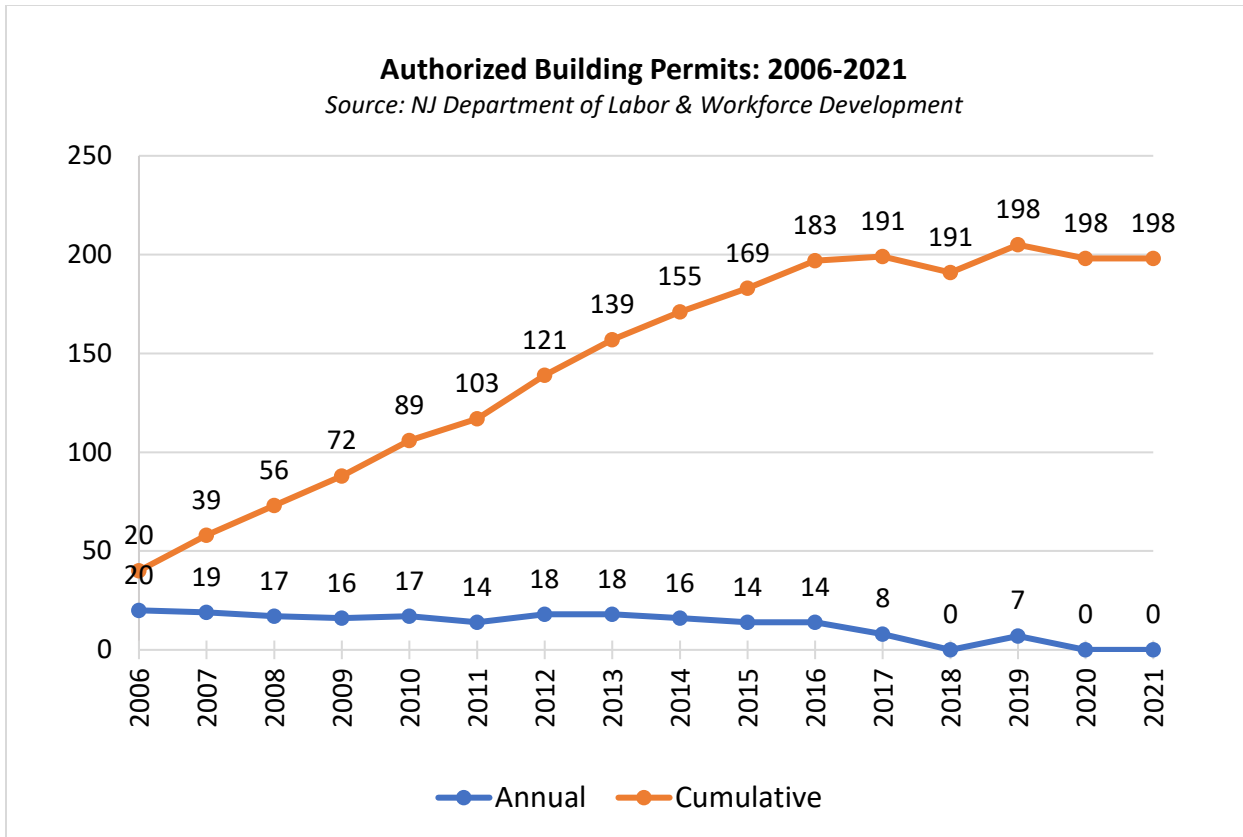
## 5. Development Pressures and Land Value

Frankford's current population, based on United States Census data, was 5,328 individuals in 2020.<sup>18</sup> This is a 4% decrease from 2010, consistent with what has been occurring county-wide with individuals leaving or not resettling back into the rural section of northern New Jersey. (Figure 15 and Table 12)

Since the economic recession of 2008, population of the Township has declined. In 2019, Frankford had 7 building permits, representing 4% of total county permits.<sup>19,20</sup> The residential permits approved in 2019 were 37% of the amount issued in 2007 (7 permits versus 19 in 2007), when permit numbers peaked.<sup>21</sup> (Figure 16) Sussex County has experienced a similar trend, issuing 24% of permits in 2019 compared to its numbers in 2000.<sup>22,23</sup>



**Figure 15. Population Trends (2000-2020)**



**Figure 16. Authorized Building Permits (2006-2021)**

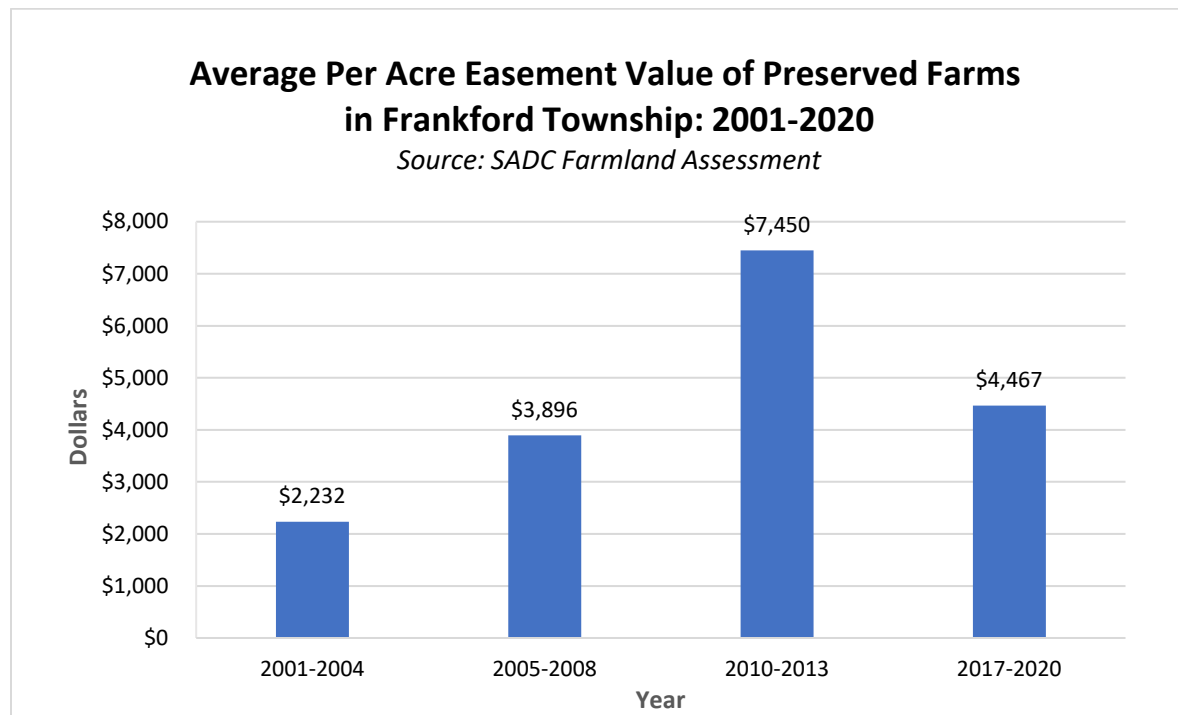
<b>Table 12. Population of Sussex County (2000-2020)</b>		
<b>Year</b>	<b>% Change</b>	<b>Population</b>
2000	-	144,166
2001	1.33%	146,078
2002	1.27%	147,936
2003	1.09%	149,553
2004	1.64%	150,360
2005	.27%	150,764
2006	.32%	151,250
2007	.25%	151,632
2008	-.13%	151,431
2009	-.21%	151,118
2010	-1.49%	148,859
2011	-1.45%	148,185
2012	-.80%	147,003



Table 12. Population of Sussex County (2000-2020)		
Year	% Change	Population
2013	-.91%	145,672
2014	-.71%	144,639
2015	-1.09%	143,059
2016	-.74%	142,004
2017	-.52%	141,267
2018	-.19%	140,995
2019	-.20%	140,710
2020	2.41%	144,221

*Source: U.S. Census Bureau*

From the perspective of land values, there has been a general trend downward in the per-acre easement values paid to preserved farms, to their 2008 levels. From the 2001 to 2004 period, the average value paid per acre was \$2,323, which rose to \$7,450 from 2010 to 2013. It has since dropped to \$4,467 from 2017-2020. Between 2001 and 2013, the average values rose, but begun to decline after 2013. (**Figure 17**)



**Figure 17. Average Per Acre Easement Value of Preserved Farms (2001-2020)**

## G. Density Transfer Opportunities

One program Frankford might consider is the *intra-municipal* TDR in which sending and receiving areas are located within the same town. Alternatively, *inter-municipal* TDR programs establish sending areas in one municipality and receiving areas in another. Some form of tax-based revenue sharing may be necessary with inter-municipal TDR programs.

*Regional* programs are an alternative that may be proposed at the regional or state level, such as the program introduced as part of the Highlands Regional Master Plan. The New Jersey TDR Bank and the Office of Planning Advocacy (Smart Growth) are facilitating TDR activities statewide. They offer Planning Assistance Grants and technical assistance to municipalities looking to establish municipal TDR programs and may provide funds for the purchase of development credits. The State TDR Bank will also provide financial banking on loans secured using development credits as collateral and keep records of all development credit transfers within the State. Frankford Township may benefit from participating in a TDR program, primarily as a Township with sending areas.



## ***Chapter 4. Farmland Preservation Program***

There are **10,928 acres** of farm-assessed land in Frankford Township.<sup>b</sup> (**Inventory Table 1** and **Map 2**) Farms in the Township have been preserved using a variety of programs, and the town remains firmly committed to farmland protection.

### **A. Sussex County Agricultural Development Area (ADAs)**

#### **1. Statutory and County Criteria**

The Sussex County Agriculture Development Board (CADB) developed the Sussex County Agriculture Development Area (ADA) based upon both statutory and county criteria. The ADA designates land that has the potential for long-term agricultural viability. This agricultural use would be the preferred, but not the exclusive, use.

- The land must be agriculturally productive or have future production potential. Also, zoning for the land must permit agriculture, or permit it as a nonconforming use.
- Suburban and/or commercial development must be reasonably non-existent in the proposed ADA area.
- The land must comprise of no greater than 90% of the agricultural land mass of the County.
- Any attributes deemed appropriate by the Board must also be incorporated.

Prior to 2007, the County had designated ADAs on a voluntary, case-by-case basis, including properties with a minimum of 40 acres or within a project area or reasonably contiguous to another application for farmland preservation.

- All farm assessed property in Andover, Frankford, Fredon, Green, Hampton, Hardyston, Lafayette, Montague, Sandyston, Sparta, Stillwater, Vernon, and Wantage Townships as cited by tax assessments as of July 2006.

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<sup>b</sup> *Note:* These numbers are determined by GIS parcel data analysis and thus differ slightly from the Farmland Assessment statistics referenced in Chapters 1 and 2, which derive from reports compiled by the New Jersey Division of Taxation based on filings from Township tax assessor.

- The ADA does not include farm assessed property that is in an existing sewer service area or designated center.
- Land is currently in agricultural production or has strong potential for agricultural production or is farm assessed through a woodland management plan.
- Agriculture is the preferred, but not necessarily the exclusive use.
- Agriculture is permitted by current municipal zoning ordinance or is a protected, pre-existing, non-conforming use. (*2008 Sussex County Comprehensive Farmland Preservation Plan Update*)

Utilizing the state’s regulatory criteria for designating ADA and existing farmland assessment data, the County designated an ADA on a county-wide basis that does not exceed 90% of the County’s agricultural land base

## 2. Agricultural Development Area – Frankford Township

Overall, there are **10,928 acres** of farm assessed parcels in Frankford Township. **Map 1** and **Map 2** show the farm assessed lands in the Township, including all preserved farms. There are **9,269 acres** included within the Sussex County ADA. Sussex County will soon update their *Comprehensive Farmland Preservation Plan* and reexamine their ADA, but until then the few target farms outside of the County ADA are not eligible for county or state cost share. A map of the location of the ADA in Frankford is included within **Map 4**.

## B. Farmland Preserved to Date by Program

As of July 2022, there are **23 farms** totaling **1,662 acres** preserved in Frankford Township, at an average cost of \$4,200 per acre. (**Table 13**)

- Frankford Township has spent a total of \$65,767, or approximately 1% of the total cost share.
- The State of New Jersey, through the SADC, has provided \$4,237,522.66, or approximately 60% of the total cost share.
- The County has spent a total of \$2,441,815, or approximately 35% of the total cost share.
- Other sources like the Federal Farm Bill provided \$271,701, or 4% of the total cost share.

Different programs have been used to preserve farmland in the Township:

- The County EP program has preserved 54% (897.28 acres) of farmland in Frankford.
- The County and Municipal PIG programs have preserved 21% (346.82 acres).
- Non-profits have helped preserve 15% of farmland (244.29 acres).
- The SADC State Acquisition Program protected nearly 10% (168.89 acres).

These programs are referenced in **Table 13**:

Muni PIG: Municipal Planning Incentive Grant program

County PIG: County Planning Incentive Grant program

County Fee: County Fee program

SADC Fee: State Fee Simple program

NP Fee: Non-Profit Fee Simple program

Highlands Grant: New Jersey Highlands Council Grant program

**Table 13. Preserved Farms in Frankford Township**

<b>Farm</b>	<b>Program</b>	<b>Year</b>	<b>Acres</b>	<b>Total Cost</b>	<b>State Cost</b>	<b>County Cost</b>	<b>Municipal Cost</b>	<b>Cost per Acre</b>
Cuneo, James A.	Cty EP	2001	54.04	\$98,583.66	\$74,194.99	\$24,388.67	\$0.00	\$1,900.80
Kelly, Patrick	Cty EP	2001	2.77	\$105,072.18	\$84,058.40	\$21,014.64	\$0.00	\$850.00
Jaeger, Alfred	Cty EP	2002	118.13	\$223,511.27	\$168,539.58	\$54,971.69	\$0.00	\$1,850.00
Neppl, Claus and Grace	Cty EP	2002	35.06	\$190,370.84	\$141,912.81	\$48,458.03	\$0.00	\$2,200.00
HMB Realty Corp/Henry & Helen Boheim	Cty EP	2003	86.02	\$211,219.01	\$156,833.71	\$54,385.30	\$0.00	\$2,352.00
Barnitt, Raymond	Cty EP	2004	45.77	\$147,481.40	\$109,940.68	\$37,540.72	\$0.00	\$2,200.00
GGE Ventures - Glenn Thomas	Cty EP	2004	76.00	\$220,756.70	\$162,141.99	\$58,614.71	\$0.00	\$2,900.00
Van Wingerden, William & Charmaine	Cty EP	2004	77.68	\$271,306.80	\$192,929.28	\$78,377.52	\$0.00	\$3,600.00
Tricer Mgt. - Nicholas Cerbo	Cty EP	2005	213.39	\$601,592.21	\$442,068.65	\$159,523.56	\$0.00	\$2,871.00
Sadlon, Carolyn	Cty EP	2005	109.41	\$381,940.65	\$272,690.39	\$109,250.26	\$0.00	\$3,510.00
Morris Land Conservancy/Stoll	NP EP	2008	39.28	\$186,333.00	\$55,899.90	\$130,433.10	\$0.00	\$4,750.00
The Land Conservancy of New Jersey\Bain Estate	NP Fee	2010	125.80	\$990,048.00	\$500,000.00	\$218,347.00	\$0.00	\$8,200.00
H.J. Hautau & Sons Inc. #1	CPIG	2011	30.90	\$373,666.80	\$216,423.90	\$157,242.90	\$0.00	\$8,500.00
H.J. Hautau & Sons Inc. #2	CPIG	2011	38.32	\$250,928.50	\$0.00	\$250,928.50	\$0.00	\$10,200.00
H.J. Hautau & Sons Inc. #3	CPIG	2011	37.12	\$325,053.00	\$0.00	\$325,053.00	\$0.00	\$9,000.00

**Table 13. Preserved Farms in Frankford Township**

<b>Farm</b>	<b>Program</b>	<b>Year</b>	<b>Acres</b>	<b>Total Cost</b>	<b>State Cost</b>	<b>County Cost</b>	<b>Municipal Cost</b>	<b>Cost per Acre</b>
Golden View Farm, LLC (The Land Conservancy/McCain)	NP EP	2013	74.23	\$315,978.60	\$157,989.30	\$157,989.30	\$0.00	\$4,200.00
Mazza, Mario/MC Land Trust of Frankford LLC	CPIG	2013	102.75	\$471,219.40	\$323,707.24	\$323,707.24	\$0.00	\$4,600.00
Sussex Co. Farm & Horse Show Assoc	Muni PIG	2017	44.10	\$197,421.60	\$136,817.76	\$30,301.92	\$30,301.92	\$4,300.00
Goldman Frankford Farm Partners	Cty EP	2017	90.96	\$398,967.80	\$271,949.48	\$127,018.32	\$0.00	\$4,900.00
Eisele, Ray & Dana	Muni PIG	2017	13.84	\$68,526.20	\$47,074.52	\$10,000.00	\$11,451.68	\$4,600.00
Gianattasio, Peter & Marcy	CPIG	2020	28.36	\$128,593.00	\$88,337.80	\$40,255.20	\$0.00	\$4,600.00
Grande, Antonio and Clara	SADC EP	2020	172.01	\$699,433.70	\$699,433.70	\$24,013.84	\$0.00	\$4,300.00
Williams, Donald E. - Estate of (Carriage House Farm)	Muni PIG	2020	44.08	\$158,801.20	\$110,773.52	\$24,013.84	\$24,013.84	\$4,100.00
<b>Total (23):</b>			<b>1,662</b>	<b>\$7,016,806.52</b>	<b>\$4,237,522.66</b>	<b>\$2,441,815.42</b>	<b>\$65,767.44</b>	<b>\$4,200</b>

Sources: SADC and Sussex County

Since the completion of the *2012 Farmland Plan*, **8 additional farms** have been preserved. Three farms were preserved with through the county program (County PIG and easement purchase), three were preserved using the Municipal PIG, one by a nonprofit organization, and one was preserved through the SADC's Easement Purchase program. A total of **570 additional acres** of farmland have been preserved since 2012.

There are currently no farms **pending preservation** in Frankford Township.



## 1. County Easement Purchase

County Easement Purchases (CEP) involve the sale of farmland development rights to the county by the landowner. To be eligible for the County Easement Purchase program, the land must be in the ADA and be eligible for farmland assessment. In Frankford, 11 farms have been preserved through the County Easement Purchase Program, protecting 909 acres of farmland.

## 2. County Planning Incentive Grants

The goal of County Planning Incentive Grants (PIGs) is to protect and preserve large pieces of contiguous farmland through the purchase of development easements. Sussex County completed their *2008 Comprehensive Farmland Preservation Plan Update* to bring it into compliance for the County Planning Incentive Grant program and plans to update the plan again to ensure compliance. In Frankford Township, five farms have been preserved through the County PIG program, protecting approximately 237 acres of farmland.

## 3. Municipal Planning Incentive Grants

Municipal Planning Incentive Grants (PIGs) are very similar to the County PIGs in their goals, requirements, and implementation. Like the County PIGs, Municipal PIGs require a local financial commitment for preserving farmland. They also require that the municipality have an active Right to Farm ordinance and maintain and updated *Farmland Preservation Plan* every 10 years. To qualify for this program, the municipality must have an agricultural advisory board and a source of funding for farmland preservation. Farms to be preserved through a municipal PIG need to be approved by the CADB. As part of a municipal PIG, the SADC funds 60% of the development easement purchase with the County and the municipality splitting the remaining cost.

Frankford Township is currently enrolled in the Municipal Planning Incentive Grant program. Frankford has three farms totaling 102 acres that were preserved through a municipal PIG program.

## 4. SADC Direct Easement Purchase

The SADC Direct Easement Purchase is a program that allows a landowner to apply directly to the SADC for the sale of development rights. In most cases, the State will pay up to 100% of the certified appraised easement value in the direct easement purchase program. In Frankford, one farm has been preserved through this program totaling in 172 acres.

## 5. SADC Fee Simple

A fee simple acquisition involves an entire property being purchased directly by the state. The SADC pays the survey and title costs, the landowner is exempt from paying rollback taxes for farmland assessment, and the transaction can be completed in a matter of months. The property is then resold at auction, and the SADC does not retain ownership. To participate in this

program, the farmland must be within an ADA, and be eligible for Farmland Assessment. In Frankford Township, this program has not been used to preserve farmland.

#### 6. Non-Profit Easement Purchase

In Frankford Township, two farms totaling 116 acres have been preserved through this program, with the State of New Jersey paying \$213,889.

#### 7. Non-Profit Fee Simple

In Frankford Township, one farm totaling 125 acres was preserved by The Land Conservancy of New Jersey through this program, with the State of New Jersey paying \$500,000.

#### 8. Transfer of Development Rights

TDR is a growth management tool that transfers development rights from one location, a sending or preservation area, to another, an identified growth or receiving area. To date, this program has not been used by Frankford Township to preserve farmland.

#### 9. Other Programs and Partnerships

*Highlands Grant Program* - To date, no farms in Frankford Township have been preserved using this program.

### C. Term Farmland Preservation Programs

The Term Farmland Preservation Programs are cost sharing programs for soil and water conservation projects, in which the farmer receives up to 50% of the costs for these projects, as well as protection against nuisance complaints, emergency fuel and water rationing, zoning changes and eminent domain actions. In return, the farmer signs an agreement that restricts the land to agricultural use for either eight years or sixteen years. For entrance into these programs and to qualify for benefits, a farm must be located within the county ADA. Technical assistance for the soil and water practices comes through the Natural Resource Conservation Service.

In Frankford Township, no farms currently participate in the Term Farmland programs.

### D. Coordination with Open Space Preservation Initiatives

Farmland preservation and the identification of targeted farms should be coordinated with open space planning efforts. Trail easements and adjacency to proposed and existing active recreational facilities are potential areas of concern for farmers. Frankford has a Municipal Open Space Trust Fund, which is used to preserve farmland and open space. The Township updated its *Open Space and Recreation Plan* in 2009.

## E. Farmland Preservation Program Funding Expended to Date by Source

The Frankford Open Space Trust Fund was approved in 1998 by voter referendum. The levy was set at \$0.015 cents per one hundred dollars (\$100) of assessed valuation and generated approximately \$143,800 annually through 2009. The levy was suspended in 2010 due to economic conditions but was reinstated in 2015 at a rate of \$0.01cents. Currently, the fund collects a tax of one-half cent (\$0.005) per one hundred dollars (\$100) of assessed property value. The Fund generated \$36,976 in 2021 and has a balance of approximately \$462,160 as of December 2021.<sup>24</sup> **Table 14** details the amount generated per year for the past seven years

<b>Table 14. Frankford Open Space Trust Fund</b>		
<b>Year</b>	<b>Tax Rate</b>	<b>Amount Generated</b>
2015	0.0100	\$72,305
2016	0.0100	\$73,138
2017	0.0100	\$73,078
2018	0.0100	\$73,138
2019	0.0100	\$73,425
2020	0.0100	\$73,452
2021	0.005	\$36,976

To date, the Township has expended \$590,171 in funds from their municipal Open Space Trust Fund to cover the costs of appraisals, survey, and title work on pending farmland preservation projects.

## F. Monitoring the Easements

The SADC monitors those properties protected through SADC Direct Easement and Fee Simple programs. Sussex County monitors all other properties to verify that compliance with the deed restrictions on the preserved property is taking place. The Township’s AAC will notify the Sussex CADB if violations are suspected. Sussex County performs annual inspections of the preserved farmland property. The inspectors take note of the following:

- Change in ownership since the previous inspection
- Evidence of non-agricultural development (approved or otherwise)
- Use of the premises for agricultural activities
- Expansion of non-agricultural activity since the previous inspection
- If the non-agricultural practice has been abandoned
- Evidence of excessive erosion, mining, or removing of materials such as sand, gravel, rock, etc.
- Evidence of dumping
- Whether or not the farm has an approved conservation plan
- Any improvements to farm buildings and residences
- Any new agricultural buildings erected

## G. Coordination with Transfer of Development Rights Programs

TDR may be used in conjunction with the traditional Purchase of Development Rights (PDR) program; these two programs are not mutually exclusive. As previously discussed, Frankford Township is not currently enrolled in or developing a TDR program.



**Chapter 5. Future Farmland Preservation**

**A. Preservation Goals**

Frankford Township is 34.8 square miles (22,585 acres) in size. Of this, **10,928 acres** are under farmland assessment, which includes croplands, woodlands, farm structures and wetlands/waterways that occur on an agricultural property. Since 2000, Frankford Township has preserved **1,662 acres** of farmland. Of the total farm assessed acres in Frankford, **4,525 acres** are in active agricultural land. Based upon the State’s Minimum Eligibility Criteria for productive soils and tillable land, **3,618 acres** are potentially eligible for farmland preservation in Frankford Township and are located within the ADA.

In Frankford, these are the “targeted” farms through the municipal Planning Incentive Grant program. This analysis was done on a farm unit (where a farm consists of a collection of individual lots) and a farm parcel (one lot) basis.

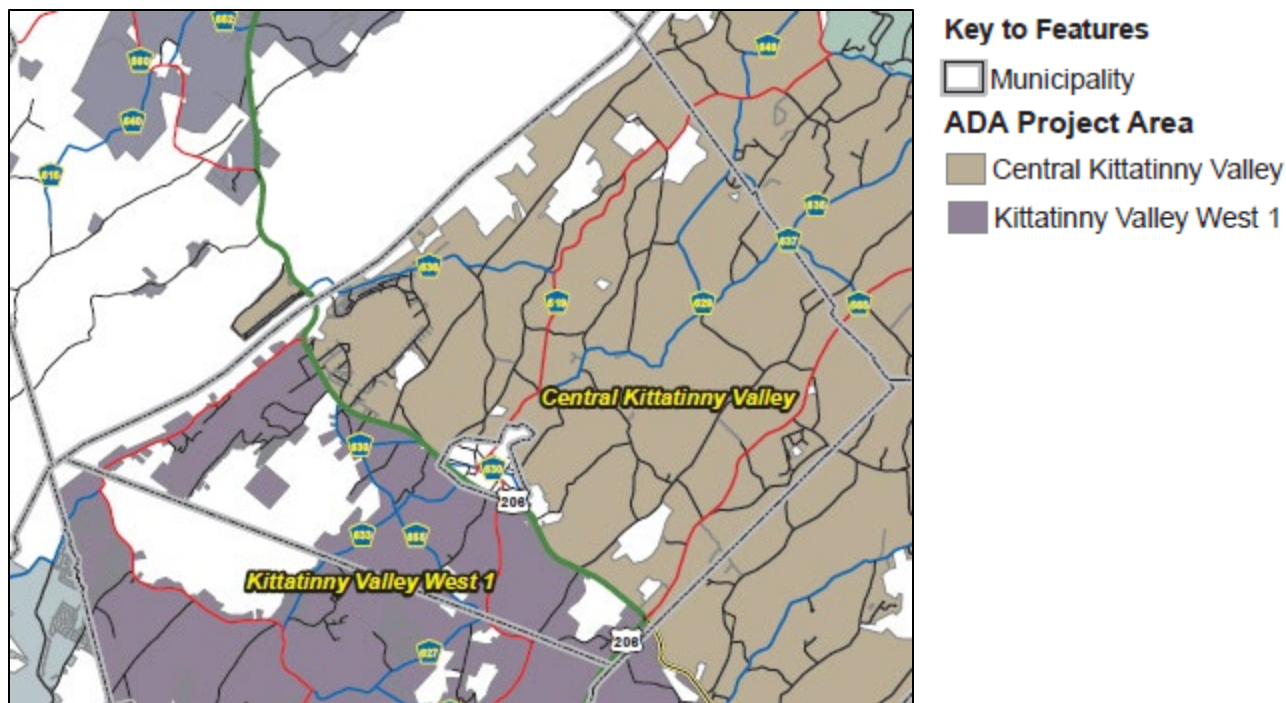
Based upon the available funding to purchase and preserve farmland, and the amount of farmland potentially eligible for preservation, the following preservation goals are identified for Frankford Township:

One-year target:	100 acres, 1 farm
Five-year target:	500 acres, 6 farms
Ten-year target:	1,000 acres, 10 farms

**B. Description of Project Areas**

As part of its *2008 Comprehensive Farmland Preservation Plan Update*, the Sussex CADB identified ten project areas within the County’s ADA for farmland preservation. The majority of Frankford north of Route 206, is part of the **Central Kittatinny Valley Project Area**. Much of Frankford south of Route 206 is part of the **Kittatinny Valley West 1** project area. (**Figure 18**)

There are **10, 928 acres** of farm assessed land in Frankford Township. Of this, **9,269 acres** are included within the County’s ADA. (**Table 15**) Within the County’s ADA **3,630 acres** are in active agriculture in Frankford Township.



**Figure 18. Sussex County Project Areas**  
*2008 Comprehensive Farmland Preservation Plan*

<b>Table 15. ADA in Frankford (Acres)</b>				
	<b>Total Farm Assessed Properties</b>	<b>Unpreserved Farmland</b>	<b>Preserved Farmland</b>	<b>Preserved Farm Assessed as Farmland</b>
Frankford	10, 928	9,269	1,659	1,659
Sussex County ADA	9,269	7,764	1,505	1,505

### C. Minimum Eligibility Criteria

Minimum Eligibility Criteria are based upon the SADC’s rules for farmland preservation and project eligibility.<sup>c</sup> In order to be eligible for preservation the site must be developable, have soils capable of supporting agricultural or horticultural production, and meet minimum tillable land standards. (N.J.A.C. 2:76-6.20) In summary:

*For all lands less than or equal to 10 acres:*

- The land must produce at least \$2,500 worth of agricultural or horticultural products annually; and
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be tillable; and
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be capable of supporting agriculture or horticulture; and

<sup>c</sup> Adopted by the SADC May 21, 2007, and July 25, 2019.



- The land in question must exhibit development potential as defined by the SADC (based upon zoning, ability to be subdivided, less than 80% wetlands, less than 80% slopes of 15% or more); or
- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

*For lands greater than 10 acres:*

- At least 50% or a minimum of 25 acres of land (whichever is less) must be tillable; and
- At least 50% or a minimum of 25 acres of land (whichever is less) must have soils capable of supporting agriculture or horticulture; and
- The land in question must exhibit development potential as defined by the SADC; or
- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

For a farm application to qualify for SADC cost share, the farm must have at least one parcel listed on the targeted farm list; comprise an assemblage of substandard parcels which together meet SADC minimum standards; or have sufficient justification by the municipal FPC and the Sussex CADB that the parcels were not identified as targeted due to a specific mapping issue or other error.

The Township may proceed without State funding on projects that do not meet these Minimum Eligibility Standards, but as a rule, the County and Frankford will not cost share on applications that do not meet SADC minimum standards. In all cases, the Frankford Township AAC will work closely with the Sussex CADB to review and process applications from landowners for farmland preservation. The Frankford AAC will follow all County and State procedures to ensure consistency in application review and processing.

Within the identified project areas, candidate farms are identified which meet the tillable land and soils minimum eligibility standards. To determine farms that are potentially eligible for preservation, a series of queries were made utilizing the ArcGIS 10.8.1 digital mapping software for soils and tillable land. These are described in further detail below and shown on target farm analysis maps, **Map A** (meeting tillable criteria), **Map B** (meeting soil criteria), **Map C** (farms meeting both criteria – target farms).

*Farmland that meets the SADC Criteria for Tillable Land*

Tillable acreage was determined using the NJDEP 2015 Land Use/Land Cover mapping for agricultural lands. The land categories that are defined as the “tillable land” based on the 2015 NJDEP Land Use/Land Cover, are as follows:

- Agricultural Wetlands (Modified)
- Confined Feeding Operations
- Cropland and Pastureland
- Former Agricultural Wetland
- Orchards/Vineyards/Nurseries/Horticultural Areas
- Other Agriculture

Farm parcels were sorted by size based upon the SADC Minimum Eligibility Criteria for tillable land:

<u>Farm Size</u>	<u>Requirements</u>
0-6.667 acres	75% tillable
6.667-10 acres	5 acres tillable
10-50 acres	50% tillable
50+ acres	25 tillable acres

Farms which meet the minimum eligibility criteria for tillable land in Frankford are shown on **Map A**.

*Farmland that meets the SADC Criteria for Agricultural Soils*

Agricultural soils as defined by the SADC are those soils capable of supporting agricultural or horticultural production. The use of the NRCS Soil Survey identifying prime, statewide, and unique agricultural soils is the first and best indication of the farmland soils. The interpretation of the tillable land layer from the NJDEP Land Use/Land Cover data (including pastureland) is the second screen for soils capable of supporting agriculture with the following provisions:

- It is best to make determination of soils capable of supporting agriculture on a site-specific basis (that is for individual submitted applications);
- For farmland planning, on a municipal and county basis, the tillable land layer can also be used to show general areas of farmland potentially eligible for preservation if it is noted that this picture of farmland would need to be confirmed on an individual basis by studying:
  - ✓ Practices the individual farmer has made to farm the land
  - ✓ Amount and location of steep slopes on the farm
  - ✓ Number of stony/gravelly soils on the farm

The SADC has agreed that soils capable of supporting agricultural production are those classified as agricultural by the NRCS Soil Survey or identified as tillable by the NJDEP Land Cover/Land Use mapping.<sup>25</sup>

Farm parcels are sorted on size based upon the SADC Minimum Eligibility Criteria for soils:

<u>Farm Size</u>	<u>Requirements</u>
0-6.667 acres	75% soils capable of supporting agricultural production
6.667-10 acres	5 acres of soils capable of supporting agricultural production
10-50 acres	50% soils capable of supporting agricultural production
50+ acres	25 acres of soils capable of supporting agricultural production

Farms that meet the NRCS minimum eligibility criteria for soils are shown on **Map B**.

*Farmland that meets SADC Criteria for both Tillable Land and Soils*

Using the tillable acreage determined from the NJDEP 2015 Land Use/Land Cover mapping for agricultural lands and soil acreage determined using the NRCS Soil Survey for prime farmland soils, soils of statewide importance and soils of unique importance, farm parcels were sorted by

size based upon the SADC Minimum Eligibility Criteria for tillable land and soils. Farms in Frankford that meet the minimum eligibility criteria are shown on **Map C** and listed in **Inventory Table 2**. In Frankford, this analysis was run on both an individual farm parcel basis and for units of farms (which include a collection of parcels):

- ✓ Farm Parcel: Individual tax lot
- ✓ Farm Unit: Collection of parcels comprising one farm

Overall, there are **3,618 acres** of farm assessed land which meet the minimum eligibility criteria for the state’s farmland preservation program and are located within the ADA. These are the “target farms” for Frankford Township. (**Table 16**) More detailed information can be found in **Inventory Table 2**.

Properties located within the Town Center are not identified as target farms and are excluded from the analysis. Farm parcels which meet the eligibility guidelines and are located outside of the County ADA, are also not included as target farms. If the owners of these lots wish to preserve their farms, the Township will ask the CADB to consider amending the County ADA so these farms could be included as target farms and preserved through the county and state programs.

**Table 16. Target Farms in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Location</b>	<b>Acres (GIS Data)</b>
<i>Farm Parcels which have not been identified as part of a farm unit</i>			
1	11	15 LOSEY RD	14.84
7	4	27 FENWICK RD	104.50
8	6	8 FENWICK RD	10.56
9	11	7 LINN SMITH RD	17.64
9	6.01	137 PLAINS RD	16.72
9	6.02	139 PLAINS RD	15.07
9	6	129 PLAINS RD	27.97
9	7	117 PLAINS RD	32.45
10	1	578 COUNTY ROUTE 565	31.40
10	2	8 LINN SMITH RD	20.12
10	3.02	18 LINN SMITH RD	12.55
10	3.05	81 PLAINS RD	19.63
18	18.03	18 AUGUSTA HILL RD	9.93
18	18	12 AUGUSTA HILL RD	7.18
18	19.02	44 AUGUSTA HILL RD	18.04
18	19.03	63 PRICE RD	28.36
18	19	71 PRICE RD	11.22
19	11	207 COUNTY ROUTE 519	16.98

**Table 16. Target Farms in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Location</b>	<b>Acres (GIS Data)</b>
19	24	167 US HIGHWAY 206	20.28
19	9	59 NEWTON AVE	96.63
2	3	214 PLAINS RD	99.77
24	4	57 FOX HILL RD	26.06
25	14.02	84 GEORGE HILL RD	14.47
25	4	24 FOX HILL RD	60.21
27	4	62 PLAINS RD	13.71
27	7	86 PLAINS RD	6.53
29	18	144 PLAINS RD	70.50
30	3.03	79 GEORGE HILL RD	10.45
30	4	101 GEORGE HILL RD	90.61
30	6	105 WYKERTOWN RD	35.09
31	12	63 WYKERTOWN RD	13.47
32	2.01	73 HYATT RD	6.82
34	2	200 PLAINS RD	71.38
37	1	57 DALRYMPLE RD	20.48
37	2.01	56 HAGGERTY RD	29.05
38	4	269 WYKERTOWN RD	132.71
38	8.03	26 DALRYMPLE RD	11.88
38	8	14 DALRYMPLE RD	19.73
41	8	191 DENNIS PHILLIPS RD	129.69
42	4	296 MATTISON RESERVOIR AV	84.69
44.01	1.04	4 PERRY RD	8.86
44.01	3.05	30 WYKERTOWN RD	6.92
44	8	38 GUNN RD	6.04
45	1	30 PERRY RD	19.20
46	4.03	93 PHILLIPS RD	5.73
46	4	83 PHILLIPS RD	8.81
48	18	67 MATTISON RD	103.56
48	20.06	63 MATTISON RD	30.41
55	18	223 MORRIS TNPK	11.19
68	2.06	321 MATTISON RESERVOIR AV	11.28
<b>Total Farm Parcel Acreage (50 farm parcels):</b>			<b>1,692 acres</b>

<b>Farm Parcels that are part of a Farm Unit</b>			
<b>Block</b>	<b>Lot</b>	<b>Location</b>	<b>Acres (GIS Data)</b>
5	2,3	95 FENWICK ROAD	44.38
12; 7	2.01; 3	579 COUNTY ROUTE 565	72.29
32; 33; 38	17; 5; 6	Wykertown and Haggerty RD	204.16
35	4.04, 4.05	Beemer Church Rd	9.62
28; 29; 30	2.02; 12; 2.01, 2.02	Dickerson Ln & George Hill Rd	57.20
48	20.02, 20.03, 20.04	Rosyln and Mattison Rd	21.15
25; 26	16; 3	Pines Rd	157.51
3	2, 11	CR 565 and Plains Rd	81.85
39	7, 9.02	Wykertown Rd	74.47
29	16.02, 16	Plains Rd	147.68
66; 68	11; 6.04, 7, 9.01, 14	Mattison Rd, Upper North Shore Rd, Risdon Dr, Mattison Res. Ave	378.54
8; 9	2.02, 2.03, 2.05, 2; 2, 3	County Rt 565	137.22
3; 29; 30; 32	4; 1, 11; 1; 9	Plains Rd, Dickerson Rd, Wykertown Rd	506.66
18	18.01, 18.02	Augusta Hill Rd	16.66
26	15, 17	US HWY 206	16.40
<b>Total Farm Unit Acreage (15 farm units):</b>			<b>1,926 acres</b>
<b>Total Target Farms:</b>			<b>3,618 acres</b>

Based upon the available funding to purchase and preserve farmland, and the amount of farmland potentially eligible for preservation the town has identified the following goals:

- One-year target: 100 acres, 1 farm
- Five-year target: 500 acres, 6 farms
- Ten-year target: 1,000 acres, 10 farms

#### D. County and Municipal Ranking Criteria

The Sussex CADB uses the SADC’s ranking criteria as the basis for qualifying farms for preservation. The County would consider cost sharing with the Township on applications that do not meet the SADC minimum standards on applications that have compelling factors including (but not limited to) adjacency to other preserved farms or fit into the plan for the County for farmland preservation.<sup>26</sup> In these special cases the CADB may use its own ranking sheet to determine each of the following for individual applicant farms:

- the quality of the local soils
- total tillable acres available
- local buffers and boundaries
- zoning
- County growth and existing infrastructure

- municipal commitment to agriculture
- other financial commitment to agriculture

Points are received in each category relevant to the suitability of the local conditions for agriculture. The higher the score received, the higher the ranking. For the municipal PIG program, the Sussex CADB uses the SADC Minimum Eligibility Criteria as the basis for participating with the local municipality.

Frankford AAC and Township Committee are committed to preserving as much of the Township’s agricultural land base as possible and supports innovative funding mechanisms and preservation tools. The AAC follows criteria that is consistent with Sussex County and the SADC.

## E. Municipal and County Policies Related to Farmland Preservation Applications

Frankford Township follows the policies established by Sussex County regarding housing opportunities, division of premises, and exception areas. These policies are documented in the *2008 Sussex County Comprehensive Farmland Preservation Plan Update*. The Sussex CADB follows the SADC’s policies regarding these issues.

### 1. Approval of Housing Opportunities

Agricultural labor housing is not currently protected under the Right to Farm Act in the State of New Jersey and the SADC has not, to date, adopted an official policy for agricultural labor housing.<sup>27</sup> However, the SADC recognizes the need for this type of housing and does have guidelines that a landowner must refer to construct labor housing on preserved farms for work on the preserved farm.

The guidelines are:

- Agricultural labor housing must be permitted with approval of easement holder and the SADC.
- Must verify need for “production” aspects of farm.
- Must be full time employed on the premises (seasonal labor is permitted).
- Structure must be sized appropriately based on labor needs.
- Cannot be used for owner or any lineal descendant of owner.<sup>28</sup>

### House Replacement

The policy of the SADC on house replacement is that requests for replacement of a residence on permanently preserved land must be reviewed and approved on an individual basis by the CADB and the SADC, to minimize the impact on the agricultural operation. This is supported by the CADB and AAC for Frankford Township.



## **Residual Dwelling Site Opportunity Allocation**

Residual Dwelling Site Opportunities (RDSOs) are lingering potential housing prospects located within a deed-restricted farm. By designating an area as an RDSO, the landowner is implying that the land will be used for a residential unit or other structure as referred to in N.J.A.C. 2:76-6.17. The maximum RDSO density is one residence per 100 acres. The purpose of the building in question must be for “single-family residential housing and its appurtenant uses.”<sup>29</sup> To qualify as an RDSO, the SADC requires that the use of the residential unit be for agricultural purposes and “at least one person residing in the residential unit shall be regularly engaged in common farm site practices.” This is supported by the Frankford Township AAC and Sussex CADB. RDSO units must be requested at the time of application and approved by the WCADB and SADC prior to closing according to SADC Policy P-31.

### 2. Division of the Premises

The goal of the SADC, supported by the Sussex CADB and Frankford Township AAC, is to preserve large tracts of farmland. The division of the premises by way of subdivision may significantly alter the potential use of the preserved land. Therefore, a division of the premises is not an encouraged practice; however, when division occurs it must be for agricultural purposes and must result in agriculturally viable land parcels. A landowner wishing to divide permanently preserved farmland must submit a written request. The application must be approved, in writing, by both the State Agriculture Development Committee and the CADB.

### 3. Approval of Exception

Exceptions are defined by the SADC as “areas within a farm being preserved” which are “not subject to the terms of the deed of easement.” When an exception is made, the landowner does not receive any compensation in the excepted area. The SADC discourages the preservation of farms that do not have at least one exception, and it is important to take the number, size, location, and purpose of the exception into consideration. Exceptions may be granted in some circumstances, especially in the case of non-severable exceptions, or where the exception might be justified (e.g., to allow for the expansion of pre-existing non-agricultural uses, for trail easements, etc.). It is critical to make decisions about exceptions at the time of application, as exceptions cannot be granted, expanded, or moved once the farm has been preserved. There are two types of exceptions that can occur: severable and non-severable.

*Severable:* A severable exception is defined by the SADC as an “area that is part of an existing Block and Lot owned by the applicant which will be excluded from the restrictions of the Deed of Easement and may be sold as a separate lot in the future.”<sup>30</sup> Typically, there is “no requirement to subdivide a severable exception prior to or after the deed of easement is executed.”

*Non-severable:* Non-severable exceptions are defined by the SADC as “area that is part of an existing Block and Lot owned by the applicant, which will not be subject to the restrictions of the Deed of Easement but cannot be sold separately from the remaining premises.”<sup>31</sup>

Exceptions made to farmland have the potential to impact the value of the property. When an appraisal occurs, both severable and non-severable exceptions are considered in the determination of the restricted/after value of the property. The Sussex CADB and Frankford Township AAC follow the exception policies as identified by the SADC. The AAC will work with applicants to the municipal PIG program to minimize the impacts of exception requests on the agricultural operation to the greatest extent possible.

## F. Funding Plan

The Preserve New Jersey Act of 2014 established that a portion of the Corporate Business Tax was to be dedicated to preservation efforts. Of this revenue, 62% is allotted to Green Acres, 31% is set aside for farmland preservation, and the remaining 7% goes to Historic Preservation.<sup>32</sup>

### 1. Municipal and County Funding Sources

The Sussex CADB is responsible for administering the county's farmland program. Prior to the establishment of the dedicated Trust Fund, Sussex County funded farmland preservation through a \$3 million bond issued in 1987. The **Sussex County Open Space and Farmland Preservation Trust Fund** was established in 2000, with the support of 73% of the voters. The Trust was initially set at two cents. In 2005 the voters of Sussex County approved a second dedicated fund of one and one-half cents. This second source of funding is competitive and is shared between open space and farmland preservation. The initial 2000 Trust Fund was established with a sunset provision; its term of collection lapsed in January 2009.<sup>33</sup>

Sussex County's Open Space Trust Fund tax rate is currently (2022) set at \$0.0022 (slightly less than 1/4 cent) and collects an annual levy of \$395,000. The Trust Fund has enabled Sussex County to preserve 20,946 acres of land. In 2022, the funds were allocated as follows:

- \$225,000 for development of lands for recreation and conservation (salaries & expenses)
- \$120,000 for maintenance of lands for recreation and conservation (expenses)
- \$50,000 for acquisition of lands for recreation and conservation<sup>34</sup>

As of December 2022, the Trust Fund has collected \$39.2 million, and expended \$36.8 million. Frankford Township is eligible to apply to the Trust Fund for land acquisition grants.

The **Frankford Open Space Trust Fund** was approved in 1998 by voter referendum. The levy was set at \$0.015 cents per one hundred dollars (\$100) of assessed valuation through 2009 and generated approximately \$143,800 annually through 2009. Currently, the Fund collects \$0.005 (1/2 cent) and generated \$36,981 in 2022.<sup>35</sup> The balance (as of December 2022) is \$451,330.<sup>36</sup> Allocations of funds from the Trust is under the purview of the Township Committee, which evaluates each initiative on merit. Historically, the Committee has tended to give priority to farmland, followed by open space, recreation development, then historic preservation.

### 2. Financial Policies – Cost-Share Requirements

Frankford works with Sussex County according to its current cost-share requirements for preserving farms. The Sussex CADB will fund one-half of the difference between the amount the

SADC funds and the total cost for preserving a farm, based upon the Certified Market Value (CMV), through the municipal PIG program. The remainder is funded by the municipality. Frankford Township is supportive of donation/bargain sales and installment purchases. Both tools serve to leverage limited funding resources.

*Donation and Bargain Sale:* This mechanism for preserving a farm involves donation by the landowner. If the landowner donates a portion of the value of the development rights when an easement is sold, this is called a bargain sale. A bargain sale can result in substantial tax savings for the landowner and can stretch farmland preservation funds. The landowner donation is a reduction in the amount of gain that is subject to the capital gains tax, and the landowner can take a tax deduction for the amount donated against his or her federal and state income taxes.

*Installment Purchase:* Through an installment purchase agreement, development rights may be acquired by the Sussex CADB through a payment plan that provides payments to the landowner over time. Receiving the income from the sale in installments may provide the landowner with financial management and/or tax advantages.

### 3. Cost Projections and Funding Plan Associated with Preservation Goals

The Frankford Township Trust Fund generates approximately \$67,930 per year and has a current balance of \$462,160. The average cost was \$4,200 to purchase a development easement on farms in the municipality. However, the cost of land has risen since the earliest acquisitions were made, affecting the cost per acre for future acquisitions. The Township looks to leverage the municipal funds with county and state cost-share grants on farmland projects. It is anticipated that the municipal cost share will average 15% (at a minimum). The following assumptions can be made:

- The Trust Fund generates \$67,930 per year.
- Average price per acre is \$4,200 per acre.
- The average price per acre will increase 5% over the next five to ten years.
- The town is purchasing land in partnership with county and state (no direct purchase).
- The municipal cost share is on average 15%.

Based upon the above assumptions and the AAC's goal of preservation ten farms (1,000 acres) in the next ten years, it is anticipated that the Township will have a total project cost of \$4,200,000 and contribute \$630,000 over the same time, if their percent contribution remains at 15%. If it increases to 30%, the municipal share will be \$1,260,000.

Utilizing the SADC sliding scale for cost-sharing, and the estimated per acre value of the purchase of a farmland easement in Frankford Township, it is likely that the state will contribute approximately 60% of the funding on a municipal PIG project with the County and Township contributing the remaining 40% (split equally, 20% and 20%).

## G. Administrative Resources

### 1. Staff/Consultant Resources

The AAC meets as needed to discuss farmland projects and issues. The Land Conservancy of New Jersey assists Frankford Township with their farmland program.

### 2. Legal Support

Legal support for Frankford Township's farmland preservation program is provided by the municipal attorney, up to the point of contract signature, after which the county attorney is used.

### 3. Database Development

The AAC maintains the database of farmland in the municipality and works with the Sussex County Department of Land Preservation on projects and data issues, as needed.

### 4. Geographic Information System (GIS) Capacity

The Land Conservancy of New Jersey has provided Geographic Information System mapping services for Frankford Township for the *Comprehensive Farmland Preservation Plan Update*.

## H. Factors Limiting Farmland Preservation Implementation

Frankford Township has a strong commitment to preserve its farmland. The high rate of farmland preservation in Frankford Township has been attributable to the willingness and the ability of the Township to leverage its own funding to protect farmland. Frankford Township strongly supports the municipal PIG program.

The biggest deterrent to farmers participating in farmland preservation at this time include:

- ✓ The low value of development rights, which have declined over time.
- ✓ The length of time it takes to go through the process.
- ✓ Concern over the state imposing new rules once a farm is preserved.



## ***Chapter 6. Economic Development***

### **A. Economic Development Plans and Initiatives**

The farmland preservation program is a critical component of the farming industry, and the success of the farmland preservation program in Frankford Township is measured not just by acres preserved but also by the programs put in place to support the farmers and their businesses. To be a full partner in a successful farmland preservation program, agriculture as an industry must be vibrant, self-sustaining, and innovative.

The future of agriculture in Frankford Township is shaped by market forces and social trends that are occurring throughout New Jersey. The combination of traditional agricultural markets declining and land costs increasing will likely promote innovation in the ways farmers supplement their incomes. As traditional farming practices become less economically feasible, exploring opportunities for niche farming will be increasingly important for Frankford Township farmers.

New Jersey offers Frankford Township farmers several support agencies and programs ranging from technical advice to farm loans. The NJDA *Smart Growth Tool Kit* provides information to support municipal and county government, businesses, non-profit groups, and local citizens in their efforts to achieve the goals and objectives outlined in the NJDA *Agricultural Smart Growth Plan for New Jersey, 2006*.<sup>37, 38</sup> The Tool Kit embraces the five linked components that have been identified by NJDA as critical for the future of farming: Farmland Preservation, Innovative Conservation Planning, Economic Development, Agriculture Industry Sustainability, and Natural Resource Conservation. Additionally, the NJDA released a *2011 Economic Development Strategies* report to expand and strengthen various sectors of the agriculture industry in New Jersey, including strategies for produce, horticulture, dairy, livestock and poultry, field crops, organic, equine, and agritourism.

As part of this emphasis on the business of agriculture, the *2011 Economic Development Strategies* identifies and proposes methods to expand and enhance various subsets of the agriculture industry in New Jersey, including produce, horticulture, aquaculture and seafood, dairy, field and forage crops, livestock and poultry, organic, wine, and agritourism. The NJDA observes that “local access to large affluent markets has long been an advantage for the marketing of [those] products. While our markets are still there, competition has become

tougher. New Jersey...must continually work to rediscover its competitive advantages, improving access to nearby markets and strengthening consumer loyalty.”<sup>39</sup>

In 2017, 35 of Sussex County’s 1,008 farms, or 3.5% of all farms, had sales of more than \$100,000, accounting for 62% of the total revenue. This leaves 97% of farms accounting for 38% of the remaining total sales, indicating a wide disparity in revenue between a large majority of smaller farms and a small minority of larger farms. From a profitability standpoint, Sussex County farms had a net cash farm income of -\$992,000 in 2017. The average farm market value of \$18,081, was lower than the statewide average of \$111,095.<sup>d</sup> (Table 17)

<b>Table 17. Sussex County Agricultural Economic Overview</b>			
	<b>2007</b>	<b>2017</b>	<b>% Change to 2017</b>
Market Value/Products Sold (\$1,000)	\$21,242	\$18,226	-14%
Average/Farm (\$)	\$20,040	\$18,081	-10%
Production Expenses (\$1,000)	\$25,917	\$24,532	-5%
Average/Farm (\$)	\$24,450	\$24,339	-0.5%
Net Income (\$1,000)	1,342	-992	-174%
Average/Farm (\$)	1,266	-984	-178%
Farms w/Net Gains	362	351	-3%
Average/Farms (\$)	\$25,445	\$26,068	2%
% of All of Farms	34%	35%	3%
Farms w/Net Losses	698	657	-6%
Average/Farm (\$)	\$11,273	\$15,436	40%
% of All of Farms	66%	65%	2%
Total Acres	65,242	59,766	-8%
All Farms	1,060	1,008	-5%
Average Acres/Farm	62	59	-5%

*Source: Census of Agriculture*

A look at market sectors in Sussex County shows that crop sales climbed steadily from \$8.1 million in 2002 to \$11.8 million in 2007, before slightly decreasing to \$11.6 million in 2012 and dropping again to \$10.8 million in 2017. Within the crop sector, hay and other crops was the largest sub-sector in 2017 with 30% of the market share, more than the 10% market share in 2012. The nursery/greenhouse sub-sector came in second with 18%, vegetables and grains were third with 17%, and fruits and Christmas trees lagged at 14% and 2% respectively.

<sup>d</sup> *Census of Agriculture* data is available through the USDA NASS portal, accessed here: <https://www.nass.usda.gov/AgCensus/index.php> or through specialized searches on the Quick Stats interface accessed here: <https://quickstats.nass.usda.gov/>. Citations throughout this document refer to information gathered from these sources for the indicated years.



Over this same 15-year period (2002-2017), livestock sales were \$6.7 million in 2002 before increasing to \$9.4 million in 2007 and declining to \$7.4 million in 2017.

Using recommendations outlined in the *2011 Economic Development Strategies* report, Sussex County municipalities including Frankford Township, can investigate ways to expand and/or diversify into more profitable sectors to ensure sustainable agriculture practices and profitability. For each of the sectors, the 2011 report encourages farmers to continually seek new local, state and interstate markets to strengthen market share. Frankford Township had 266 Farmland Assessment forms for Tax Year 2018.<sup>40</sup>

### **Produce**

Major efforts by the NJDA are directed at increasing the demand for New Jersey grown produce through branding, agritourism, farm direct sales programs, and farm markets. The NJDA *2011 Economic Development Strategies* include all these activities. NJDA is committed to promoting agritourism through the *Jersey Fresh* website, the distribution of printed materials, and other forms of advertisement and promotion including collaborating with Rutgers University through the New Jersey Agricultural Experiment Station (NJAES-RCE), and promotion of the work of other organizations such as the New Jersey Farmers Direct Marketing Association. Frankford Township farms with appropriate activities benefit from such promotion.

The NJDA *2011 Economic Development Strategies* for produce focused on the *Jersey Fresh* program and food safety. NJDA's *Jersey Fresh* labels program is promoted throughout the state to strengthen the appeal of the *Jersey Fresh* brand to supermarket chains and other retailers. This has been largely successful, with major retailers such as Wegmans, ShopRite, Trader Joe's, Targets, ACME and Foodtown (among others) carrying and promoting produce from the *Jersey Fresh* program.<sup>41</sup>

Produce, which includes vegetables and fruits, is a leading agricultural commodity in New Jersey. In 2017, Sussex County vegetable growers on 101 farms harvested 564 acres, with resulting sales of \$1,877,000. Fruit, tree nut, and berry combined sales totaled \$1,545,000 in 2017, an increase of 85% from 2012. Total produce sales increased after 2007, from \$2,971,000 in 2007 to \$3,422,000 in 2017, a 15% increase.

Frankford Township had a total of 81 acres which were harvested for fruits and vegetables in 2018, an increase from 31 acres in 2015. The most prominent fruit and vegetables crops in 2018 were apples (48 acres), pumpkins (19 acres), and peaches (13 acres).<sup>42</sup> Some of these crops do not require as much land as field and forage crops, such as hay, making them a positive match with the trend towards smaller farms over the years, especially those that follow organic or sustainable practices. However, these crops also have higher input costs, and can benefit from economies of scale.

In Frankford Township, many produce growers market their products at their own roadside stands or at farmers markets. Farmers with roadside stands or markets should have their own

websites, and utilize other websites and regional events, to gain visibility. Opportunities for promoting produce (and, in many cases, numerous other agricultural products) include:<sup>e</sup>

- NJDA *Jersey Fresh* website listings have recorded 11 farms in a 5 miles radius of Frankford Township, including 8 on-farm markets and pick-your-own farms.<sup>43</sup>
- *Jersey Fresh* also offers community-supported agriculture (CSA), where residents can pledge to support a farm in advance of the growing season, where they receive shares of the total harvest in return. Frankford Township has two CSA farms: DanaRay Farm and Willow Brook Farm.<sup>44</sup>
- *Rutgers New Jersey Agricultural Experiment Station Cooperative Extension (NJAES-RCE)* created an educational website dedicated to agritourism for the public, planning and policy professionals, farmers, and educators.<sup>45</sup>
- A training website was also developed by the Rutgers Agritourism Team for farmers and can be found at <http://agritourism.rutgers.edu/training/>.
- *Natural Jersey* is a site promoting local natural health products and sustainable living. They highlight producers, such as farms, farm stands, and farmers markets throughout New Jersey which align with their mission and nearby farms and vineyards.<sup>46</sup>
- *The New Jersey State Fair* and *Sussex County Farm & Horse Show/Fair* are hosted at the Sussex County Fairgrounds, featuring many local farms offering products for sale, as well as 4-H youth shows, horse shows, and other attractions.<sup>47</sup>
- *Greenmarket* is a network of New York City farmers markets designed to promote small family farms within the region. Over 50 Greenmarket locations are found within all five boroughs.<sup>48</sup>
- Other resources listing direct marketing opportunities for produce in Frankford Township include VisitNJfarms.org, NJ Farmers Direct Marketing Association (<http://njfarmmarkets.org/>), Northeast Organic Farming Association New Jersey (<http://nofanj.org>), LocalHarvest.org, EdibleJersey.com (pick-your-own listings).

Specific recommendations include:

- Utilize consistent, inclusive, and up to date accurate information from the state, county, and regional/association websites.
- Establish or reestablish community farmers markets with help from the CADB and the NJAES-RCE. and the Sussex County Department of Planning and Economic Development.
- Explore expansion/diversification into value-added produce products, such as jams and jellies, in workshops and direct communications from the CADB in concert with the NJDA and Rutgers.
- Explore “Contract Growing,” that is, growing goods for specific customers on a contract basis (such as regional pharmaceutical or biotech companies).
- Explore diversifying into ultra-niche crops and produce crops that serve the needs of growing ethnic populations in the region, through NJAES-RCE workshops, videos,

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<sup>e</sup> These websites are not meant to exclusively promote produce-centric farms, but rather to highlight various farms and events throughout Sussex County, including Union.

and resources: <https://njaes.rutgers.edu/ultra-niche-crops/>,<sup>49</sup> <https://sustainable-farming.rutgers.edu/alternative-world-crops/>.<sup>50</sup>

- Utilize state promotional campaigns, free signage, and other signage opportunities.
- Offer CSA and other retail options to capture consumer dollars to garner increase from profitability, as well as raise community awareness of local agriculture.

### **Nursery, Greenhouses, Floriculture, and Sod**

The NJDA *2011 Economic Development Strategies* focused on ensuring plant health, including inspections and research; increasing consumer awareness of the *Jersey Grown* brand; and working with government agencies to use New Jersey-produced products wherever possible. This was the second highest-ranking category of agricultural commodities in Sussex County in both 2012 and 2017, bringing in \$2,523,000 and \$1,960,000, respectively. It accounted for 14% of total agricultural sales in 2012, and 11% in 2017, versus 40% and 45% statewide.<sup>51</sup> This sub-sector exhibited growth from \$2.8 million countywide in 1987 to \$3.7 million in 2002, before steadily falling to \$2.5 million in 2012, and declining to \$2 million in 2017. The county experienced a steady decrease in revenue from nursery/greenhouse products from 1987 to 2012, and a 22% decrease from 2012 to 2017.

Frankford Township had a total of 370 acres dedicated to nursery (including cultivated sod and floriculture) in 2018, down from 400 acres in 2015, and the 538 acres in 2005. There are 17 garden centers and nurseries certified to market the *Jersey Grown* branding in Sussex County, as listed on NJDA's *Jersey Grown* website.<sup>52</sup> One of these is in Frankford Township, Culver Lake Nursery and Farm Market.

In addition to those strategies listed above where nursery, greenhouse, floriculture and sod products may be applicable, other strategies to follow may include:

- Increase consumer awareness of the *Jersey Grown* brand; utilize the resources of the NJDA for advertisement and marketing purposes.
- Seek and/or expand contracts with large box store operations such as Home Depot, Lowe's, and Walmart; contact Sussex County for opportunities.
- Promote "drive up" operations where consumers can buy directly from the nursery or greenhouse.

### **Field and Forage Crops**

The NJDA *2011 Economic Development Strategies* for field and forage crops provides strategies to improve production, yield per acre and management practices; and support organic crop production plans for a green energy initiative involving biofuel production that could provide a new local market for New Jersey agricultural products. The two prominent crops in Frankford Township are hay (both alfalfa and other hay) and corn for grain.

In 2017, Sussex County reported total sales of grains, oilseeds, dry beans and dry peas to be \$1.9 million, a 22% decrease since 2012 (\$2.4 million), with hay and other crops totaling \$3.3 million, a 17% increase since 2012 (\$2.8 million), together representing approximately 29% of total agricultural sales in Sussex County.

**Corn:** In 2017, Sussex County ranked seventh in the state for corn, with a total of 3,890 harvested acres (2,697 for grain and 1,193 for silage) which brought in a total of \$1.6 million in sales. In 2012, Sussex County harvested 5,089 acres of corn (3,250 acres of corn for grain, and 1,839 acres of corn for silage), resulting in sales of \$2.3 million. Though the total monetary amount for corn sales is not released on a municipal level, Frankford Township farmers harvested a total of 640 acres of corn (489 acres of corn for grain, and 151 acres of corn for silage) in 2018, relatively similar to 2015 when the total acres of corn harvested was 637 acres (470 acres of corn for grain, and 167 acres of corn for silage).

**Hay:** Frankford Township harvested 2,713 acres of hay, including alfalfa hay in 2018, an increase from the 2,243 acres harvested in 2015. Sussex County on a whole harvested 11,756 acres of hay (including alfalfa hay, excluding haylage) in 2017, bringing in a total of 24,130 tons, a decrease from 14,031 acres harvesting 25,942 tons in 2012.

**Soybeans:** Sussex County ranked 11th in the state for soybeans in 2017, with 10 farms harvesting 666 acres of soybeans, bringing in a total of \$232,000 in sales. The number of acres harvested and sales in 2012 are not disclosed in the Census of Agriculture data. Soybeans were a new crop introduced to Frankford Township between 2015 and 2018, with farmers harvesting a total of 52 acres of soybeans in 2018.

Field and forage crop strategies to consider include:

- Utilize improved management practices and ways to boost yield per acre.
- Capitalize on any available workshops on cropland and pasture management from the county or state.
- Diversify to row crops that meet newly emerging markets or markets with increasing demand (such as spelt as a dietary substitute for wheat or switchgrass for pelletized energy) and pursue to value-added marketing opportunities (such as sorghum for homemade jams and jellies that can be marketed from roadside stands, at community markets and over the Internet).
- According to NJAES-RCE “there are a number of profitable alternative world crops that can be grown in New Jersey to satisfy the demand for fresh produce by immigrant populations. These crops are suited to diversified small to mid-size farms where high returns per acre is required.”<sup>53</sup> A website called World Crops,<sup>54</sup> of which NJAES-RCE is a sponsor, can point farmers to crops that meet the needs of ethnic populations in the area.
- Transition to certified organic or naturally grown bean and grain crops to increase their value.
- Investigate and possibly invest in crop insurance to mitigate market risk.
- Utilize county assistance to investigate alternative crops for local production and new markets (such as hops, specialty small fruits, small-scale animal products).

**Dairy:** In 2017, Sussex County had 12 farms with milk cows, bringing in a total of \$4.4 million. As of 2018, Frankford Township had 76 head of dairy cattle compared to 99 head in 2005, and approximately 360 in 2000.

**Livestock and Poultry:** The NJDA 2011 Economic Development Strategies for livestock focused on animal health, ensuring safe and legal sales of poultry and eggs at community farmers markets; and supporting youth programs involving livestock. Operations in Frankford Township include beef and dairy cattle, sheep, goats, hogs, bees, fur, and poultry, and eggs. (Table 18)

**Table 18. Livestock and Poultry in Frankford Township**

	Beef and Dairy Cattle	Sheep	Swine	Beehives	Fur Animals	Goats	Ducks	Meat Chickens	Egg Chickens	Turkeys
2005	473	149	43	24	10	307	118	459	1,151	18
2010	495	178	90	51	31	218	385	1,247	1,719	170
2015	367	379	146	62	83	154	76	1,656	2,903	119
2018	391	203	100	64	17	187	81	666	4,139	110
% Change (2005-2017)	-17%	+36%	+133%	+167%	+70%	-39%	-31%	+45%	+260%	+511%

Source: Farmland Assessment Data (SADC)

Between the years 2005 and 2018, the cattle stock reduced by 17%, reflecting the end of dairy, and the reduction in beef cattle. Other livestock that shows downward trends in Frankford Township are goat and duck, following national and state cultural shifts. The fastest growing animal industry is turkeys, with a 511% growth between 2005 and 2018. Other substantially growing animal herds are egg chickens (260% growth), beehives (167% growth), and swine (133%). These specialized products are easily sold directly to consumers.

While goat numbers decreased by 39% over this thirteen-year period, goat and sheep might still be a niche sector for farmers to explore to provide specialty meat and value-added products to nearby markets. The national price for wool in 2019 was \$1.89 per pound and the average yield per fleece was 7.2 pounds.<sup>55f</sup> Goat and sheep herds bring the opportunity for value-added products such as cheeses made from sheep’s milk. Goats are easier to manage and less costly to raise than many livestock, with a variety of end products: milk, cheeses, mohair or meat, depending on the type of goat. Growing populations of ethnic groups that favor goat meat spur demand, and goat milk can be used to make artisan goat cheeses, soaps, and other value-added products.

To strengthen and expand its place in the Frankford Township economy, some cattle, sheep, hog, goat, poultry, and specialty livestock strategies may include:

- Ensure animal health.
- Encourage USDA inspections in area farms to permit more direct sales of cuts of beef to consumers.

<sup>f</sup> Wool prices were not available at the county level or at the state level after 1997.

- Explore various additional markets, including local hospitals and assisted-living operations, restaurants and grocery markets, and increased outlets for meat sales at regional community markets (such as the Culver Lake Nursery and Farm Market and the Sussex County Farmers Market) and special events (such as the New Jersey State Fair).
- Seek opportunities for production contracts with poultry and livestock processors.
- Investigate outlets for dairy products for goats and sheep and educate farmers about the benefits of diversifying into these value-added opportunities.
- Explore increased marketing opportunities for goat meat to meet the preferences of growing ethnic populations in the state.
- Encourage passage of proposed raw milk legislation that would permit sale of raw milk under certain conditions and establishes a raw milk permit program.
- Assist farmers with farming techniques, including continued and additional cooperation with the NJAES-RCE, NJDA and Natural Resources Conservation Service (NRCS).
- Promote the agritourism potential of livestock and livestock products in concentrated agricultural areas, including exotic animals and poultry, such as “looking” or “petting” zoos, on-farm sales of value-added products such as wool and cheeses, and educational school tours.

### **Organic Farming**

The NJDA *2011 Economic Development Strategies* for organic farming included promoting federal cost-sharing funds for certification reimbursement; integrating marketing of *Jersey Organic* brand alongside *Jersey Fresh*; and working with NOFA-NJ (Northeast Organic Farming Association – New Jersey) towards research and technical assistance for organic growers.

Organic crops and animals have the potential to be an important market for Frankford Township and Sussex County. With an increasing population, potential markets in Pennsylvania, and New York State (including Philadelphia and New York City), and increased consumer awareness regarding food production, organic products and the markets that support them should continue to gain a stronghold and become more mainstream as people demand high quality, readily accessible and affordable organic products. Certification of organic farms is regulated by the USDA via the Organic Food Production Act of 1990 (OFPA) through a National Organic Program (NOP) and can be somewhat costly and time consuming as compared to non-organic farming. This may dissuade some farmers otherwise amenable to this type of farming.

“Natural” farming is a type of farming that seeks to emulate organic farming, but is not overseen by laws or regulations, as is organic farming. Natural farming is somewhat less costly and time consuming than “organic,” and therefore may be a viable option for some farmers and their potential customers. Another alternative, for farmers transitioning to organic production, is the ability to market their products under the NJDA’s “Transitional Sustainable” label, eliminating the need to wait 36-months to profit from this niche market. With its strong produce sector, Sussex County is in an excellent position to facilitate the market growth of organic and natural agriculture products. Certified Naturally Grown (CNG) is a non-profit organization that offers certification “tailored for small-scale, direct-market farmers and beekeepers using natural methods.” Its standards are based on the NOP standards, but CNG uses a peer-review process, as it is more affordable for small operations than certifying through the state program.<sup>56</sup>

Small organic operations (growers or processors), those with gross sales of less than \$5,000 per year of unprocessed organic product and/or less than \$5,000 of processed organic products (such as jam), can be exempted from the NOP certification process. They can market their products as organic if they follow the national organic standards for production, labeling and recordkeeping, but they cannot use the USDA Organic seal, which can only be used on certified products. They can also sell their products to the retail market, which can sell them as organic if the retailer does not re-package or process the product.<sup>57</sup>

In 2017, the Census reported four Sussex County farms with the USDA NOP certification, three farms making the transition to NOP certification, and five farms which were listed as exempt from certification. On the state level in 2017, 102 farms reported \$13 million in sales of NOP certified or exempt organically produced commodities. There is an opportunity for other farms to invest in this practice to satisfy the continually growing trend.

Sussex County and Frankford Township can:

- Improve marketing of organic and natural produce.
- Explore various additional markets, including local restaurants and grocery markets.
- Promote agritourism for organic and natural farm stands.
- Educate growers about organic and natural regulatory and certification requirements.
- Explore ways to support organic food growing and processing.

### **Equine**

The NJDA *2011 Economic Development Strategies* for the equine industry focused on horse health and promotion of the industry through the *Jersey Bred* brand, hosted events, the equine website, including youth programs. The 2017 Census of Agriculture indicates that New Jersey produced almost \$28 million in equine sales. Since 2002, number of farms in Sussex County have decreased, however average sales per farm have increased. In 2002, Sussex County had 89 farms with average sales of \$5,899 per farm. 2007 saw a higher sales figure, in part due to a dip in farm numbers to 85 farms, but largely due to a spike in total equine revenues of \$735,000, resulting in a \$8,647 sales average per farm. In 2012 there were 67 farms with equine, averaging \$8,776 in sales, and in 2017 there were 63 farms with equine with averages sales of \$8,890.

The New Jersey Equine Advisory Board does not report any equine facilities in Frankford Township, but it does report two equine facilities in Sussex County offering such services as training, driving, sales, breeding, boarding, turnouts, rehabilitation, shows/clinics, and lessons/instructions.<sup>58</sup> Farms which have breeding services can make use of the *Jersey Bred* logo when marketing their animals.

To retain and grow its market share in the state and regional equine industry, Frankford Township can:

- Ensure the health of equine animals.
- Educate farmers about the benefits of equine rules and seek guidance from Sussex County about the rights of equine farmers.



- Promote the industry at shows and festivals, such as the New Jersey State Fair, also known as the Sussex County Farm & Horse Show.
- Promote the industry through enhanced listings of Sussex County and Frankford Township equine events in state, regional and County website and print listings.
- Promote the agritourism aspect of the equine industry through farm tours, horse and pony rides, and boarding and riding lessons.

## **Wine**

In recent years, the wine industry in the Garden State has gotten several boosts. In January 2012, Governor Christie signed into law in a bill permitting direct shipping by New Jersey wineries,<sup>59</sup> and on July 2, 2014, the Governor signed into law another bill that establishes a pilot program through March 1, 2018, to allow wineries on preserved farms to conduct special occasion events under certain conditions as defined by the appropriate CADB.<sup>60</sup> In February of 2020, A2773 was introduced which would “allow preserved farms to hold 14 special events per year”<sup>61</sup>

According to the NJDA, the state has 50 licensed wineries versus 25 in 2007. One Sussex County winery is listed on both the *Jersey Fresh* site and on [visitnj.org](http://visitnj.org) (the Official Tourism Website of New Jersey), though none in Frankford Township. In 2018, Frankford Township had five acres dedicated to growing grapes, an increase from zero acres in 2005. Hampton Township had the highest number of acres for grapes in Sussex, at 8 acres in 2018. Sussex County had a total of 22 acres growing grapes in 2018, a decrease of 60% from the 55 acres in 2005.

Frankford Township may consider:

- Exploring the feasibility for additional Sussex County and Frankford Township farmers to diversify into grape production (or other fruits suitable for wine making).
- Coordinating with wineries from other New Jersey counties, and New York and Pennsylvania, to grow a regional wine industry.
- Market through state tourism and marketing apparatuses, including the *Jersey Fresh* site (<https://findjerseyfresh.com/explore/#findfresh>), and the Official Tourism Website of New Jersey, [visitnj.org](http://visitnj.org).
- Encouraging promotion of Sussex County and future Frankford Township wineries and wines, as they develop, through publicity, expanding a County-wide wine trail or wine tour to multiple vineyards, and encouraging expanded distribution of local wines to local outlets such as retail outlets and restaurants, and at other special events.

## **Aquaculture**

The NJDA *2011 Economic Development Strategies* lists New Jersey as one of the country’s largest and most culturally diverse consumer seafood markets. Sussex County has two aquaculture farms as of 2017, down from three in 2012. The sale and revenue data are not available in 2017 for Sussex County. To support a growing aquaculture and seafood economy, Sussex County and Frankford Township may consider:

- Working with the State Division of Animal Health to identify revenue streams to develop testing and certification for finfish species to allow transportation and sale of live farm-raised fish to markets in other states.

- Assist in crafting a supportive policy and regulatory path to allow aquaculture to grow in New Jersey, including revising the aquaculture rule providing for the Aquatic Farmer License Program, developing land-use permitting specifically for aquaculture, and assisting the industry and NJDEP in utilizing Aquaculture Development Zones.

### **Agritourism**

Agritourism is one potential link in the long-term sustainability of the agriculture industry in Frankford Township and Sussex County. A successful example of agritourism is the New Jersey State Fair, also known as the Sussex County Farm and Horse Show, held annually. The Fair, which highlights the past and present agriculture heritage of Sussex County and New Jersey, has been operating as the New Jersey State Fair since 1999 after consolidation with the Sussex County Fair, and is extremely popular, drawing hundreds of thousands of visitors each year.

One advantage for Frankford Township farmers is the proximity to New York City and Pennsylvania's metropolitan areas, providing millions of potential customers to target. The NJDA *2011 Economic Development Strategies* for agritourism focused on expanding roadside programs, including signage and eligibility for signage, consumer promotion through an agritourism brochure, press releases and promotion of agricultural fairs, along with continued development of njfarms.org.

Participation of agritourism operations in the Tourist Oriented Destination Signage (TODS) program through the New Jersey Department of Transportation (NJDOT), gains a discounted agritourism rate and increases the maximum distance (set at three miles) an operation can be from a state road to be eligible for the signage promotion. The maximum distance for an agritourism operation is 10 miles, and the annual cost per sign is \$400 versus \$800 for other businesses. To be eligible, businesses must be open at least six hours a day, five days a week during its growing or operating season.<sup>62</sup>

Visitnjfarms.org is sponsored by Rutgers, the New Jersey Farmers Direct Marketing Association, and the New Jersey Farm Bureau. Its focus is on agritourism activities provided on commercial farms in New Jersey, and farmers must self-register. It includes a "find farms" option, event listings and a chart showing what is in season, and a map of various agritourism destinations. In 2011, the Rutgers New Jersey Agricultural Experiment State reported that "...census data shows our state ranks first nationally in the percentage of farm revenue earned from agritourism" and that 1 in 5 New Jersey farms offer agritourism activities.<sup>63</sup>

In April 2014, the state gave further support to agritourism as a recognized sector of the agricultural industry by adopting an Agricultural Management Practices (AMP) for On-Farm Direct Marketing Facilities, Activities and Events into the New Jersey Register (N.J.A.C. 2:76-2A.13). The AMP "establishes performance-based standards for commercial farms seeking to qualify for right-to-farm protection for on-farm direct marketing facilities, activities and events that are used to facilitate and provide for direct farmer-to-consumer sales, such as farm stands, farm stores, community-supported agriculture and pick-your-own operations, and associated activities and events that fit within the scope of the Right to Farm Act. The intent of the AMP is to provide statewide standards on which farmers, municipalities, CADBs and the public can rely, while also providing flexibility to commercial farm owners and operators."<sup>64</sup>

The 2017 Census reports that Sussex County had \$1.3 million in direct sales, representing 7% of total agricultural sales for the County. This is an increase of 74% over 1997, even while the total number of farms increased by only 20%.<sup>65</sup> (Table 19)

<b>Table 19. Direct Sales in Sussex County (1997-2012)</b>						
	<b>1997</b>	<b>2002</b>	<b>2007</b>	<b>2012</b>	<b>2017</b>	<b>% Change '97-'17</b>
<b>Farms</b>	172	234	242	223	207	20%
<b>Sales (\$1,000s)</b>	\$774	\$919	\$1,530	\$1,265	\$1,343	74%
<i>Source: Census of Agriculture</i>						

For every dollar in agritourism sales generated on a New Jersey farm, \$0.58 of additional sales are generated in other businesses (e.g., restaurants, construction companies, insurance providers, etc.). This report also noted the importance of clarifying right to farm protections.<sup>66</sup> Among the series of recommendations included in this report are:

- Marketing and promotion.
- Liability protection and insurance.
- Regulatory guidance for operators.
- Training and information workshops for farmers.
- Role of CADB – examine preservation policies to identify and address any restraints to agritourism development.
- Resources – innovation fund providing grants or low interest loans; technical assistance for farmers in identifying and obtaining grant funding.
- School tours – identify and compile farm-related curriculum for different grade levels

Frankford Township can work with the state, the CADB, state agencies, organizations, and County farmers to affect a strong agritourism presence in the County. Strategies may include:

- Establishing additional permanent, three season community markets, which may assist local farmers in selling farm and value-added products, strengthening the business of agriculture within the County.
- Establishing event-specific cooperative farm stands at community events in the County, which would promote and benefit the Frankford Township farming industry and offer additional opportunities for product sales.
- Creating a regional harvest festival in the fall, a horticultural festival in the spring, or a farm itinerary tour of participating farms that could be listed on the Sussex County Tourism page.
- Establishing a working farm devoted to public education, similar to The Farm Institute<sup>67</sup> on Martha’s Vineyard; a working farm on preserved land that offers innovative programs that involve children, families and others, such as local chefs who come in to demonstrate recipes that can be prepared using local produce.
- Working with schools and farmers to develop and promote an expanded curriculum of opportunities for school tours to farms and for farmer visits to schools, maintaining a list

of available farmers, and acting as a clearinghouse or coordinating link between schools and farmers.

- Expanding participation in WIC & Seniors Farmers Market Nutrition Program as Certified Farmer Vendors. Four \$5 vouchers are available for each eligible WIC/Senior participant to use June through November to redeem for fresh fruits, vegetables and herbs grown by local farmers.<sup>68</sup>
- Implementing a permanent signage program on a municipal or county level to supplement the NJDOT Tourist Oriented Destination Signage (TODS) program that alerts and directs tourists and residents to agritourism destinations to help increase business and income for these farming establishments, informing farmers of the availability of these programs and encouraging participation.
- Exploring growth in other sections of agritourism such as hunting, fishing and trapping. Often farmers do not charge for these privileges, if they offer them, perhaps, in part because of liability issues. Liability has also become an issue for petting zoos, causing some farmers in other areas to repurpose to “looking zoos” to avoid the safety and health issues that can ensue from interaction between farm animals and visitors. If the Limited Liability protection mentioned above were enacted, farmers might feel freer to generate income from these activities.

Potential challenges to successful expansion of agritourism in Sussex County include:

- Impediments to farmers making long-term investments in crop diversification (such as the unavailability of long-term leases for farmers who rent rather than own the land);
- Market saturation (too many farmers engaged in any given type of agritourism could cause profitability for individual farmers to fall, even as it contributed more dollars to the overall agricultural sector); and
- Lack of recognition for agriculture in regulations and master plans, including municipal, federal or state regulations that make it difficult or expensive for farmers to participate, such as requiring food products to be processed in federally licensed kitchens or slaughterhouses.

Farmers with direct sales or agritourism activities can post their listings in the following online resources. Farmers who want to learn more about running an agritourism operation can start with the resources available from the Rutgers Sustainable Farming on the Urban Fringe website.

### **General Strategies**

“Many different agencies, councils, and organizations, working through a variety of programs, have the common goal of assisting New Jersey’s agricultural community,” according to the *2011 Economic Development Strategies*. Two areas of focus were called out: Farmland Assessment and Crop Insurance and Technical Assistance; and Export Development.

- Farmland Assessment – Updating documentation, supporting farmers in filling out applications, and supporting tax assessors in determining farmer eligibility.
- Crop Insurance – Implementing an education initiative in partnership with the USDA Risk Management Agency and Rutgers Cooperative Extension to increase knowledge and skills among farmers and improve their financial health.

- Technical Assistance – Offering assistance concerning the New Jersey Uniform Construction Code as it relates to farm buildings and the Real Property Appraisal Manual, Farm Building Section.
- Recycling and Food – Increasing participation in agricultural plastics recycling programs and assisting food processing industry in finding markets for soon-to expire and expired foods.
- Motor Vehicle Requirements – Providing information about regulations, license plates for farm vehicles, and other vehicle related provisions through a user-friendly website.
- Financing – Providing information on federal, state, and commercial lending institutions financing for agricultural loans.

## B. Agricultural Industry Retention, Expansion, and Recruitment Strategies

### 1. Institutional

#### **Minimum Wage Impact on Farm Businesses**

The State minimum wage was raised to \$10.44 for agricultural employees effective January 2021, followed by an increase to \$11.05 on January 1, 2022. There are further wage increases every year from 2023 until 2027, when the minimum wage reaches \$15.00 per hour.<sup>69</sup> This minimum wage applies to farm workers and exceeds the federal minimum wage of \$7.25, as does that of neighboring New York State, raised to \$13.20 on December 31, 2021.<sup>70</sup>

Pennsylvania, however, still has an exception for farm workers, particularly seasonal workers, giving it a competitive advantage in operations that are hired-labor intensive. Generally, the production of vegetables and fruits (produce) requires the highest amount of hired farm labor, mainly at harvest time, to pick and process the vegetables and fruits.

#### **Farmer Support**

A variety of resources exist at the state level, published on the NJDA and the SADC websites.<sup>71</sup> These include:

- Agriculture credit and finance.
- Business development for agriculture, food manufacturing and related industries.
- Farm building construction.
- Motor vehicle regulations for agriculture.
- Real property appraisal manual, farm building section.
- Recycling for agriculture.
- Risk management and crop insurance.
- Sales and use tax on farmers purchases.
- Trespass, vandalism, and liability on farms.

One program, *Farm Link*, serves as a resource and referral center for new farmers, farmers seeking access to land and farming opportunities, landowners seeking farmers, and farmers working on estate and farm transfer plans.<sup>72</sup> In 2015, the SADC launched “NJ Land Link,” an interactive website connecting farmers seeking land or farming opportunities with those who

have existing farmland or farming opportunities. Farmers interested in land or partnership/job opportunities, as well as those wanting to advertise available land and opportunities, sign up and create and manage their own listings. In FY2018, “NJ land Link had more than 845 registered users and more than 200 active listings.”<sup>73</sup>

Resources specific to estate planning and retirement planning are available through the *Farm Link* Program’s Farm Transfer, Succession, and Retirement Planning section.<sup>74</sup> Resources include workshops, Farm Succession Guidebook,<sup>75</sup> plans and planning information, workbooks and worksheets, and informational documents. Farm Link can also be used to facilitate succession when there is no next generation to take over the farm. Information is also available for the incoming generation of farmers through this Farm Link Program.

Another opportunity is the New Jersey Agricultural Society’s New Jersey Agricultural Leadership Development Program (NJALDP), administrated by Burlington County College.<sup>76</sup> NJALDP is “a two-year professional development opportunity, which is designed specifically for individuals in farming and agribusiness to become informed, articulate leaders.” Through a series of seminars and domestic learning experiences, NJALDP participants explore various agricultural topics, debate key issues, sharpen communications skills, particularly through public speaking, and establish and cultivate an extensive agricultural network throughout the state.

One program which could be expanded to Sussex County is the School Gardens initiative, funded by Team Nutrition Training mini-grants provided by the U.S. Department of Agriculture, the NJDA, and Grow Healthy – a program of the NJAES-RCE. This is a hands-on way to educate children about the importance of farming. Expanding this program to schools in Sussex County would be a great way to increase the awareness of both students and their parents about the benefits and value of the agricultural industry in the County.

According to the NJAES-RCE, the Grow Healthy program is a way to:

- Help children eat more fruits and vegetables.
- Offer nutrition education, physical activity, gardening & agriculture programs to students, families and staff.
- Connect with local farms.
- Serve more local foods.
- Offer farm-to-school & nutrition trainings for foodservice staff.<sup>77</sup>

The Grow Healthy Initiative does not have a Sussex County representative, but the statewide program is run by Sara Elnakib, Family & Community Health Sciences Educator III (phone: 848-932-3661; email: elnakib@njaes.rutgers.edu).

### **Marketing, Advertising, Public Relations Support**

Marketing and advertising are critical to profitability. A coordinated effort to “sell” agriculture as a way of life that is enduring and significant to the County and its economy, will ensure area residents are aware of the enduring benefits of farmland, and solidify public economic support for the agriculture industry. Signage on preserved farms and other outreach mechanisms, such as adult and youth farmer education, the Sussex County Farm and Horse Show, farmers markets,

farm stands and pick-your-own operations, and Community Supported Agriculture will work to continue enhancing farming throughout the County.

The CADB, the NJAES-RCE, and the state are great resources for farmers to learn about the availability of various free promotional channels such as the *Jersey Fresh*, *Jersey Bred*, *Jersey Grown* and *Jersey Equine* websites, Visit NJ Farms website, and the Sussex County “Tourism” web page. For those farmers who want to consider paid advertising or garner free media coverage, web resources can help with the planning. For example, the New Jersey State Horticultural Society website publishes ad rates for its quarterly newsletter, *Horticultural News*.<sup>78</sup> Another website for Community Involved in Sustaining Agriculture (CISA),<sup>79</sup> a non-profit organization in Western Massachusetts, offers a Basic Marketing Practices manual.

### **Signage**

Signage promotes visibility and awareness of agriculture in general, as well as benefitting the individual farmers. Municipal considerations of farming needs when drafting their sign ordinances can be helpful in supporting farmers efforts to promote their products. Signs that give directions to the farm stand and let customers know what is available are important. Having farm-friendly ordinances in place can make it easier for farmers to promote their products and can minimize right-to-farm complaints in cases where farmers run up against opposition to their signage, whether from neighboring residents or municipal officials. Farm signage can also benefit the municipality by drawing more visitors and dollars to the area, benefitting other businesses in the community as well as the farmer. Signs should conform to local, county, or state right-of-way and sight standards.

For farmers who qualify for the *Jersey Fresh* series of marketing programs, signage is available. This ranges from free price cards to banners and stickers, hats and T-shirts. *Jersey Fresh* point-of-sale signs and other materials, both free and fee-based, can be ordered using the point-of-purchase application on the NJDA’s Marketing and Development Jersey Fresh page. Information on how to participate in the *Jersey Fresh* program is also included.<sup>80</sup>

### **Farmers Markets**

In 2022, six community farmers markets were operating in Sussex County. It is suggested that the County consider establishing a three-season market:

- Sussex County Farmers Market, 37 Plains Road, Augusta, Saturdays 9-2, May through November.
- J.A.D.S. Farm Market, 267 NJ-23, Sussex, every day 9-5, April through December.
- Sparta Farmers Market, 89 Sparta Avenue, Sparta, Saturdays 9-1, May 7 – November 19, 2022.
- Vernon Farmers Market, 451 NJ-94, Vernon, Saturdays 10-2.
- Farmers Market at the Shoppes at Lafayette, 75 State Route 15, Lafayette, Sundays 10-2, May through October.
- Newton Winter Farmers Market, 145 Spring Street, Newton, Saturdays 10-1, November through May.



### **Community Supported Agriculture (CSA)**

Economic support of the Frankford Township agricultural community also comes from local grass roots groups. This support is embodied in Community Supported Agriculture, which consists of:

- A community of individuals who pledge support to a farm operation so that the farmland becomes the community's farm. In such an arrangement, the growers and consumers provide mutual support, and share the risks and benefits of agriculture.
- Members or "shareholders" of the farm pledge in advance to cover the anticipated costs of the farm operation and farmer's salary.
- Members receive shares in the farm's products throughout the growing season.
- Members also receive the satisfaction gained from reconnecting to the land and participating directly in food production.
- Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests.
- Generally, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.<sup>81</sup>

Frankford Township has two CSA farms: DanaRay Farm and Willow Brook Farm.

### **Agricultural Education and Market Research Coordination**

Frankford Township may want to consider coordinating with Sussex County and the Rutgers Cooperative Extension of Sussex County to identify and integrate market research on agriculture and economic trends. The NJAES website offers a wealth of additional information relating to animal agriculture, farm management and safety, pest management, plant agriculture and other elements of interest to those involved in commercial agriculture. The Sussex County NJAES-RCE traditionally has been a sponsor of workshops, often funded through grants secured by the NJAES-RCE, and a helpful resource for local farmers in many other ways. Frankford Township can support agricultural education and market research coordination include:

- Coordinate with NJAES-RCE and NJDA to research and market agricultural education.
- Seek grants to fund farmer education.

## **2. Businesses**

### **Input Suppliers and Services**

Without an adequate number of suppliers within reasonable driving distances of farms, the business of farming can become so expensive and time consuming to not be profitable. As agriculture in Sussex County becomes more "permanent" through increased preservation efforts, former suppliers who have left the area may return if they sense that a profitable supply business can be operated in the area. The county agricultural community can pursue options, which may include tax incentives, to entice other suppliers to return to the area. The Township welcomes agriculture-related businesses within the confines of its existing zoning.

Equipment and supply stores in Sussex County include:

- Tractor Supply Company, in Sussex
- Farmside Supplies, in Sussex
- Outlaw Outfitters, in Newton
- Brodhecker Farm, LLC, in Newton

### **Product Distributors and Processors**

**Field and forage crops**—Hay and other forage crops are generally sold locally to cattle and equine operations, landscapers, nurseries, and farm stands as baled straw, or kept for the farmer’s own livestock and other uses. Corn products<sup>§</sup> are almost entirely sold wholesale and fluctuate depending on the national market. Small amounts of corn are sold as retail to hunters for bait as well.

**Produce**—The majority of produce is sold through retail markets to maximize profits, and some are sold either directly to consumers or through roadside stands. Some farmers may travel to metropolitan areas, including New York City, to sell produce at farmers markets and/or greenmarkets. Additionally, some produce is wholesaled to local supermarkets.

**Livestock**—Some animals are sold in their entirety directly to consumers (whether still alive or previously slaughtered); this includes sheep and goats to growing regional ethnic markets. The USDA must certify cuts of cattle before they can be sold directly to the consumer, otherwise they may be sold as a whole without inspection.

### 3. Anticipated Agricultural Trends

#### **Market Location**

Frankford Township is located near the large population centers of New York City, and Philadelphia, with a route to New York City via Route 15 and Interstate-80. Frankford Township farmers can consider taking advantage of these large population centers, the growing ethnic diversity and dietary trends, and the growing agritourism sentiments, and adapt their farming as practicable for potential increased profitability and viability. Maximizing the use of nearby highways can increase the number and type of consumer markets to be reached by Frankford Township farmers.

#### **Product Demand**

Looking forward, the nursery, greenhouse, grain and vegetables sectors of the agricultural industry should continue to be healthy and viable sectors in Sussex County and Frankford Township since they often serve the needs of increasing livestock practices such as sheep, goats, and poultry in the face of a declining cattle industry, as well as a burgeoning population of homes and businesses within the County and the region.

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<sup>§</sup> This does not include sweet corn, which falls into the produce section below.

Value-added products can bring additional income to farms involved in direct marketing through farm stands and websites. Direct marketers can capitalize on the advantages of selling at retail rather than wholesale, selling from their own location rather than having to pay transport costs, and of generating additional income by developing value-added products such as pies, cheeses, jams, honey, and other products that serve the increasing numbers of customers who want the advantages of ready-made and the appeal of items “home-made” by someone else.

An increased demand for organic products may encourage farmers to adopt more natural farming methods. Since federal certification requires a three-year commitment, many farmers may lean toward “natural” farming methods for food crops and for livestock, such as grass-fed beef raised without hormones or antibiotics.

One emerging trend is the emerging resurgence of hemp (*Cannabis sativa*). The growing support for hemp products, and the recent legislative actions which removed it from the Schedule I list of Controlled Substances Act, have created a new market. The “New Jersey Industrial Hemp Pilot Program” was signed in 2018, for hemp that is cultivated and tested to ensure that THC content does not exceed 0.3 percent.<sup>82</sup>

- Changing the farm operation’s mix of products.
- Consider new crop opportunities being researched/promoted by the NJDA, the NJAES-RCE, and the NJFB: hops, tree nut crops, organic or low input produce or meat products, aquaculture, biotechnical and pharmaceutical use of farm products or animals, and hemp.
- Marketing livestock as dressed meat on a retail basis.
- Fresh herbs, sold at retail, in bunches or as potted plants.
- Economic development through preservation.
- Agricultural Enterprise District (AED) as a potential preservation mechanism. Modeled after Urban Enterprise Zones, the AED would provide economic development advantages, particularly to preserved farms, and use taxes from farmland assessed land to seed the formation of an economic development corporation and development of a program.

#### 4. Agricultural Support Needs

##### **Agricultural Facilities and Infrastructure**

An increase in permanent agricultural suppliers would work to guarantee the stability of the support services for farmers, and in turn, the agricultural industry. If those outside the farming community see ways to make profits, then they will feel much more confident in setting up operations, whether they be cattle and equine veterinarians, feed and fertilizer suppliers, or machinery sales and repairs.

##### **Flexible Land Use Regulations**

**State Level** – Examples where regulatory flexibility is important are the NJDEP’s “Freshwater Wetlands Protection Act Rules” (N.J.A.C. 7:13-et. seq.), which grants exemptions for agricultural activities, and the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13). The latter was adopted in 2007 and amended last in June 2019, with amendments for agriculture effective June 2016, including numerous agricultural permits.<sup>83</sup>

***Municipal level*** – Building an awareness of and provisions supportive of agriculture into municipal master plans and zoning ordinances can go a long way towards the kind of support agriculture needs to be an economically viable sector. Frankford Township farmers benefit from having a right to farm ordinance enacted in their town. Other areas where municipal sensitivity to the land use needs of agriculture can be helpful include consideration of the following issues when creating municipal regulations:

- Setting specific buffer standards for non-farm development adjacent to working farms that help to limit trespassing and littering and protect the residential landowner from dust and spray materials spread during farm activities, thus minimizing potential Right to Farm conflicts.
- Code or ordinance provisions requiring developers to notify purchasers of the proximate existence of active agriculture.
- Exemptions for certain farm structures from building height restrictions.
- Allowing additional principal dwelling units on farms to meet the needs of farmers for additional housing for their children or for farm managers.
- Exemptions from setback requirements when farmers seek to expand an existing nonconforming structure.
- Flexible fencing ordinances that make allowances for types of fencing on farms that might not be desirable in residential zones, in consideration of the farmers needs to prevent wildlife damage.
- Construction fee reduction for agricultural buildings.

### **Agriculture Representation in Economic Development**

Frankford Township supports the representation of agricultural interests on regional and local industry boards, business organizations, and economic development associations. The Township does not have the resources to initiate local programs and sees its greatest success in supporting and partnering with local and regional organizations (county and state), and to encourage farmers to enroll and actively participate in programs to stimulate and encourage agricultural economic development.

#### **5. Agricultural Support Implementation**

The NJAES-RCE of Sussex County has always been a large source of support to local farmers, helping them adapt to new technologies, introducing new farming practices to improve efficiency, and keeping farmers up to date with market trends. With the rise of online shopping, more people are choosing to order products, including agricultural products, from the comfort of their own homes. The NJAES-RCE can work with local farmers in expanding their presence to the web in addition to traditional advertising such as signage and roadside stands.

The average age of farmers is increasing as well, with a large need for new generations of farmers to come in and take over agricultural operations in the years to come; the NJAES-RCE can reach out to those interested in or just beginning their own farming operations, assisting them in reaching the point where their operations become profitable.

The Township, as well as the County and other relevant parties, can also continue to promote agritourism, helping to boost farm revenues and raise local awareness of, and support for, farming operations. This can be done in conjunction with the non-farming community, such as local artists, who can help in attracting people who may primarily be more interested in artwork or music than agriculture and end up gaining exposure to farming activities and products when visiting art exhibits or concerts.

**Federal agriculture support** can be found through the USDA's Grants and Loans webpage<sup>84</sup> includes grant and loan programs ranging from farm loans, housing assistance, rural development loan and grant assistance, beginning farmers and ranchers, livestock insurance, specialty crop block grant program, the farmers market promotion program, and the organic cost share program.

Sustainable Agriculture Research and Education (SARE) is a USDA competitive grants program that helps build the future economic viability of agriculture in the United States.<sup>85</sup> SARE funds are used for:

- *Farmer & Rancher Grants*: These grants have the goal of helping farmers shift to practices that are environmentally sound, profitable, and beneficial to the wider farm community.
- *Partnership grants*: These grants are for RCE and NRCS personnel, non-profits, and agricultural consultants who work directly with farmers. Grants are used for on-farm research and demonstration projects that address sustainability.
- *Sustainable Community Grants*: These grants allow for key issues to be addressed which connect farming with community prosperity and revitalization.
- *Professional Development Grants*: These grants fund professional development projects that help RCE educators and other agricultural professionals learn and transmit the knowledge needed to help farmers move toward greater sustainability.
- *Research and Education Grants*: These grants fund research and education projects that lead to farmers adopting sustainable practices. The emphasis is on improved farming practices and an enhanced quality of life for farmers and rural communities.

**State agriculture support** includes the 2020 Specialty Crop Block Grants, New Jersey Wine Industry Project Grants, Soil and Water Conservation Grants, New Jersey Risk Management and Crop Insurance Education, New Jersey Junior Breeder Loan Fund, Organic Cost Share, and Farm to School Mini Grants. More information can be found on the NJDA Grants webpage,<sup>86</sup> accessed through the following link: <https://www.nj.gov/agriculture/grants/>.

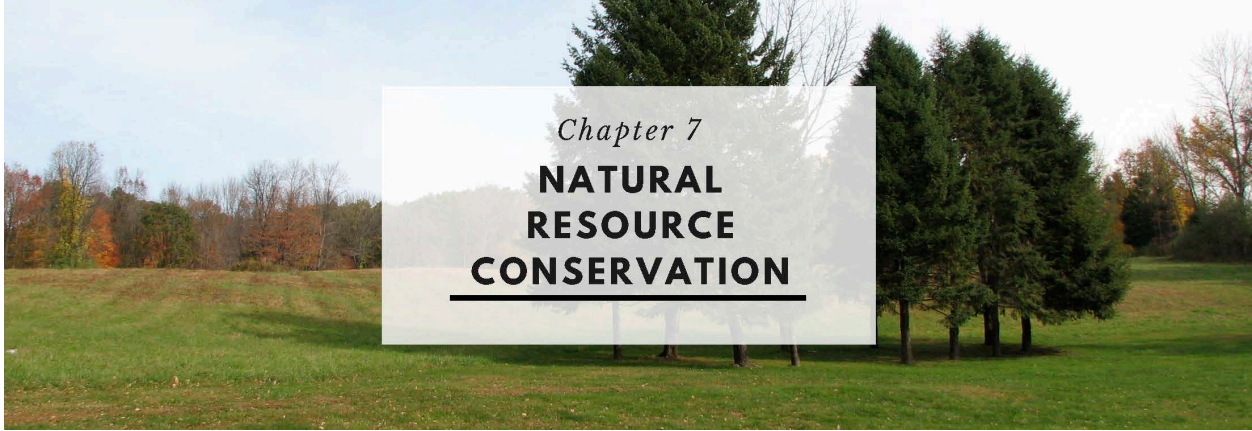
**Farmland Preservation Programs** support include State Acquisition, County Planning Incentive Grants, Municipal Planning Incentive Grants, and Grants to Non-Profits. More information can be found through the SADC webpage,<sup>87</sup> accessed through the following link: <https://www.nj.gov/agriculture/sadc/farmpreserve/programs/>.

**New Jersey Farm Bureau (NJFB)** is a private, non-profit membership organization that represents the agricultural producers and enterprises in New Jersey at all levels of government. The NJFB advocates for farmland preservation, environmental regulations, wildlife and water

issues, and legislation relating to agricultural labor and the Right to Farm. Through grants, initiatives, and partnerships, the NJFB educates the public about the agricultural industry and participates in farmer training and education programs.<sup>88</sup>

**Future Farmer of America (FFA)** and the Rutgers Cooperative Extension **4-H Youth Development Program** aid in fostering the future of agriculture within the County. These programs aid youth in developing important life skills that are important for career in agriculture. FFA is a national educational organization that helps prepare youth for careers and leadership in agriculture by aiding students in the development of agricultural skills.<sup>89</sup>

The **RCE 4-H Youth Development Program** is run for youth in kindergarten through a year after completing high school. The 4-H program is led by volunteers that teach about different areas of interest varying from animals, plants, agriculture, and leadership. Within Sussex County, the approximately 60 4-H clubs are active in county events such as the Sussex County Farm and Horse Show.



## ***Chapter 7: Natural Resource Conservation***

### **A. Natural Resource Protection Coordination**

#### **1. Natural Resources Conservation Service**

An important partner in support of natural resource conservation for the agricultural community is the USDA NRCS. The NRCS provides technical assistance regarding the natural resource issues that are specific to a farmer's needs, with opportunities for cost-shares and financial incentives.<sup>90</sup> NRCS also will reach out directly to landowners if they know of a farmer who needs technical assistance or could use the guidance of the NRCS staff.

Address: Building 1, 101 Bilby Road, in Hackettstown Commerce Park.  
Phone and Website: 908-852-2576, [www.nj.nrcs.usda.gov](http://www.nj.nrcs.usda.gov)  
Staff: Jill Ott, District Conservationist, 908-441-7518, [jill.ott@nj.usda.gov](mailto:jill.ott@nj.usda.gov)<sup>91</sup>

Within one year of selling their development easement, owners of preserved farms are required to develop a Conservation Plan with the NRCS. The conservation planning process is a collaboration between NRCS conservation planners and the farmer to provide tools and resources that ensure continued maintenance of the preserved land. A Conservation Plan is also required to apply for Wildlife Habitat Incentive Program (WHIP) and the Environmental Quality Incentive Program (EQIP). The following strategies would strengthen natural resource conservation efforts for farms in Warren County and its municipalities, including Washington:

The following strategies would strengthen natural resource conservation efforts for farms in Sussex County and its municipalities, including Frankford Township:

- Providing a mechanism and staff to ensure that Conservation Plans are prepared and implemented will guarantee that the objectives of the program are put in place, and active stewardship practices are underway.
- While NRCS services are voluntary, farmers can benefit from conservation and there are opportunities to help farmers become eligible for NRCS and USDA funding.<sup>92</sup>



An additional resource available from the NRCS is the “Field Office Technical Guide.”<sup>93</sup> It contains technical information about the development and implementation of soil, water, air, flora, and fauna resource conservation practices, and is used to develop conservation and resource management plans. Conservation practices discussed in the Guide that are pertinent for Frankford Township include, but are not limited to:

- Riparian buffers, including necessary buffer widths and plant species.
- No till and minimum till practices.
- Prescribed grazing and pasture management.
- Nutrient management, including manure and fertilizers.

Program opportunities and incentives are available for farmers who wish to implement conservation practices on their farm. Eligibility requirements can be found on the New Jersey NRCS website at: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/financial/>. Farmers can reach out to the local NRCS office for more information.

In November of 2020, the USDA NRCS completed an update to its National Conservation Practice standards. The 2018 Farm Bill required the NRCS to review these practices. They provide guidance for planning, designing, installing, operating, and maintaining conservation practices. Some of the main areas of interest they cover are:

- Irrigation water management
- Heavy use area protection
- Composting facilities

Two new conservation practices which deal with wastewater treatment and wildlife habitat planning and another 18 conservation standards are currently being tested to establish and document natural resources benefits. This update addresses changes in technology and added criterion for soil health, water conservation, drought tolerance, and resiliency.<sup>94</sup>

## 2. Upper Delaware Conservation District

The NJDA Division of Agricultural and Natural Resources includes the State Soil Conservation Committee (SSCC). Among its objectives are the protection of agricultural lands through farmland retention and productivity improvements, control and prevention of soil erosion and sedimentation on agricultural land, protection of water quality and control, and prevention of storm and flood water damages.<sup>95</sup>

The SSCC coordinates and supports the work of the state’s 14 local soil conservation districts (SCDs), including the Upper Delaware CD (Warren and Sussex Counties). The SSCC are part of the New Jersey Conservation Partnership, which also includes the USDA NRCS and NJAES-RCE. The Upper Delaware CD is charged with implementing natural resource conservation and assistance programs and services, which include agricultural conservation planning assistance, agricultural conservation cost-sharing program grants, application of organic materials on agricultural land, agricultural water supply and management, soil erosion and sediment control, storm water discharge authorization, and soil surveys.

The Upper Delaware CD works with the NRCS in providing survey assistance, engineering designs and plans. For development easements which require a conservation plan for the farm to be obtained within one year, the NRCS will prepare a conservation plan at no cost to the farmer. It also provides administrative support to Conservation Assistance Program (CAP) in support of Federal Farm Bill Conservation programs and the New Jersey Farmland Preservation Program, including the preparation and implementation of Conservation Plans. Its goal is to promote best management practices (BMPs) for soil erosion and sediment control, animal wastes, nutrient management, water quality improvement, and other natural resource management concerns.

Frankford farmers may approach this local CD office (as well as the local NRCS office) with a Request for Assistance (RFA) to apply for funds from the State Conservation Cost Share program and federal programs such as EQIP. If approved, the RFA is forwarded to the local NRCS office in Hackettstown for processing. The administration of the RFA includes preparation of a Conservation Plan and program contract. The Upper Delaware CD is involved in review of Conservation Plans and program contracts and must give final approval to both.

The Upper Delaware CD office serving Frankford is:<sup>96</sup>

Address: 51 Main Street, Suite B in Blirstown

Phone: 908-852-2579

District Manager: Sandra Myers, [smyers@upperdelawarecd-nj.com](mailto:smyers@upperdelawarecd-nj.com)

Staff: Tim Matthews; District Forester, Jeff Eckert; Soil Erosion Sediment Control

### **Rutgers New Jersey Agricultural Experiment Station, Cooperative Extension of Sussex County (NJAES-RCE)**

The NJAES-RCE of Sussex County provides both field and technical research that is focused on best management practices (BMPs) for farmers to ensure the long-term viability of both the agricultural economy and the natural resources upon which it is based. The NJAES-RCE of Sussex County is:<sup>97</sup>

Address: 130 Morris Turnpike, Newton 07860-4914

County Agent II: Stephen Komar, [komar@njaes.rutgers.edu](mailto:komar@njaes.rutgers.edu)

Program Assistant II: Lisa Chiariello, [lisa.chiariello@rutgers.edu](mailto:lisa.chiariello@rutgers.edu)

4-H Senior Program Coordinator: David Foord, [foord@njaes.rutgers.edu](mailto:foord@njaes.rutgers.edu)

4-H Program Assistant: Tanya Patrie, [patrie@njaes.rutgers.edu](mailto:patrie@njaes.rutgers.edu)

### **New Jersey Department of Environmental Protection**

The NJDEP Division of Parks and Forestry oversees the Private Lands Management Program for stewardship and management of private forest lands.<sup>98</sup> This includes the private woodlands currently under Farmland Assessment, which totaled 228,000 acres statewide in 2020.<sup>99</sup>

There are two classifications of woodlands: appurtenant (or attached) and non-appurtenant (or unattached). Requirements for non-appurtenant woodland tracts are listed in N.J.A.C. 18:15-2.7. These tracts must be utilized by the farmer as a sustainable “product,” and require Woodland Management Plans (WMPs) to receive reduced local property taxes accorded properties in the farmland tax assessment program.<sup>100</sup> The NJDEP’s Division of Parks and Forestry, Bureau of

Forest Management (BFM), reviews farmland assessment applications that include WMPs prepared for farmers by private consultants.<sup>101</sup> Once a WMP is in place, a Woodland Data Form (WD-1) must be submitted with the farmland assessment application yearly to certify compliance with the WMP. The NJDEP/ BFM, also inspects each site once every three years to verify compliance.

Non-appurtenant woodlands are woodland acreage on a farm over and above total farmed acreage (tilled and pasture). If 50 acres of a farm are tilled or pastured, and there are 125 acres of woodlands on the farm, 75 acres of woodlands would be non-appurtenant (125 woodland acres minus 50 farmed acres). In Frankford Township for 2021, there were 2,498 acres of non-appurtenant (or unattached) woodland acres in farmland assessment.<sup>102</sup> The total of non-appurtenant woodland acres in 2021 was up from 2018 when there were 1,103 acres. This is also a significant increase from 2010, with 840 acres, from 2000, 978 acres, and from 1990, with only 650 acres in farmland assessment in Frankford Township.<sup>103</sup>

Appurtenant woodlands are woodland acreage on a farm, less than or equal to, farmed acreage. So, in the preceding example, 50 of the 125 woodland acres would be appurtenant. Appurtenant woodland acres do not require a WMP to qualify for farmland assessment. In Frankford Township for 2021, there were 1,799 acres of appurtenant (or attached) woodland acres in farmland assessment, up from 2018 when there were 436 acres. In 2000, there were 685 appurtenant acres in farmland assessment in Frankford Township.

The NJDEP's Nongame and Endangered Species Program, since 2005, administered the Landowner Incentive Program (LIP). This program worked to improve habitat management and protection for threatened and endangered species on private lands, some of which were agricultural lands. Since 2014, there is no expectation of congressional reapproval of LIP. While LIP is no longer available, other incentive programs through NJDEP are listed on the NJDEP, Division of Fish and Wildlife website.<sup>104</sup>

### **USDA, Forest Service's Forest Stewardship Program**

The United States Forest Service (USFS) sponsors the Forest Stewardship Program (FSP), administered locally by the NJDEP's State Forestry Service BFM. In the summer of 2017, the Forest Stewardship Program transitioned to a new program that eliminated income requirements to qualify for the program and enhanced monitoring and management of enrolled acres.<sup>105</sup> As of April 2021, 454 properties covering 11,662 acres in Sussex County are enrolled in FSP.<sup>106</sup> As of November 2021, Frankford Township contained 430.23 acres of farmland on 12 different properties enrolled in the Forest Stewardship Program.<sup>107</sup> This program, when fully funded, offers landowners cost-share initiatives of up to 75% of the cost of a new or revised FSP to allow the landowners to fully follow the guidelines in their plan.<sup>108</sup>

For more about the NJDEP FSP, Frankford Township farmers can reach out to the New Jersey Forest Service Regional office at 501 East State Street, 3rd Floor, Trenton, NJ 08625-0420, call 973-786-5035, or visit <https://www.nj.gov/cgi-bin/dep/contactdep.pl>.<sup>109</sup>

### **North Jersey Resource Conservation and Development Council**

The North Jersey Resource Conservation and Development (NJRC&D) works with communities to deliver agricultural sustainability, water resource protection, and community development. Among other programs, the NJRC&D offers a River-Friendly Farm Certification, which is a voluntary certification program designed to provide technical assistance and recognize farms that protect our shared natural resources through responsible management. Since its inception in the early-2000s, the certification program concentrated its efforts in the Raritan River Basin. The program has expanded with the certification of 33 farms in the vicinity of Sussex County.<sup>110</sup>

The NJRC&D offers no-till drill rental for cover cropping and pasture reseeding, rain garden design and rebates, and a small grant funding program to assist farmers in implementing best management practices through a Water Quality Restoration Grant from the NJDEP. NJRC&D is located at:

Address: 10 Maple Avenue in Asbury, Warren County  
Phone: 908-574-5368  
Executive Director: Laura Tessieri, ltessieri@northjerseyrcd.org

### ***Private Non-Profit Groups and Private Citizens***

The preservation of agriculture and agricultural resources requires not only the broad support of state, county, and local governments but also the help of private non-profit groups and citizens. Without their support, government programs and support for agriculture would fall short of what is needed to protect the natural resource base of the agricultural landscape. The Frankford Township agriculture community has the support of a variety of organizations, including the New Jersey Farm Bureau, 4-H, Future Farmers of America, and the Sussex County 4-H & Agricultural Fair.

Local and regional non-profit organizations also contribute to the permanent protection of farmland. These groups include The Land Conservancy of New Jersey, The Nature Conservancy, New Jersey Conservation Foundation, and New Jersey Audubon Society.

## **B. Natural Resource Protection Programs**

### **1. SADC Soil and Water Conservation Grants**

The types of soil and water conservation projects funded by SADC include soil erosion and sediment control systems (terrace systems), control of farmland pollution (stream protection; sediment retention, erosion or water control systems; animal waste control facilities; and agricultural handling facilities), the impoundment, storage and management of water for agricultural purposes (diversions; water impoundment reservoirs; irrigation systems; and drainage systems), and management of land to achieve maximum agricultural productivity (land shaping or grading) while conserving natural resources.<sup>111</sup>

These grants fund soil and water conservation projects approved by the Upper Delaware CD, with the program administered by both the CD and the local NRCS office. Once the District deems the conservation project necessary and feasible, applications are forwarded to the New

Jersey State SCC, which recommends projects to the SADC for funding approvals. A permanent source of funding needs to be put in place to ensure that farmers can continue to participate in these beneficial programs.

## 2. SADC Deer Fencing Grant Program

Farmers can apply to the SADC at any time for cost-sharing grants for the installation of high-tensile woven wire deer fencing on permanently preserved farms. Farmers who are successful in their applications can cover up to 50% of the cost of materials and installation. Assistance for this program is capped at \$200/acre or a total grant amount of \$20,000.<sup>112</sup>

SADC: David Clapp or David Kimmel  
Phone, Email: 609-984-2504, [sadc@ag.nj.gov](mailto:sadc@ag.nj.gov)

## 3. Federal Conservation Programs

### **Farm Bill Programs**

The Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) was landmark legislation, with much of its focus on conservation funding and environmental issues. Since 2002, the legislature has drafted and instituted new Farm Bill programs in 2008, 2014, and 2018. Voluntary programs relevant to New Jersey, and Sussex County, included the Conservation Reserve Enhancement Program (CREP), Conservation Innovation Grant Program (CIG), Environmental Quality Incentives Program (EQIP), Farm and Ranch Land Protection Program (FRPP), Grassland Reserve Program (GRP), Wetlands Reserve Program (WRP), and Wildlife Habitat Incentives Program (WHIP).<sup>113</sup> These programs were continued under the Food, Conservation and Energy Act of 2008 (2008 Farm Bill). These programs were renewed in 2014 and 2018, with the most recent legislation being The Agricultural Improvement Act of 2018 (2018 Farm Bill).<sup>114</sup> The 2018 Farm Bill will be active until 2023. As in the past, these programs are administered by the local NRCS office and Upper Delaware SCD.

In 2014, the Farm Bill repealed the 2008 Average Crop Revenue Election (ACRE) program. This voluntary program provided payments when revenues fell below established levels. In 2014, the USDA Farm Service Agency (FSA) replaced the ACRE program with two new programs: Price Loss Coverage (PLC) and Agricultural Risk Coverage (ARC), which are continued through the 2018 Farm Bill.<sup>115</sup> These programs, “pay producers who have eligible historical base acres when prices and/or yields of covered commodities fall below a certain amount, regardless of their current planting decisions.”<sup>116</sup> Since a significant acreage of field crops are grown in Frankford Township, and are also covered commodities under these programs, such a revenue support system may well have a positive effect since it would help specialty crops and niche markets receive their fair share of payment support.

The 2018 Farm Bill, in effect since December 2018, made minor changes regarding conservation programs administered by the NRCS and the FSA. Some highlights include:

- Increasing mandatory funding for conservation programs by about 2% from 2019-2023.
- Increasing Conservation Reserve Program (CRP) acreage cap from 24 million acres to 27 million acres by 2023.
- Continuing the Conservation Stewardship Program (CSP), but at a reduced funding level, and replacing an acreage cap with a funding cap.
- Increasing funding for EQIP, the Agricultural Conservation Easement Program (ACEP), and direct funding for the Regional Conservation Partnership Program (RCPPE).<sup>117</sup>

### **Conservation Reserve Program (CRP)**

The CRP is a land conservation program where farmers enroll on a volunteer basis to remove environmentally sensitive land from agricultural production. In exchange, participating farmers plant species that improve the environmental health of the land and receive a yearly rental payment. The contract period is between 10-15 years.”<sup>118</sup>

### **Conservation Reserve Enhancement Program (CREP)**

The NJ CREP program is an offshoot of the CRP and establishes a partnership between the USDA and the state to address environmental impacts related to agricultural practices. The program’s goals are, “to maintain and improve water quality by reducing agricultural pollutants into streams, enhance farm viability, and to contribute to the State’s open space goals.” In exchange for removing environmentally sensitive lands from production, and introducing conservation practices, agricultural landowners are paid an annual rental rate. Like CRP, farmers enter in a voluntary contract for 10-15 years. This program targets 30,000 acres of agricultural lands throughout the state, requesting \$100 million in federal funds and a state match of \$23 million over the life of the program. 100% of the cost is paid to establish the conservation practices and annual rental and incentive payments to the landowner.<sup>119</sup>

### **Environmental Quality Incentive Program (EQIP)**

EQIP is a voluntary conservation program that offers financial and technical assistance to implement conservation practices on eligible agricultural land.<sup>120</sup> Opportunities include:

- Funding opportunities for beginning farmers.
- Financial assistance to help agricultural producers and forest owners address specific natural resource concerns.
- Financial assistance to install high tunnels (similar to hoop houses) to protect high-value crops.
- Soil health initiative to provide technical and financial assistance for soil conservation practices.<sup>121</sup>

As of 2014, portions of the Wildlife Habitat Incentives Program (WHIP), which was not reauthorized in the 2014 Farm Bill, have been folded into the EQIP program; anyone interested in applying for wildlife projects should apply through the Working Lands for Wildlife (WLFW) initiative through EQIP.

Across all NRCS programs in Sussex County, there were 2,425 contracted acres, with 55 contracts in 2020. These contracts totaled \$876,378 (amount available, not paid out). While some

farms in Frankford Township may be assisted through EQIP, the number of farms enrolled is not tracked on a municipal level.<sup>122</sup>

### **Conservation Innovation Grants (CIG)**

Funded by EQIP, the aim of the CIG is to stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production. Funds are awarded as competitive 50-50 matching grants to non-governmental organizations, tribes, or individuals for projects with a one- to three-year duration. Each year, the NRCS announces a new round of competitive grants; North Jersey RC&D was the most recent recipient of such a grant was in 2019 worth \$74,995 to assess the use of short season variety corn and soybeans to facilitate adoption of multi-species cover crop.<sup>123</sup>

### **Conservation Stewardship Program (CSP)**

The CSP, initiated in 2007, is a voluntary conservation program that provides technical and financial assistance to manage and maintain existing conservation systems, implementing additional conservation activities on land currently under production. CSP Provides two types of payments through five-year contracts: annual payments for installing new conservation activities and maintaining existing practices; and supplemental payments for adopting a resource-conserving crop rotation. Participants earn payments for conservation performance – the higher the performance, the higher the payment. Minimum annual payments amount to \$1,500. Participants can apply for renewal at the end of the five-year contract. The local NRCS administers this program.<sup>124</sup>

### **Working Lands for Wildlife (WLFW) Program**

Administered by the local NRCS, WLFW provides technical and financial assistance to agricultural producers to assist the implementation of conservation practices that benefit target species and priority landscapes. Frankford Township is situated in focal areas for one out of three target species in New Jersey, the American Black Duck. The town's placement within this focal area provides an advantage to Frankford Township's WLFW applicants who will receive high consideration.<sup>125</sup>

### **Agricultural Conservation Easement Program (ACEP)**

In 2014, the Farm and Ranch Land Protection Program (FRPP) was repealed and consolidated into the ACEP. Administered by the local NRCS, the ACEP merges three former programs – Wetlands Reserve Program (WRP), Grassland Reserve Program (GRP), and Farm and Ranch Land Protection Program (FRPP). It has two components:

- Agricultural Land Easements – prevents the loss of working agricultural lands to non-agricultural uses. NRCS may contribute up to 50% of the fair market value of the easement.
- Wetland Reserve Easements – provides habitat for fish and wildlife and improves water quality through restoration and enhancement and may provide opportunities for limited recreational activities. There are two types available in New Jersey: permanent (100% of the value and 50-75% of restoration costs) and 30-year easements (50-75% of the value and of the restoration costs).<sup>126</sup>

In February 2021, the USDA released a final rule to update ACEP as directed by the 2018 Farm Bill. This update incorporates public comments and makes minor changes improving the processes in place to protect ecologically important lands.<sup>127</sup> Frankford Township may want to consider ALE funding to pursue properties that do not meet the County cost-share requirements.

### **Regional Conservation Partnership Program (RCPP)**

RCPP was introduced in the 2014 Farm Bill, and significant changes were made in the 2018 Farm Bill. This program encourages partnerships to implement solutions to conservation challenges. Partnerships can be formed by agricultural producer associations, farmer cooperatives, municipal entities, and non-government organizations. Significant changes that were made in 2018 to RCPP are:

- RCPP is now a standalone program with its own funding of \$300 million annually. Moving forward, landowners and ag producers will enter RCPP contracts and RCPP easements.
- Enhanced Alternative Funding Arrangement provision – NRCS may award up to 15 AFA projects, which are more grant-like and rely more on partner capacity to implement conservation activities.
- Three funding pools reduced to two – the national pool was eliminated. Partners must apply to either the Critical Conservation Area (CCA) or State/Multistate funding pool.
- Emphasis on project outcomes – all RCPP projects must now develop and report on their environmental outcomes.<sup>128</sup>

Partnerships must apply for a project grant on a competitive basis during the grant applications period. There are two funding categories: critical conservation areas (CCA) (New Jersey does not fall within one of these eight areas), state/multi-state. To apply for state funding, the project must address at least one of the national or state priorities of soil erosion, soil quality, water quality, and wildlife habitat.

The RCPP has three funding categories: Technical Assistance Obligations, Financial Assistance Obligations, and Reimbursable funds. In 2020, New Jersey was obligated \$44,100 to Technical Assistance and \$3,300 to Financial Assistance.

In 2022, the NRCS incorporated investment in two waves from the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act. BIL provided the NRCS is \$918 million in Watershed Program funding spread between 240 projects across the country; none of these projects reside in New Jersey.

## **C. Water Resources**

### **1. Supply Characteristics**

In Frankford, many farms occupy some of the higher-ranking aquifer recharge areas and/or border the Paulins Kill, Papakating Creek and their tributaries. Much of the town lies in the broad Kittatinny Valley, with the westernmost portion hugging the Kittatinny Ridge. This is one of the best areas in Frankford for aquifer recharge and contains some of its best agricultural soils.



The other area with relatively high aquifer recharge potential extends from the Hampton Township border through the Homestead Complex to Route 206, between Augusta Hill Road and Morris Avenue, and extending across Rt. 206. There is a high concentration of agricultural soils, which cluster around the Paulins Kill, Papakating Creek and their tributaries.

While the town predominantly relies on individual wells and septic, there are four public water supply wells; the two on the Homestead Complex and the one near the Frankford Township School. Some aspects of ensuring clean and plentiful water can be controlled at the individual farm level. These include:

- Minimizing the use of synthetic chemicals such as fertilizers, herbicides, pesticides, and fungicides so as to lessen impacts to groundwater;
- Providing riparian buffers along watercourses, so as to protect streams from the aforementioned synthetic chemicals;
- When possible, practicing organic farming methods;
- Practicing appropriate timing of chemical application, so as to minimize its use; and
- Practicing water conservation techniques, such as drip irrigation and water reuse for certain types of farming where feasible, such as smaller scale vegetable and fruit operations.

## 2. Agricultural Demand & Supply Limitations

Agricultural lands according to the *New Jersey Farmland Assessment* include cropland harvested, cropland pastured, woodland, equine, and permanent pasture. The most recent assessment (2021) identifies 9,817 acres of devoted agricultural or horticultural land in the municipality, 542 acres less than the 2018 assessment. About 35% of this total is harvested cropland, land that requires the most amount of water for production. This comprises about 13% of Sussex County's total harvested acres.

As of 2019, hay and soybeans comprise roughly 80% of the field crops grown in the Township. However, because of the region's climate, only 3 acres of the town's field crops are irrigated.<sup>129</sup>

Both population increases and agricultural irrigation can affect Frankford Township's water supply. In 2015, 15 acres of farmland in Frankford Township were irrigated, and in 2019, 21 acres were irrigated. This suggests that irrigation pressures on water sources are very low. In terms of population pressures, data indicates that the rate of building permits is decreasing in Frankford Township. Increased pressure from development and the concomitant demands on water supplies may be felt by Frankford Township farmers. Increased development exacerbates water supply concerns, not only by increased water usage from occupants of the units, but also by creating more impervious surface, causing more stormwater runoff (which often washes pollutants into waterways) and less opportunity for aquifer recharge. Lack of sufficient water recharge areas can compromise soil conditions and means less water stays in the area and flows away to other areas, such as the river, the bay, and the ocean. Disturbing the balance of water distribution can adversely impact the region and all other areas that may be disturbed by the fluctuations in natural water distribution.

### 3. Water Conservation and Allocation Strategies

An adequate water supply is integral to successful agriculture operations in Frankford Township. Droughts in recent years have highlighted the precarious nature of the agriculture (and general) water supply, and the need for water conservation systems and regimens. Historically, from 2008 to 2018, dry conditions occurred with greater frequencies than in years prior.<sup>130</sup>

The dominant field crop in Frankford Township is hay, which is used primarily for feed on horse farms in the Township. Hay relies on rain and some groundwater for water needs, and as such water conservation strategies are difficult to implement. With nursery and greenhouse, sod, and vegetable farming, it is possible to implement conservation strategies such as drip irrigation, or watering crops in the cooler parts of the day to minimize evaporation. Water re-use is another possible option. For livestock, floats and timers in watering troughs can conserve water by negating the need for constantly running water to keep troughs full.

Seasonal differences in water demand combined with such occurrences as drought, changes in land cover and other natural or manmade circumstances can influence water supply from which an ecosystem cannot easily recover. Frankford Township falls in the scope of the *Highlands Regional Master Plan* (2008) and has access to water resource analyses completed by the Highlands Council. Frankford Township can also benefit from being aware of the analyses done for neighboring communities within the Highlands, such as Bethlehem and Alexandria, and the use of monitoring stream base flows as a measure of water sustainability, using the severity and duration of low flow to understand impacts of water use on ecosystem and water supply, as well as the need to protect ground water recharge areas, which are susceptible to variations in soil, land cover and precipitation.<sup>131</sup>

The NJDA encourages farmers to implement water-management practices as a routine part of their conservationist approach to agriculture, The NJDA also supports the efforts of the NJAES-RCE which publishes annual crop production recommendation guides that include irrigation recommendations. These guides include tips for maximizing irrigation efficiency, such as optimizing irrigation scheduling, selecting appropriate growing mediums, planning, and installing irrigation systems that provide efficient water use, managing stormwater runoff, and collecting and recycling irrigation water. The information can be found at <https://njaes.rutgers.edu/pubs/>.

The Office of the New Jersey Climatologist at Rutgers University, School of Environmental and Biological Sciences, operates the NJ Weather and Climate Network of weather monitoring stations. Farmers can use the information from stations near them to assist with irrigation scheduling, as well as pest management and other conservation issues, temperature, precipitation, wind speed and gusts. Other stations measure barometric pressure and New Brunswick measures soil temperatures as well. Farmers can set favorite locales and view charts and tabular data.<sup>132</sup>

## D. Waste Management Planning

Livestock farmers in Frankford Township may opt to participate in SCD/NRCS conservation programs that cost share the creation of animal waste facilities on their farms. By building temporary holding tanks, usually concrete, the farmer prevents the waste from mixing with runoff and polluting streams and other water bodies and providing a ready source of manure or fertilizer for farm fields. When convenient, farmers can remove the waste from the temporary storage facilities and apply it to the fields, following BMPs.<sup>133</sup>

### **Animal Waste**

Increasing trends in Frankford Township for equine and pasture from 2018 to 2022 reflect a corresponding need for making animal waste management a continuous focal point of conservation practice in the Township.<sup>134</sup>

Horse waste on farms can be a problem due in part to the relatively small land area of horse farms, making the manure more difficult to distribute on fields effectively and safely. This can contribute to the spread of disease from the manure if not controlled.<sup>135</sup>

Many farmers have “Nutrient Management Plans” to manage the manure generated on their farms. Nutrient Management Plans contain information on crop requirements, nutrient availability, proper timing and amounts of application, and environmental considerations. Such plans require farmers to have a good understanding of crop requirements, soil types and sensitive areas on/near the farm (such as wetlands and shallow aquifers); nutrient management incorporates this knowledge with site-specific sets on management practices.<sup>136</sup>

Frankford Township farmers typically use all livestock waste on their agricultural fields in accordance with their Comprehensive Nutrient Management Plans (CNMP).<sup>137</sup> For commercial livestock waste disposal services, Ag Choice LLC in Andover, Sussex County, picks up, accepts, and composts food and livestock waste on a commercial scale. It is then available as bulk pickup, sold to landscapers and garden centers, or bagged and sold at retail outlets. This type of operation not only helps control the problem of livestock waste on farms but is also a good revenue source for the owners.

### **Animal Feeding Operations**

Animal feeding operations (AFOs) have the potential to cause water pollution since mismanagement of the animal waste can lead to soil and groundwater contamination via introduction of organic matter, nitrogen, phosphorus, and bacterial pathogens into nearby surface waters.<sup>138</sup> The Criteria and Standards for Animal Waste Management (N.J.A.C. 2:91), which went into effect on March 16, 2009, set forth requirements for the development and implementation of self-certified Animal Waste Management Plans (AWMPs), high-density AWMPs and Comprehensive Nutrient Management Plans (CNMPs) for farms that generate, handle, or receive animal waste.

In general, self-certified waste management plans will be coordinated through the NJAES-RCE, which continues to aid farmers who have not yet completed AWMPs or implemented environmental BMPs on their farms. Farmers can apply for funding through Environmental

Quality Incentive Program (EQIP) to obtain a CNMP for their operation. Any livestock operation receiving EQIP funds for waste management practices such as a Heavy Use Area Protection (HUAP) site or waste storage facility must have a Comprehensive Nutrient Management Plan (CNMP). NRCS can assist producers with the development of a CNMP which in turn can be used as guide for implementing waste management practices in the future. These plans are developed with the assistance of a Technical Service Provider (TSP).<sup>139</sup>

## **Recycling**

Recycling is an important part of natural resource conservation for the agriculture industry. Hay and corn, the dominant crop products by acreage in Frankford Township, use limited products that can be recycled, and as such limit recycling opportunities. Although nursery and produce make up a small part of Frankford Township's agricultural operations, there still is a need to provide outlets for recyclable waste from these operations. The following are the recycling facilities and services available to Frankford Township farmers:

- Sussex County Solid Waste and Recycling Services – 34 South Route 94, Lafayette, 07848, (973) 579-6998 – This facility coordinates waste and recycling services for Sussex municipalities and serves as the countywide resource.<sup>140</sup>
- Frankford Township Recycling – 151 US Highway 206, Augusta, 07822, (973) 948-5566, – This facility accepts newspaper, cardboard, and magazines (empty and flatten boxes), commingled recycling, plastic bottle and food containers (including berry boxes and yogurt cups), glass bottles and jars (labels are ok), metal cans, cartons, white appliances and scrap metal, as well as scheduled leaf and Christmas tree recycling.<sup>141</sup>

Though is a Frankford Township tire recycling program available at this time, with permits being issued April through October. Local automotive service stations may also have a free tire recycling program or offer to recycle tires for a fee.

For other farm-oriented recyclables, the NJDA website lists resources for agricultural recycling. Programs listed include options for nursery and greenhouse film, pesticide containers, nursery pots, plug trays, flats, mulch film and irrigation tape. Some of these services are free, and others come at a cost to the farmers.<sup>142</sup>

## **E. Energy Conservation Planning**

In general, Frankford Township looks to the county and the state for leadership, direction and help in the areas of energy management.

In January 2010 P.L. 2009, c.213 was enacted to allow for the construction, installation, and operation of biomass, solar, or wind energy generation facilities, structures, and equipment on commercial farms, including preserved farms, with certain caveats regarding interference with agricultural productivity, valuation for farmland assessment, and amount of farm acreage that can be devoted to such facilities.<sup>143</sup>

In 2019, Governor Phil Murphy signed the Updated Global Warming Response Act seeking to reduce greenhouse emissions 80% by 2050. Green energy policy is also echoed in Governor

Murphy's Energy Master Plan, in which, the state seeks to transition to 100% clean energy by 2050.<sup>144</sup> Frankford Township farmers can take advantage of this initiative by applying for the financial incentives to implement energy efficient improvements to their farms and operations. One example of these financial incentives is the Rural Energy for America Program (REAP) which funds grant and loan guarantees to agricultural producers for assistance in purchasing renewable energy systems. Renewable energy systems include generation from the following ways: biomass, geothermal, hydropower, hydrogen, wind, and solar.<sup>145</sup>

The NRCS has the authority to use EQIP to implement Agricultural Energy Management Plans (AgEMP) to address concerns of energy conservation. As a part of the EQIP On-Farm Energy Initiative, these plans are designed to evaluate energy use and efficiency within farming operations. These energy audits can qualify a farmer for financial assistance to implement recommendations of the process if the audit meets the proper time and standard requirements. This plan is implemented to assist the landowner's goals of achieving cheaper and more efficient energy consumption.<sup>146</sup>

The EQIP natural resource conservation program pays for some energy production programs, such as replacement of older, dirty polluting working diesel engines, with newer, more efficient, cleaner burning diesel engines that will meet EPA Tier requirements for the program year. Farmers should check the NRCS website regarding this program since requirements may change from year to year.<sup>147</sup> The New Jersey Board of Public Utilities (NJBPU) offers rebates for solar electric, wind, and sustainable biomass systems if funding is available.

### **Solar Energy**

The SADC does allow solar generating facilities on preserved farms, and rules for these installations are contained in Subchapter 24 of Chapter 76.<sup>148</sup> Solar generating facilities are also allowed on unpreserved farms and the SADC has provided AMP (agricultural management practices) for these facilities.<sup>149</sup> A summary of the policies aligned by both the subchapter and the AMP is given below:

- Solar panels (solar energy general facilities) are allowed on commercial farms (preserved and unpreserved).
- Panels cannot be constructed/installed on prime farmlands (to the maximum extent practicable).
- The SADC prefers they be constructed on buildings or facilities; if on the ground, they are to be installed without concrete footing or permanent mounting.
- Solar facilities are limited to 110% of the previous calendar year's energy demand or cannot exceed more than 1% of the total farm area.
- Purpose of the facilities must be to provide energy for the farm, with an allowance for income opportunity for farmers.
- System cannot exceed height of 20 feet.
- Must minimize views from public roadways and neighboring residences.
- Facilities must use existing roadways to provide access to facilities to avoid construction of new roadways.

EQIP provides cost-share funding for solar livestock watering facility as part of a grazing system. Special rates are available to qualified farmers. In 2018, two contracts were planned and applied, but in 2019 no contracts were developed. Frankford Township farmers interested in using this alternate energy source can contact the local NRCS office in Hackettstown for more information.<sup>150</sup>

New Jersey NRCA – Hackettstown Commerce Park, Building #1, 101 Bilby Rd.  
Hackettstown, 07840, (732) 537-6040.

### **Wind Energy**

According to the NJDA, the northwest part of New Jersey, which includes Sussex County, has ample and consistent enough wind power to make turbine energy feasible. New Jersey and Frankford Township farmers might take advantage of a distributed or “small” wind system, which uses turbines of 100 kilowatts or smaller to directly power a home, farm, or small business. New Jersey’s Clean Energy Program provides a model small wind ordinance for municipal adoption. Although this is a first step toward encouraging wind energy, New Jersey’s Clean Energy Program incentives for wind energy installations have been on hold since 2011.<sup>151</sup>

In Frankford Township, a wind turbine would be deemed an accessory or conditional use under current zoning regulations and thus would require a height variance. A zoning permit and site plan are required for an application to be deemed complete.<sup>152</sup> These requirements, along with other detailed conditions, indicate Frankford Township’s willingness to consider alternative energy source.

### **Biopower**

Starting in 2017, biopower projects are incentivized through the Combined Heat and Power Program (CHP). Program participants are eligible to receive financial incentives for CHP installations to further enhance energy efficiency in their buildings through on-site power generation and using distributed generation to provide reliability solutions for New Jersey while supporting the state’s Energy Master Plan. Frankford Township farmers can find the program eligibility requirements and the program’s financial incentives in the CHP-FC Program Guide.<sup>153</sup>

### **Ethanol and Pelletized Switchgrass**

Corn, the second highest dominant field crop in Frankford Township, could position the Township’s farmers to financially capitalize on the spreading movement towards ethanol-blended fuels. In addition, interest has been shown in utilizing switchgrass to make energy producing pellets. This could add another market for Frankford Township farmers.<sup>154</sup>

### **Biodiesel**

Biodiesel, made from the oils of soybeans, is an alternative to petroleum diesel. The Environmental Protection Agency reported 2.1 billion gallons of biofuel were consumed in 2015. Countywide, soybean production has decreased significantly over the past decade. Sussex County produced 235,825 bushels in 2012, 356,376 bushels in 2015, and only 64,300 bushels in 2020. This is an 81% decrease in soybean production between 2015 and 2020. Frankford Township, based on 2017 totals, falls in the lower half of soybean producers in Sussex County.

While no bio-diesel producers are available nearby, several retailers operate within the region, including:

- Dixon Energy – 99 Cobb Street, Rockaway, 973-334-1000
- Taylor Oil Co., Inc – 77 Second Street, Somerville, 908-725-7737
- Quarles – 1046 North Godfrey Street, Allentown, PA, 877-444-3835<sup>155</sup>

### **Biogas**

In 2020, New Jersey ranked 30<sup>th</sup> nationwide in biogas production. Out of 59 operational systems, down from 62 in 2015, 22 are landfill systems and 32 are wastewater systems, and five are food waste systems. Increasing biogas operations can lead to economic opportunity through job creation and environmental benefits through reducing greenhouse gasses.<sup>156</sup>

### **Renewable Energy Grant Programs**

*New Jersey's Clean Energy Program:* Administered by the NJBPU, this program provides financial incentives to install clean energy systems, including fuel cells, solar energy, small wind, and sustainable biomass equipment. Financial incentives are in the form of rebates, grants, energy certificates and loans. Additional information is at <https://njcleanenergy.com>.

*Renewable Energy Incentive Program (REIP):* This program previously offered funding assistance for solar, wind, and sustainable biomass installations. Currently, this program is on hold for wind systems. Since the Spring of 2020, those who seek to register solar projects do so through the Transition Incentive Program (TI).<sup>157</sup>

*Anemometer Loan Program:* administered by five New Jersey universities, provides a way for prospective locations to test the potential for wind power production and assess its economic feasibility.<sup>158</sup>

*New Jersey Smart Start Buildings:* Operated by the NJBPU, this program is a statewide energy efficiency program available to qualified commercial, industrial, institutional, governmental, or agricultural customers that seek to change their electric or gas equipment.<sup>159</sup>

*USDA Rural Energy for America Program (REAP):* Reauthorized under the Agricultural Improvement Act of 2018 (2018 Farm Bill), the REAP program provides guaranteed loan financing to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements.<sup>160</sup> For agricultural producers, a guaranteed loan and grant program can provide financial assistance with the installation of renewable energy systems.

*Advanced Biofuel Payment Program:* This program is to increase the production of advance biofuels. Quarterly payments are distributed to participants for actual quantity of eligible advance biofuel production. An advanced biofuel is a fuel that is derived from renewable biomass, other than corn kernel starch. Biofuels that may be specific to Frankford Township farmers are those derived from waste material such as crop and animal wastes.<sup>161</sup>

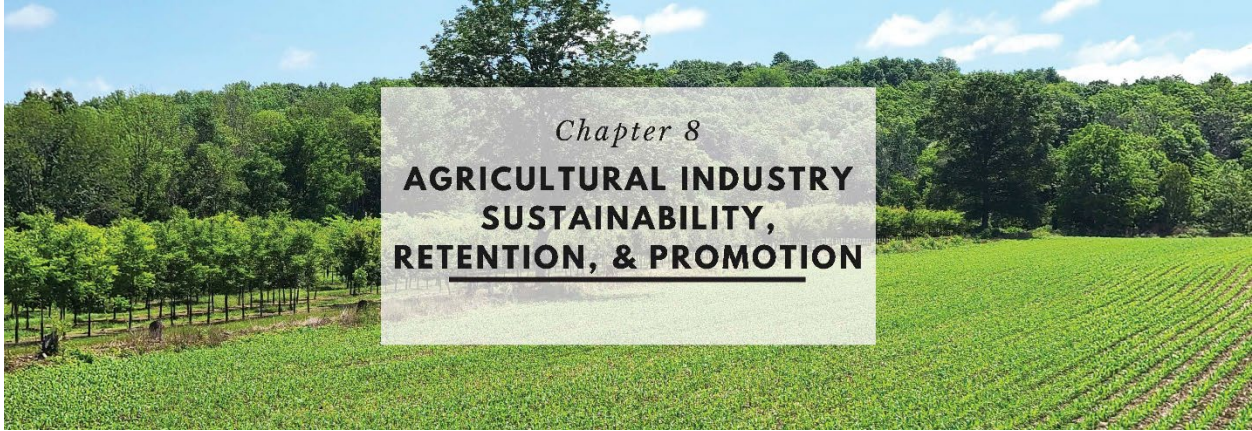
*Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program:* This program provides loan guarantees up to \$250 million to assist the development of new and

emerging technologies. These technologies include advanced biofuels, renewable chemicals, and biobased products.<sup>162</sup>

## F. Outreach and Incentives

The Township's AAC is committed to working with the Sussex CADB, the state, and regional agencies to assist in outreach and education to farmers and landowners regarding natural resource conservation and agricultural productivity. Frankford Township looks to the county, state and regional agencies for leadership, direction, and help. The Frankford Township AAC will continue to work with the Sussex CADB to implement programs to aid in natural resource conservation on farms in the Township.





*Chapter 8*  
**AGRICULTURAL INDUSTRY  
SUSTAINABILITY,  
RETENTION, & PROMOTION**

***Chapter 8: Agricultural Industry Sustainability, Retention And Promotion***

## A. Existing Agricultural Industry Support

### 1. Right to Farm

In 1983 the State Legislature enacted the Right to Farm Act (RFA) and amended it in 1998, ensuring that farmers can continue accepted agricultural operations. Another critical piece of legislation in support of agriculture was the 1983 Agriculture Retention and Development Act. This Act created the SADC, and authorized counties to create CADB. <sup>163</sup>

The SADC works to maximize protection for commercial farmers under the RFA by developing AMPs (agricultural management practices), tracking right-to-farm cases, offering a conflict resolution process, and reviewing rules proposed by other state agencies for the impact they may have on agriculture. To qualify for right-to-farm protection a farm must meet the definition of a “commercial farm” in the RFA; be operated in conformance with federal and state law; and comply with AMPs recommended by the SADC, or site-specific AMPs developed by the Sussex County CADB at the request of a commercial farmer. <sup>164</sup>

As of 2021, the SADC had 12 AMPs in place, the latest, an AMP for On-Farm Direct Marketing Facilities, Activities and Events, adopted April 7, 2014. The SADC lists 7 site-specific AMPs for Sussex County, all of which the Sussex CADB decided on or resolved. <sup>165</sup>

All right to farm complaints or issues that are brought before the Sussex CADB are first handled with fact finding and efforts to resolve differences between the parties. The mediation can be informal or, if the parties agree, the SADC will provide mediation or conflict resolution at no cost to the participants through its Agricultural Mediation Program. If a formal complaint is filed with the Sussex CADB, it is sent to the SADC for a determination as to whether the farm qualifies as a commercial farm (N.J.S.A. 4:1C-3) and whether the operation or activity is eligible for right-to-farm protection. The CADB and/or SADC typically conducts a site visit for additional fact finding, sometimes consulting with agricultural experts and municipalities (in cases where municipal regulations are involved in right-to-farm disputes.) Depending on the nature of the issues, either the CADB or SADC (or both in some cases) holds a public hearing at the county level. Decisions made by the Sussex CADB may be appealed to the SADC, and final SADC determinations may be appealed to the New Jersey Superior Court, Appellate Division. <sup>166</sup>

Municipalities can and should limit the number of right-to-farm complaints and encourage farming as an industry by:

- Working to better understand the Right to Farm process to adopt or update comprehensive RTF ordinances as outlined by the SADC;
- Making agriculture a permitted use in all appropriate zones;
- Requiring buffers between new non-agricultural development and adjacent existing farmlands; and
- Requiring notification to homeowners purchasing a home in a new subdivision where active agriculture occurs on adjacent property.

RTF ordinances are a necessary item for municipalities that wish to enter the Farmland Preservation Program. Frankford Township established its RTF Ordinance in 1999, sixteen years after the state enacted Right to Farm in 1983. (**Appendix B**)

The Ordinance states that its purpose is to “*establish as the policy of this Township the protection of commercial farm operations from nuisance actions, where recognized methods and techniques of agricultural production are applied, while, at the same time, acknowledging the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in the Township.*”<sup>167</sup>

According to the ordinance, “permissible acts” include:

- a. “Produce agricultural and horticultural crops, trees and forest products, livestock, and poultry and other commodities as described in the Standard Industrial Classification for agriculture, forestry, fishing and trapping;
- b. Process and package the agricultural output of the commercial farm;
- c. Provide for the wholesale and retail marketing of the agricultural output of the commercial farm and related products that contribute to farm income, including the construction of building and parking areas in conformance with municipal land use and site plan ordinances;
- d. Replenish soil nutrients;
- e. Control pests, predators and diseases of plants and animals;
- f. Clear woodlands using open burning and other techniques, install and maintain vegetative and terrain alterations and other physical facilities for water and soil conservation and surface water control in wetland areas; and
- g. Conduct on-site disposal of organic agricultural wastes.”

Frankford Township’s RTF Ordinance does not specifically list some of the suggested activity rights in the SADC Model Right to Farm Ordinance. These include:

- Housing and employment of farm laborers
- Construction of fences
- Conduction of agriculture-related education and recreation activities
- Farm-market and pick-your-own signage
- Operation and transportation of large, slow moving farm equipment over municipal roads

- Installation of wells, ponds, and other water resources
- Engage in renewable energy (biomass, solar, wind) <sup>168</sup>

It does not mention the Agricultural Mediation Program, which is a process where an impartial mediator can help disputing parties solve issues. This program was established by the SADC as a voluntary process to examine mutual problems, identify and consider options, and come to a solution. Although the Township’s RTF ordinance does not list all protected activities, eligible commercial farm operators are still covered for these activities through the state’s RTF act.

Frankford Township’s AAC can help avoid or minimize Right to Farm conflicts by making farmers and other residents aware of the provisions in the Township’s code and by having an open-door policy that allows those with issues to talk informally with a member or members of the AAC or Township officials to try to resolve issues before engaging the formal processes of appeals to the Sussex CADB or the SADC.

## 2. Farmland Assessment

The Farmland Assessment program is a tax incentive which reduces property taxes on active commercial farmed land, thereby assisting farmers with a critical financial aspect in helping to keep land in farms. This tax incentive is made possible by the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq. Its provisions were updated by legislation that was signed into law in 2013, becoming effective in tax year 2015. Basic eligibility requirements include:

- The applicant must own the land.
- The property owner must apply annually for Farmland Assessment on or before August 1 of the year immediately preceding the tax year.
- Land must be devoted to agricultural and/or horticultural uses for at least two years prior to the tax year.
- Land must consist of at least five contiguous farmed and/or woodland management plan acres. Land under or adjoining a farmhouse is not counted towards the minimum five acres.
- Effective as of tax year 2015, gross sales of products from the land must average at least \$1,000 per year for the first five acres, plus an average of \$5.00 per acre for each acre over five. In the case of woodland or wetland, the income requirement is \$500 for the first five acres and \$.50 per acre for any acreage over five. Dependent on the agricultural or horticultural products being produced, the farmer can also offer clear evidence of anticipated yearly gross sales, payments, or fees within a reasonable period; and,
- The property owner must represent that the land will continue in agricultural or horticultural use to the end of the tax year. <sup>169</sup>

The Farmland Assessment program does not apply to farm structures, such as barns and storage facilities.

There are **22,585 acres** of land in the municipality, of which **10,114 acres** are devoted to agricultural and horticultural usage. This is more than 45% of the land in the town. Of this, **5,691**

**acres** are used as either cropland or pasture, and **4,389 acres** are woodland, and **32 acres** are used for equine boarding rehabilitation or training operations.<sup>170</sup>

By making agriculture more profitable and viable, tax incentives help to ensure a steady, permanent source of agricultural lands for the Township's farmland preservation efforts.

## B. Additional Strategies to Sustain, Retain, and Promote Agriculture

### 1. Permit Streamlining

Municipalities play a key role in the preservation of farming as an industry. Without strong and active support from municipal governments, farming can be too costly and burdensome to be profitable or worthwhile. In towns with a sizable acreage of assessed farmland, zoning powers can be utilized to require buffers between agriculture and other uses to minimize conflict.

The viability of farming in New Jersey is impacted by many issues, including government regulation, development pressures, and the economics of the marketplace. While land preservation is vital for maintaining a sufficient land base suitable for farming, sustaining Frankford Township's strong agricultural base requires support on many fronts, one of which is flexibility in government regulation. These include:

- *Positive and supportive public policy*: This includes legal protection (right to farm), priority in decisions on taxation (farmland assessment), regulation exemptions, and financial incentives (planning incentive grants).
- *Exemptions*: State, county, and municipal regulations must be responsive to the needs of farmers. Minor changes to, or exemptions from, certain local and state regulations, rules, and ordinances help to buffer agricultural operations from burdensome costs, creating a farmer-friendly environment. The Union Township agriculture community must work to ensure that exemptions are adequate and reasonable.
- *Flexibility*: State agencies should consider the *NJDA Agricultural Smart Growth Plan* when making decisions regarding existing and proposed infrastructure, developing, and amending regulations and programs, and protecting environmental and historical resources. These agencies should coordinate with NJDA to ensure that regulations and programs are attuned to the needs of Sussex County and Frankford Township farmers.
- *Agriculture-Friendly Zoning*: This refers to a comprehensive land use practice that coordinates zoning and land use policy in a proactive way. The desired result is that it encourages agribusiness, while at the same time reducing the incidence of farmer-homeowner nuisance issues.

### 2. Agriculture Vehicle Movement

Since many farm vehicles travel over local municipal roads, municipalities should continue to support local agricultural businesses right to do so. The SADC model RTF ordinance recognizes, as a specific right, the operation and transportation of large, slow-moving farm equipment over roads. Frankford Township does not include slow-moving equipment as a protected farming activity in their RTF ordinance.

### 3. Agricultural Labor Housing/Training

An adequate labor supply is integral to harvesting vegetables, fruits, and berries. Measured in farmed acreage, Frankford Township has a relatively small industry for these products compared with field crops such as hay; Sussex County maintains 2,967 acres of corn and 11,765 acres of hay<sup>171</sup>. Since the overall acreage devoted to labor intensive farming is small in Frankford, seasonal farm labor housing, a large issue in towns and counties with high farm labor populations is, for the most part, not of high concern in the Township.<sup>172</sup>

Sussex County has a higher cost of living than the national average, which affects both farmers and laborers. Attracting farm labor to live and work in Sussex is difficult, as is attracting the next generation of farmers.<sup>173</sup> In addition, the minimum wage for agricultural employers as of January 1, 2022 is \$11.05/hr. and is expected to increase to \$15.00/hr. by 2027.<sup>174</sup> The cost of labor in New Jersey is a significant issue for some farming sectors such as produce. Though a farmer may wish to raise their prices to cover increased production costs, this is often not feasible, due to competition from neighboring states with lower labor and other production costs.

In 2018, the New Jersey State Board of Agriculture published an official position on the New Jersey minimum wage increases. The Board's position lauds the awareness of the State Senate and Assembly to the vulnerability of farmers but continues to encourage further legislative considerations and protections. Most of the Board's concerns stem from the ripple effects of wage increases that may occur without the necessary protections for farmers.<sup>175</sup>

#### **Agricultural Labor Housing**

The Sussex CADB recognizes that, currently, agricultural labor housing is not protected under the Right to Farm (RTF) Act. It may be permitted on a preserved farm, with the approval of the CADB and SADC, but that does not give it RTF protection. The 2012 Frankford Township Farmland Assessment states that the Agricultural Advisory Committee does not see a need for seasonal housing, as much as for on-site labor housing for year-round laborers.<sup>176</sup>

#### **Farmer Education**

**The New Jersey Agriculture Experiment Station – Rutgers Cooperative Extension of Sussex County (NJAES - RCE of Sussex County)** is a research and education program that serves farming communities throughout the State of New Jersey. During the growing season, the NJAES – RCE of Sussex County provides one-on-one, on-site consultations with farmers to assist with control of insect identification, plant disease diagnoses and pest management recommendations for agricultural operations. In addition, its online resources, and on-site programs through the state, the NJAES, in combination with extension services at universities nationwide, increasingly offer educational and training opportunities via Webinars, Webcasts and online tutorials.<sup>177</sup>

The RCE of Sussex County provides practical assistance to farmers. Examples are assistance in obtaining pesticide application licenses (necessary to buy and apply pesticides), and to obtain water certification and registration permits from the NJDEP, for groundwater and/or surface water allocations. The programs and assistance offer an individual farm operator the opportunity

to gain the latest information on numerous and pertinent agriculture topics, which are important to agricultural sustainability.<sup>178</sup>

**Sussex County Community College (SCCC)** currently offers several agriculture-related Associate programs, such as Agricultural Business and Horticultural Science. These degrees focus on the SCCC also offers natural sciences specializations, such as Biology, Chemistry, and Geology.<sup>179</sup>

**The Northeast Organic Farming Association (NOFA)** offers educational programs for farmers, including a Beginning Farmer Program. Other educational programming includes organic gardening, permaculture design certification, business courses, technical assistance, and farm-to-table workshops.<sup>180</sup> Circle Brook Farm is the only NOFA farm in Sussex County. Located in Andover Township, Circle Brook Farm is an organic fruit and vegetable CSA-supported farm that delivers to markets throughout New Jersey. The NOFA-NJ office is located at 386 Rock Road East, Lambertville, and can be reached at (908) 371-1111.

**The Hudson Farm Club and Foundation** seek to conserve and manage 3,800 acres in Andover Township. The Hudson Farm Club offers overnight accommodations, food services, rifle ranges, bird and big-game hunting, and training. The Hudson Farm Foundation supports local charities such as Project Self Sufficiency, Habitat for Humanity, The Karen Ann Quinlin Foundation, etc. Both organizations support conservation efforts present in Sussex County, including implementation of the American Chestnut Program, nesting boxes and bat houses, and forestry stewardship programs supported by the New Jersey Audubon Society (NJAS), New Jersey Forest Fire Service (NJFSS), New Jersey Division of Fish and Wildlife (NJDFW), and local Boy Scout Troops. The Hudson Farm Club is located at 270 Stanhope Sparta Rd, Andover, and can be reached at (973) 398-4330.<sup>181</sup>

**NJDA** through its Division of Agriculture and Natural Resources, Natural Resource Conservation Program, the NJDA offers technical, financial, and regulatory assistance, and provides educational outreach to landowners throughout the state.<sup>182</sup> Agriculture labor education and training funding may be available through the New Jersey Department of Labor and Workforce Development Programs. These programs can help assist in upgrading the skills and productivity of the agricultural workforce.<sup>183</sup>

**New Jersey Farm Bureau** hosts educational meetings and provides information for farmers about legislative issues, farmland preservation, and labor resources on its website.<sup>184</sup>

### **Youth Farmer Education Programs**

According to the Census of Agriculture, the farmer population in Sussex County is getting older, with an increase of 1.4 years of an average age of 58.7 in 2017 versus 57.3 in 2007.<sup>185</sup> The nationwide average age of operators in 2017 was 58.6, roughly the same as Sussex County.<sup>186</sup> In 2017, there were 85 farmers (4.9%) out of 1,721 farmers in Sussex County who were under the age of 35.<sup>187</sup>

Nationwide, the average age of operators on new farms is lower than for all farms (48 versus 60.6). Additionally, the *Census*' new "Young Producers" section shows that there are 84 farms

with about 116 young producers in Sussex County.<sup>188</sup> This is significantly higher than the average for New Jersey counties, made even more impressive due to Sussex's smaller size and population.<sup>189</sup> Educational programs in agriculture offered as an optional and viable opportunity for the youth of Frankford Township will assist those who are interested in pursuing such careers.

The closest post-secondary institutions to Frankford Township that offer programs relating to environmental studies and agriculture are:

- 8.5 miles – Sussex County Community College, 1 College Hill Rd, Newton, NJ,
- 18.4 miles – Kean University – Skylands Campus, 243 Mt. Paul Rd, Oak Ridge, NJ,
- 34.5 miles – East Stroudsburg University – 200 Prospect St, East Stroudsburg, PA

Changes in the cost of attendance/financial assistance for college education in New Jersey may offer incentives for young farmers to seek enrollment in higher education. In the Spring of 2019, the state piloted the New Jersey Community College Opportunity Grant, where students may be eligible for tuition-free college.

**Future Farmers of America (FFA)** was founded in 1928, has 8,739 chapters and 760,113 members aged 12-21 in all 50 states.<sup>190</sup> In 2020, there were 36 chapters in New Jersey with more than 2,400 members.<sup>191</sup> Newton High School provides youth agriculture education where students can participate in local, state, and national FFA activities.<sup>192</sup> The school works with Sussex County Community College to provide students with fieldwork farming experience on land leased through the SAgE (Sustainable Agriculture Enterprise) program of the Foodshed Alliance.<sup>193</sup>

Erin Noble is the state FFA representative and can be contacted at [erin.noble@ag.nj.gov](mailto:erin.noble@ag.nj.gov) for further information.

**Sunset View Farm**, Sussex County's largest community garden, is located on Pierce Road in Andover. Sunset View Farm offers \$200 30ft x 15ft garden plots, hand-cut flowers, vegetation contests, tractor maintenance and restoration, and horticulture educational opportunities.<sup>194</sup>

**4-H** is an informal, practical educational program for youth, which assists young people interested in farm animals through livestock projects. Sussex County's 4-H Youth Development Programs are overseen by the Sussex County NJAES-RCE.<sup>195</sup>

**Farm Link Program** is a program for all farmers, new and established, and offers resources for:

- New farmers looking for opportunities to gain experience
- New farmers looking for land to get started
- Established farmers looking for land to expand
- Farm owners looking to lease, sell, or make land available for farming
- Retiring farmers who would like to ensure their land stays in agricultural production but have no family members who want to continue to farm

- Farmers looking to hire farm managers, fill apprenticeship positions, or mentor a new farmer
- Non-profits, municipalities, and counties looking for farmers for farmland they own or manage
- Farmers and landowners working on farm transfer plans

Farmers interested in land or partnership/job opportunities, as well as those wanting to advertise available land and opportunities, can sign up and create and manage their own listings through the interactive NJ Land Link website. As of June 2022, there are 5 farmland listings in Sussex County.<sup>196</sup>

#### 4. Wildlife Management Strategies

Crop damage from wildlife leads to economic loss for the farmer and/or landowner and is a serious problem throughout Sussex County. At present, hunting is about the only method available to farmers. Although many farmers are avid hunters and do apply for depredation permits that allow them to hunt out of season, even hunting is becoming a less viable solution. The development that takes away territory from these animals also limits the farmers ability to hunt. As farms become smaller and more developments are built adjacent to farms, areas can no longer be hunted, even by the farmers who own the land, because they would be hunting too close to a neighborhood dwelling. Special hunting options include:

- License exemptions for farm families
- Special farmer black bear permit
- Farmer Depredation Permit
- Deer Management Assistance Program<sup>197</sup>

Insects are also causing crop damage. The pesticides used to control them can cause other kinds of damage, possible health concerns for the end user of the product, and pollution of the County's water supply. At the county level, studies undertaken by the NJAES-RCE, such as the perimeter trap study on insects and pumpkins undertaken several years ago and the integrated pest management resources available through the NJAES-RCE, are attempts to help solve these problems in ways that work for both the farmer and the environment.<sup>198</sup>

The NJDA's Division of Plant Industry works to safeguard the state's plant resources from injurious insect and disease pests. The Division implements several programs for detection, inspection, eradication, and control of insect pests, which helps to ensure that the public can enjoy high quality, pest-free agricultural products.<sup>199</sup> The Division's Gypsy Moth Suppression Program is a voluntary cooperative program involving local governments, county and state agencies, as well as the USDA Forest Service. Aerial spray treatments of *Bacillus thuringiensis* are utilized when gypsy moth cycles are at a peak and natural controls are not sufficient to control defoliation.

The gypsy moth problem in Sussex County was heavy enough in several recent years to require aerial spray treatments in some areas. In Frankford, in 2010 the aerial defoliation survey identified 12 acres of moderate infestation and 5 acres of heavy infestation versus 132 acres of



moderate infestation in 2009.<sup>200</sup> In 2015, Sussex County suffered the highest amount of tree defoliation in the state with over 112,149 acres impacted.<sup>201</sup> In 2022, the entire state of New Jersey was placed under quarantine for gypsy moth by the USDA Animal and Plant Health Inspection Service.<sup>202</sup>

## 5. Agricultural Education and Promotion

The USDA has an array of loans and grants, known as the **Rural Development Program**, to assist residents in rural areas of the country to support essential public facilities and services such as water and sewer systems, housing, health clinics, emergency service facilities, and electric and telephone service. The Agricultural Act of 2018 (Farm Bill) updates the Rural Development Program in several ways, including:

- Amends the definition of rural to exclude from population thresholds individuals incarcerated on a long-term or regional basis and excludes the first 1,500 individuals residing in on-base military housing.
- Increases annual appropriated funding for broadband deployment from \$25 million in FY2019 to \$350 million in FY2023.
- The 2018 Farm Bill redirects program funds of existing rural development programs to target a range of rural health issues.
- The 2018 Farm Bill also includes other provisions to reauthorize and/or amend loan and grant programs that help with rural water and wastewater infrastructure, business development and retention, and community and regional development.<sup>203</sup>

Grants and loans are available in three key areas: Business-Cooperative, Housing and Community Facilities (including farm labor housing), and Utilities (including Broadband).<sup>204</sup> To qualify for some of the program's loans and grants, municipalities must have less than 10,000 residents, other program thresholds have increased. At a population of approximately 5,362 as of 2021,<sup>205</sup> Frankford Township may qualify for these loans and grants.

The U.S. Taxpayer Relief Act of 1997, administered by the U.S. Department of Treasury's Internal Revenue Service, is meant to smooth out economic disparities that farmers experience from year to year due to the cyclical nature of agriculture. Known as **Farm Income Averaging**, qualified farmers can average all or part of their current year farm income over the previous three years. Substantial tax dollars can be saved by income averaging.<sup>206</sup>

The New Jersey Legislature has considered bills that would provide income averaging similar to the federal program. In the 2018-2019 Regular Session, Bill NJ A236 was introduced and has since been referred to the Assembly Agriculture and Natural Resource Committee. The NJDA, SADC, Sussex County Commissioners, and CADB can work with, and encourage, the New Jersey Legislature to continue to introduce bills that would assist Sussex County and Frankford Township farmers to remain economically viable.

The New Jersey FSA has both **Direct and Guaranteed Farm Ownership** loans available for farmers, including those in Sussex County. Direct Farm Ownership Loans are available up to \$600,000, and guaranteed loans can go up to \$1,776,000. Down Payment loan funds may be used

to partially finance the purchase of a family farm. Loan applicants must contribute a minimum down payment of 5% of the purchase price of the farm and the Agency will finance 45% to a maximum loan amount of \$300,015.<sup>207</sup>

FSA loans can be used for most agriculture necessities such as purchasing land, livestock, equipment, feed, seed, supplies, and for construction of buildings, or to make farm improvements.<sup>208</sup>

# Maps

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Map 1. Farmland

Map 2. Preserved and Public Lands

Map 3. Agricultural Soil Categories

Map 4. Agricultural Development Area

## **Target Farm Analysis Maps:**








Map A. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Tillable Land

Map B. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Agricultural Soils

Map C. Target Farms: Potentially Eligible Farm Parcels & Units that meet SADC criteria for Agricultural Soils and Tillable Land

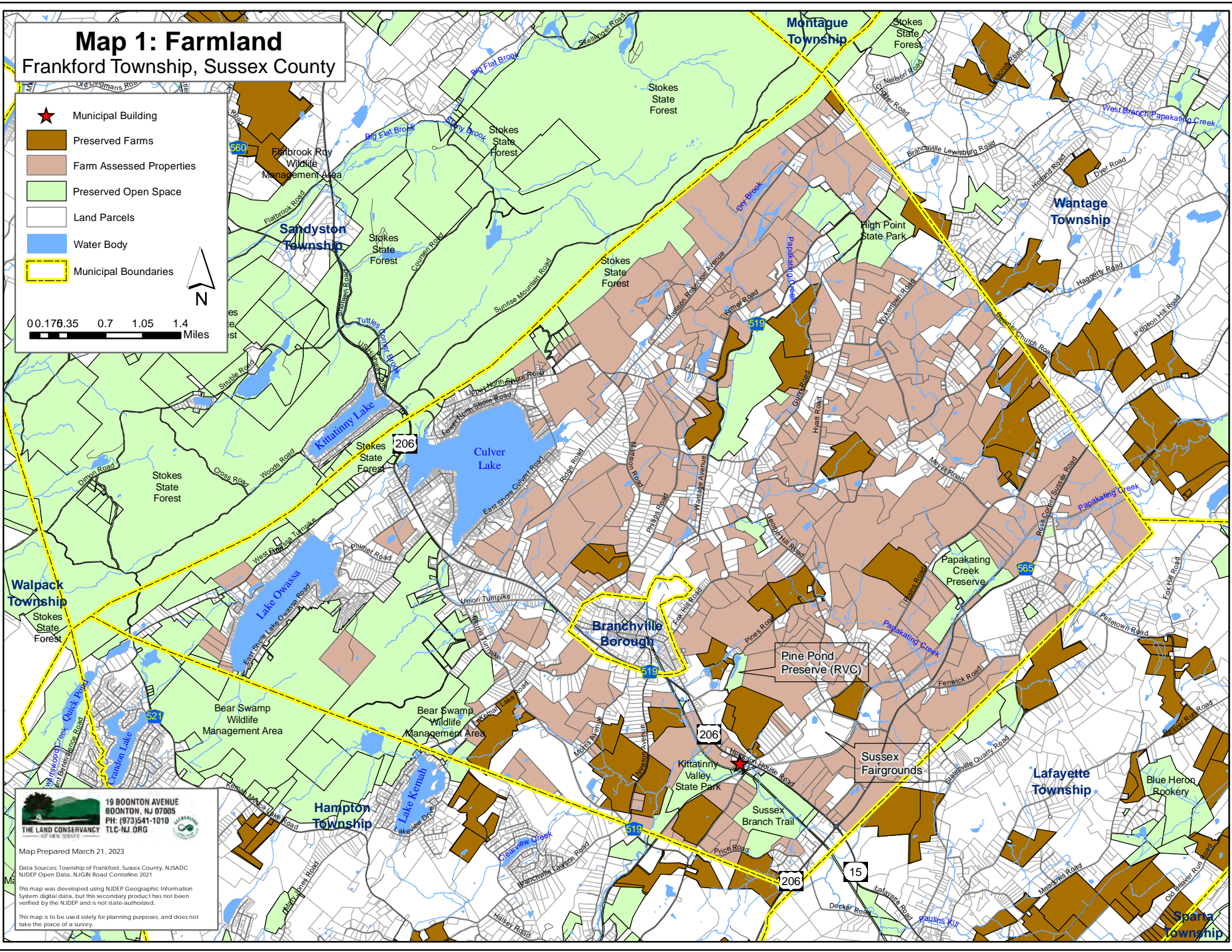
# Map 1: Farmland

## Frankford Township, Sussex County

-  Municipal Building
-  Preserved Farms
-  Farm Assessed Properties
-  Preserved Open Space
-  Land Parcels
-  Water Body
-  Municipal Boundaries

N

0 0.17635 0.7 1.05 1.4 Miles



 **19 BOONTON AVENUE**  
**BOONTON, NJ 07005**  
 PH: (973)541-1010  
 TLC-NJ.ORG

Map Prepared March 21, 2023

Data Sources: Township of Frankford, Sussex County, NJSADC  
 NJDEP Open Data, NJGN Road Centerline 2021


This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

This map is to be used solely for planning purposes, and does not take the place of a survey.



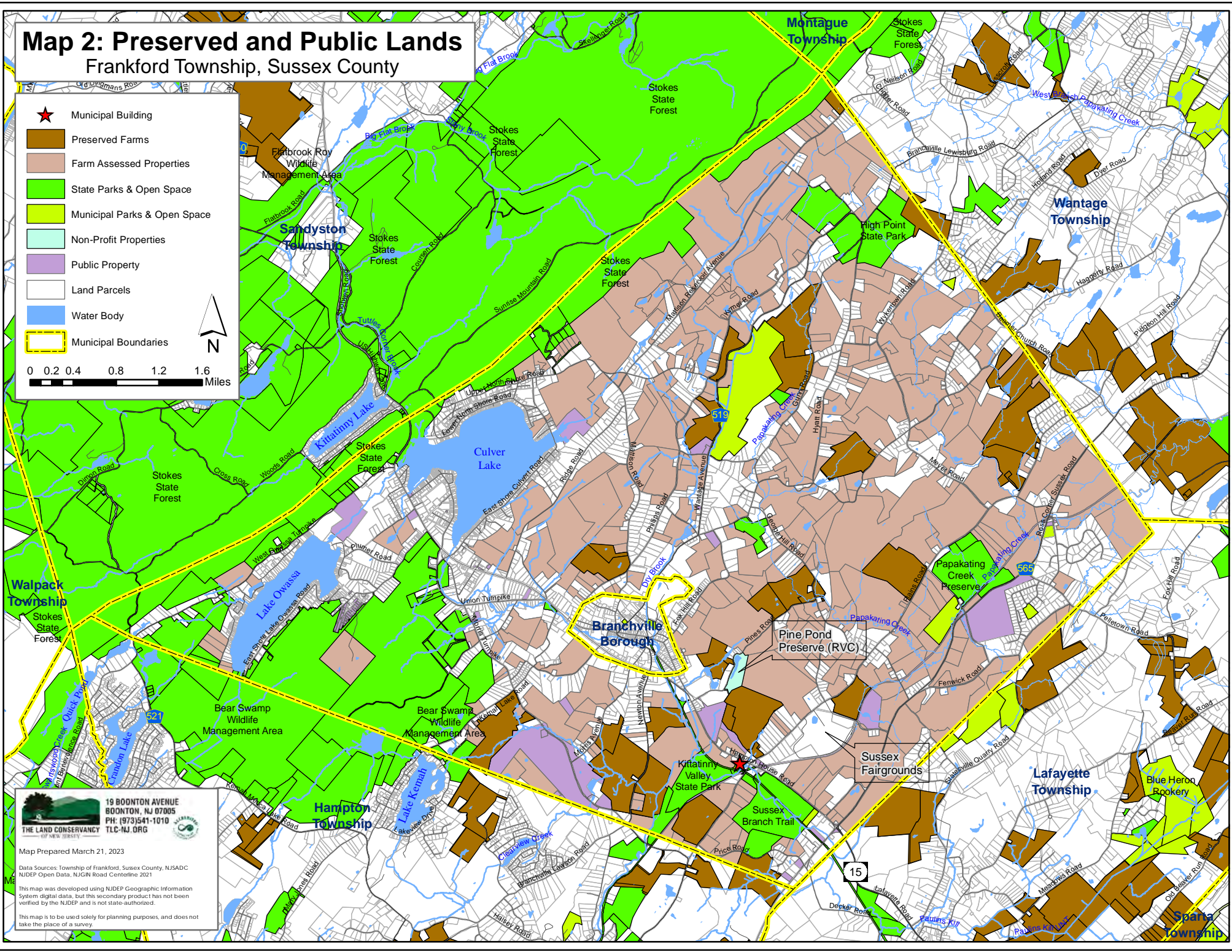
# Map 2: Preserved and Public Lands

## Frankford Township, Sussex County

-  Municipal Building
-  Preserved Farms
-  Farm Assessed Properties
-  State Parks & Open Space
-  Municipal Parks & Open Space
-  Non-Profit Properties
-  Public Property
-  Land Parcels
-  Water Body
-  Municipal Boundaries

0 0.2 0.4 0.8 1.2 1.6 Miles

N



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**PH: (973)541-1010**  
**TLC-NJ.ORG**

Map Prepared March 21, 2023

Data Sources: Township of Frankford, Sussex County, NJSADC  
 NJDEP Open Data, NJGN Road Centerline 2021







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# Map 3: Agricultural Soil Categories

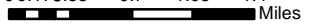
## Frankford Township, Sussex County

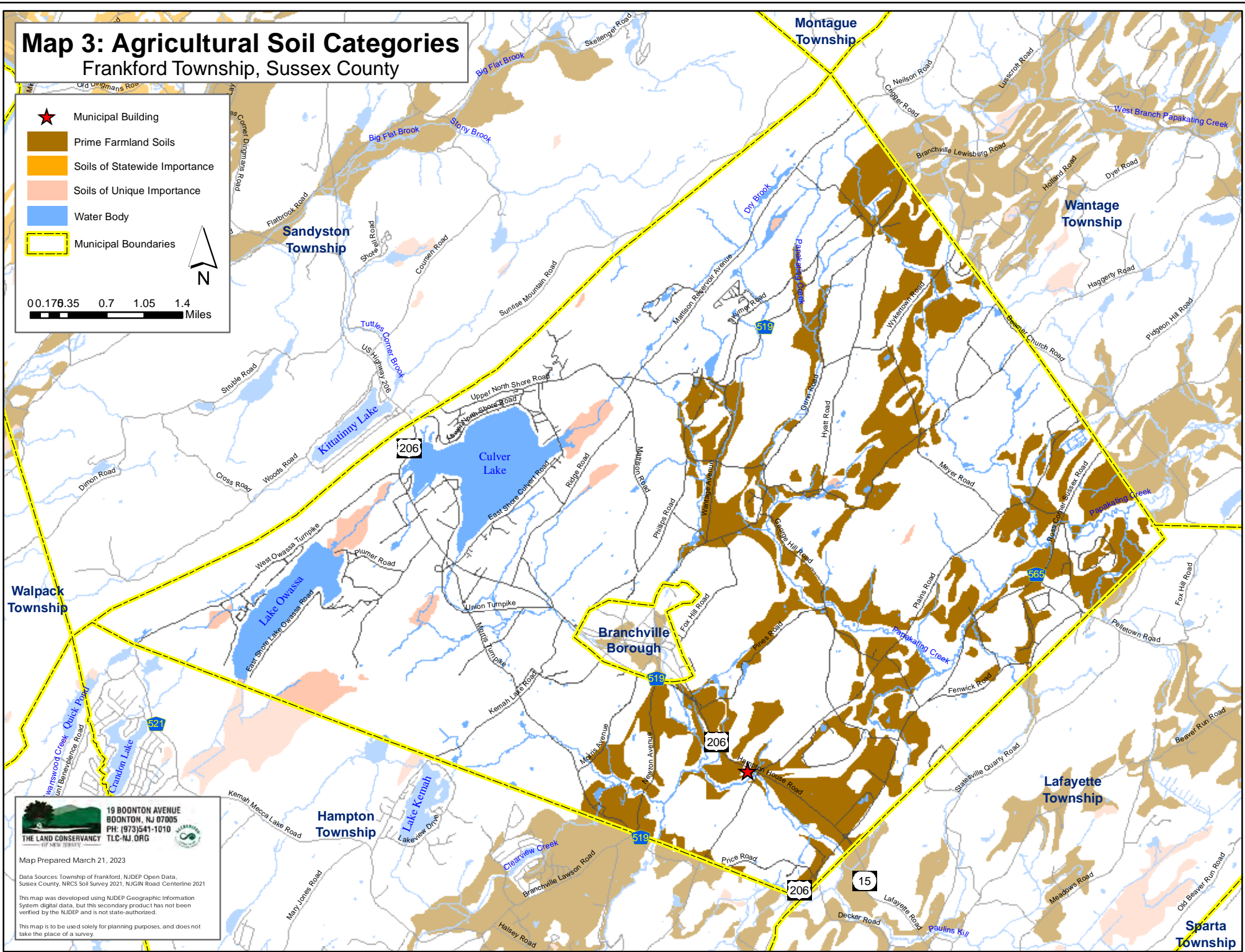
-  Municipal Building
-  Prime Farmland Soils
-  Soils of Statewide Importance
-  Soils of Unique Importance
-  Water Body
-  Municipal Boundaries



N

0 0.17635 0.7 1.05 1.4 Miles







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Map Prepared March 21, 2023

Data Sources: Township of Frankford, NJDEP Open Data, Sussex County, NRCS Soil Survey 2021, NJGIN Road Centerline 2021









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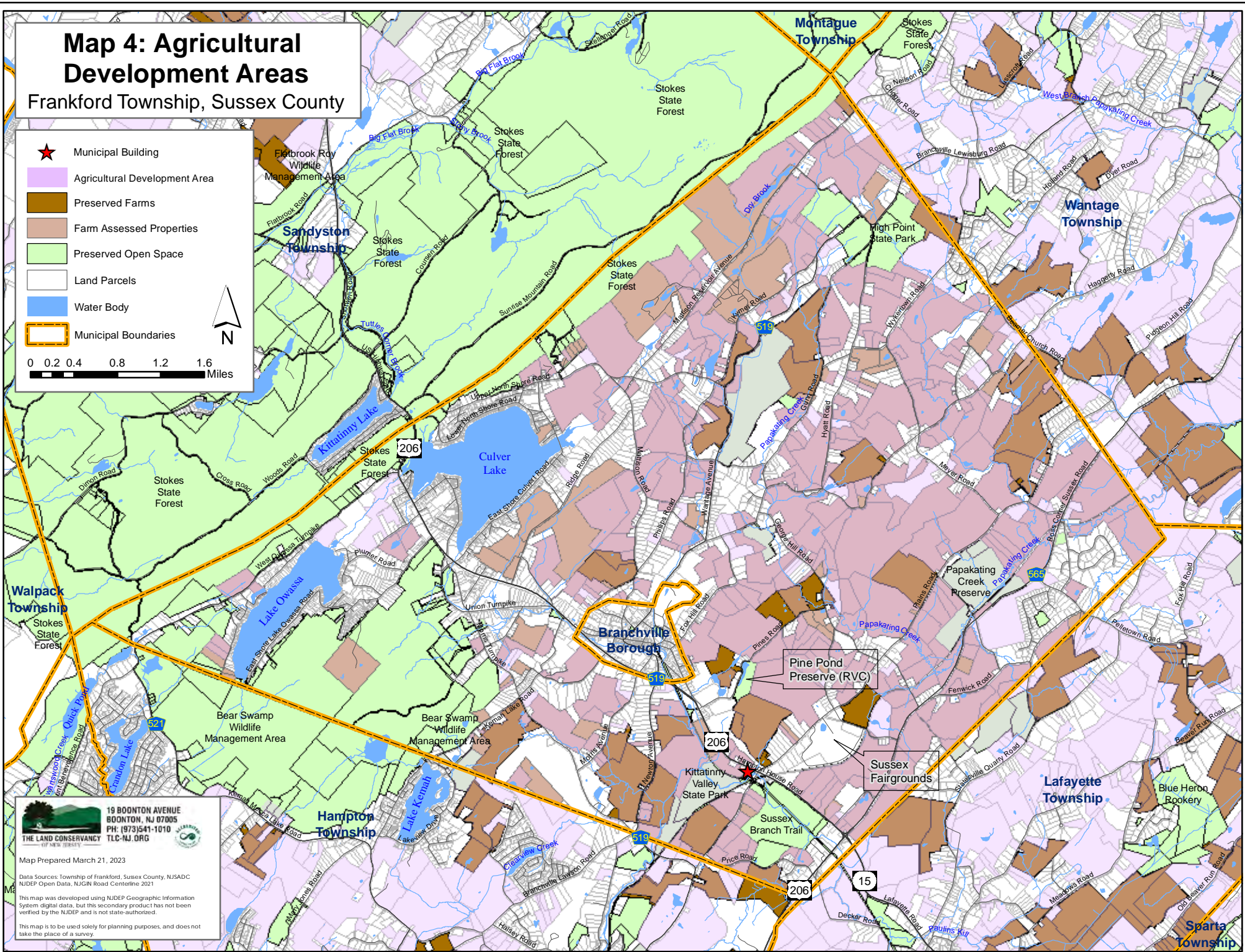


# Map 4: Agricultural Development Areas

Frankford Township, Sussex County

-  Municipal Building
-  Agricultural Development Area
-  Preserved Farms
-  Farm Assessed Properties
-  Preserved Open Space
-  Land Parcels
-  Water Body
-  Municipal Boundaries

0 0.2 0.4 0.8 1.2 1.6 Miles

 19 BOONTON AVENUE  
BOONTON, NJ 07005  
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Map Prepared March 21, 2023










Data Sources: Township of Frankford, Sussex County, NJSADC, NJDEP Open Data, NJGN Road Centerline 2021

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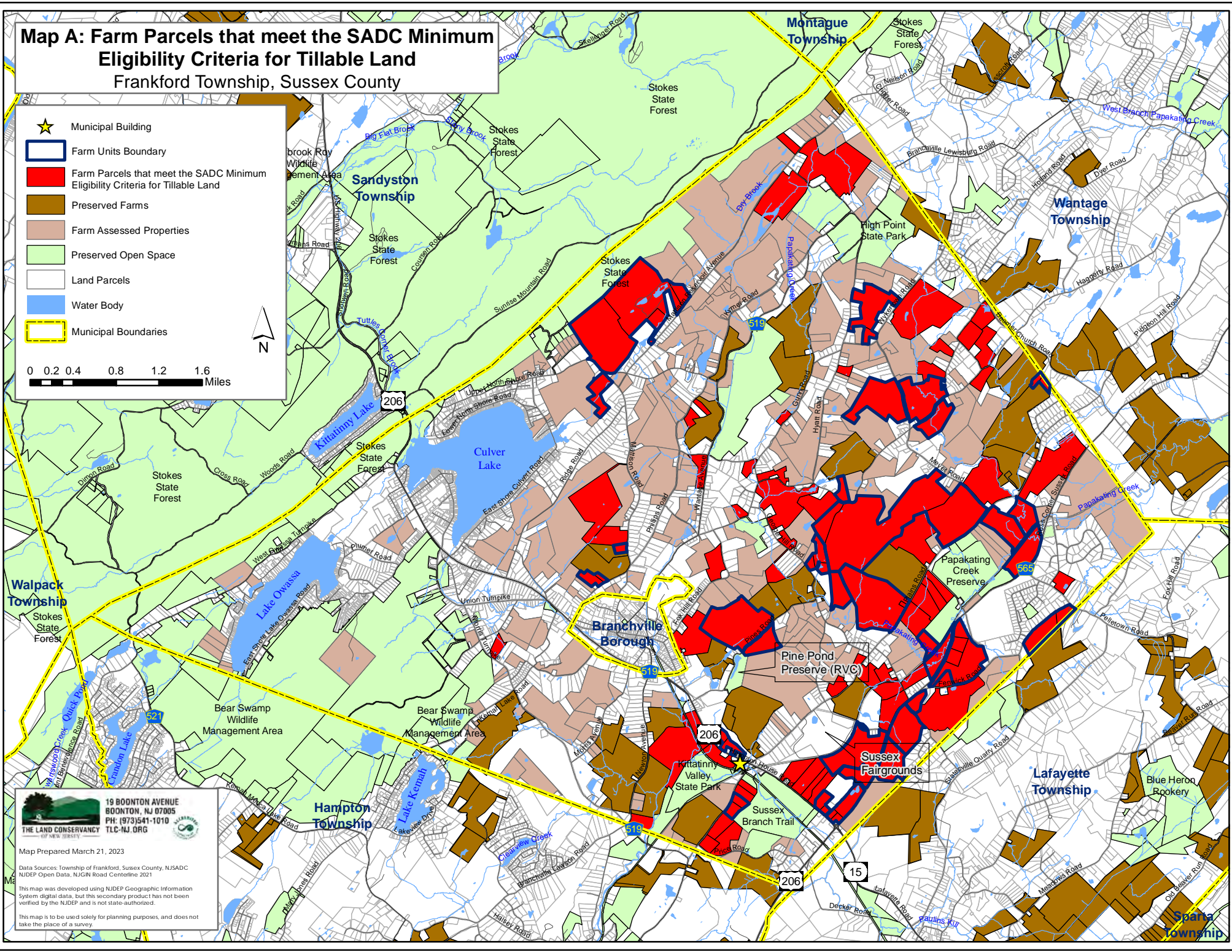


# Map A: Farm Parcels that meet the SADC Minimum Eligibility Criteria for Tillable Land Frankford Township, Sussex County

-  Municipal Building
-  Farm Units Boundary
-  Farm Parcels that meet the SADC Minimum Eligibility Criteria for Tillable Land
-  Preserved Farms
-  Farm Assessed Properties
-  Preserved Open Space
-  Land Parcels
-  Water Body
-  Municipal Boundaries

0 0.2 0.4 0.8 1.2 1.6 Miles

N



 19 BOONTON AVENUE  
BOONTON, NJ 07005  
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TLC-NJ.ORG

Map Prepared March 21, 2023










Data Sources: Township of Frankford, Sussex County, NJSADC, NJDEP Open Data, NJGN Road Centerline 2021

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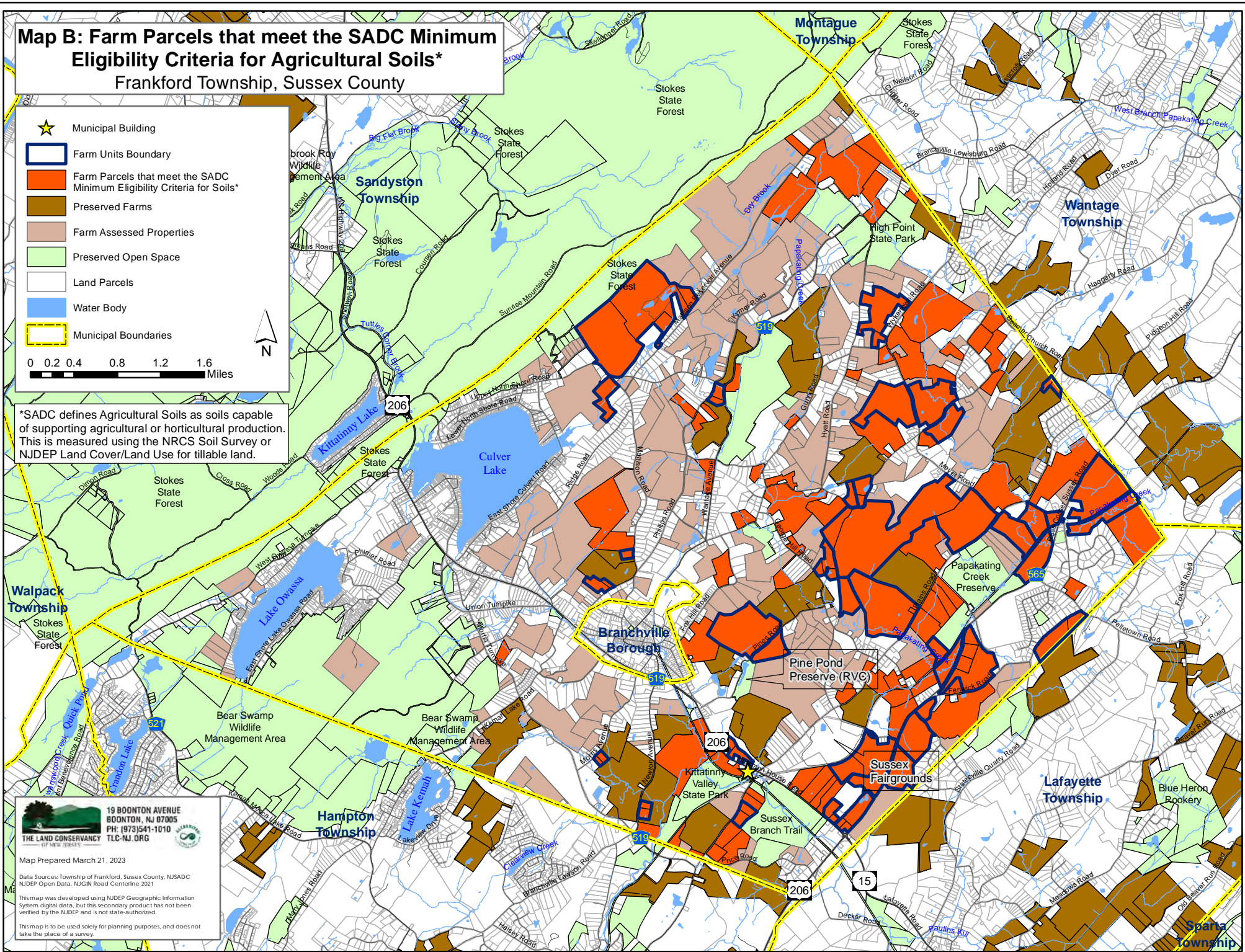
# Map B: Farm Parcels that meet the SADC Minimum Eligibility Criteria for Agricultural Soils\* Frankford Township, Sussex County


-  Municipal Building
-  Farm Units Boundary
-  Farm Parcels that meet the SADC Minimum Eligibility Criteria for Soils\*
-  Preserved Farms
-  Farm Assessed Properties
-  Preserved Open Space
-  Land Parcels
-  Water Body
-  Municipal Boundaries

0 0.2 0.4 0.8 1.2 1.6 Miles

N

\*SADC defines Agricultural Soils as soils capable of supporting agricultural or horticultural production. This is measured using the NRCS Soil Survey or NJDEP Land Cover/Land Use for tillable land.



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Map Prepared March 21, 2023

Data Sources: Township of Frankford, Sussex County, NJSADC  
NJDEP Open Data, NJGN Road Centerline 2021

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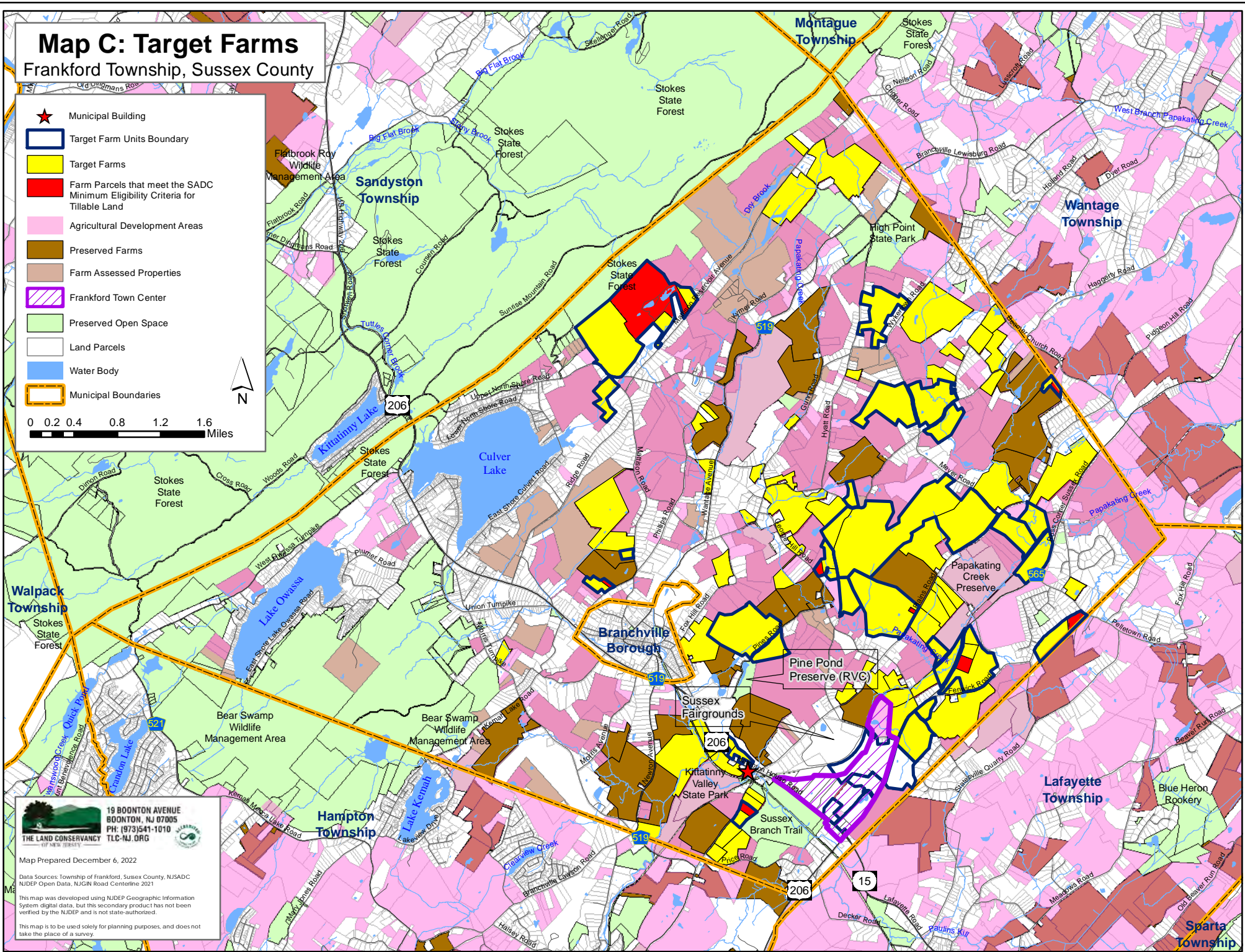



# Map C: Target Farms

## Frankford Township, Sussex County

-  Municipal Building
-  Target Farm Units Boundary
-  Target Farms
-  Farm Parcels that meet the SADC Minimum Eligibility Criteria for Tillable Land
-  Agricultural Development Areas
-  Preserved Farms
-  Farm Assessed Properties
-  Frankford Town Center
-  Preserved Open Space
-  Land Parcels
-  Water Body
-  Municipal Boundaries

0 0.2 0.4 0.8 1.2 1.6 Miles



 19 BOONTON AVENUE  
BOONTON, NJ 07005  
PH: (973)541-1010  
TLC-NJ.ORG

Map Prepared December 6, 2022

Data Sources: Township of Frankford, Sussex County, NJSADC, NJDEP Open Data, NJGN Road Centerline 2021

This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized.

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# **Appendix**

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Appendix A. Agricultural Support Services

Appendix B. Frankford Right to Farm Ordinance (1999)

## Agricultural Businesses Servicing Frankford Township

Sources: SADC Green Pages

### Equipment

Central Jersey Equipment  
228 State Rt 94  
Columbia, NJ 07832  
Warren County  
(908) 362-6916

Everitt Equipment LLC  
258 County Rd 579  
Ringoes, NJ 08551  
Hunterdon County  
(908) 782-5082  
<http://www.everittequipment.com/>

Powerco, Inc  
12 NJ-173  
Clinton, NJ 08809  
Hunterdon County  
(908) 735-2149  
<https://www.powercoinc.com/>

Smith Tractor & Equipment, Inc  
115 NJ-31  
Washington, NJ 07882  
Warren County  
(908) 689-7900  
<https://www.smithtractorandequipment.com/>

### Seed

Growmark FS  
60 Lehigh Ave  
Bloomsbury, NJ 08804  
Hunterdon County  
(908) 479-4500

Nutrien Ag Solutions  
127 Perryville Rd  
Pittstown, NJ 08867  
Hunterdon County  
(908) 735-5545

Garden State Heirloom Seed Society  
82 Delaware Rd  
Columbia, NJ 07832  
Warren County  
(973) 475-2730

### Animal Feed

Blairstown Ace  
2 Bridge St  
Blairstown, NJ 07825  
Warren County  
(908) 362-6177

Morristown Agway Store  
176 Ridgedale Ave  
Morristown, NJ 07960  
Morris County  
(973) 538-3232  
<https://morristownagway.com/>

Sergeantsville Country Store  
735 Route 523  
Sergeantsville, NJ 08557 Hunterdon County  
(609) 397-0807  
<https://sergeantsvillegrainandfeed.com/>

Tractor Supply Company  
128 NJ-94 #9  
Blairstown, NJ 07825  
Warren County  
(908) 362-0082  
<https://www.tractorsupply.com/>

Tractor Supply Company  
293 US Hwy 206, Unit 15A  
Flanders, NJ 07836  
Morris County  
(973) 252-2925

Tractor Supply Company  
144 Hwy 202/31 North  
Ringoes, NJ 08551  
Hunterdon County  
(908) 284-2021

Tractor Supply Company  
775 NJ-23  
Sussex, NJ 07461  
Sussex County  
(973) 875-7087

Tractor Supply Company  
398 Rte 57 West 4  
Washington, NJ 07882  
Warren County  
(908) 689-3202

Dover Pet Shop  
112 E Blackwell St  
Dover, NJ 07801  
Morris County  
(973) 361-2322

Ise Feed  
110 Good Springs Rd  
Stewartsville, NJ 08886  
Warren County  
(908) 859-8424

Mike's Feed Farm  
90 Hamburg Turnpike  
Riverdale, NJ 07457  
Morris County  
(973) 839-7747  
<https://www.mikesfeedfarm.com/>

New Village Farms  
11 Stewartsville Rd  
Stewartsville, NJ 08886  
Warren County  
(908) 859-3381

Outlaw Outfitters  
530 US-206  
Newton, NJ 07860  
(844) 780-3261  
Sussex County  
<https://outlawtack.com/>

Penwell Mills  
448 Penwell Rd  
Port Murray, NJ 07865  
Warren County  
(908) 689-3725

The Tack Room  
367 Pittstown Rd  
Pittstown, NJ 08867  
Hunterdon County  
(908) 730-8388

Schaefer Farms  
1051 County Rd 523  
Flemington, NJ 08822  
Hunterdon County  
<http://www.schaeferfarms.com/>

Delaware Valley Feed and Farm Supply  
1133A NJ-12  
Frenchtown, NJ 08825  
Hunterdon County  
(908) 628-3550

Deer Run Hay Company  
110 Amwell Rd  
Flemington, NJ 08822  
Hunterdon County  
(732) 904-5137

Brodhecker Farm, LLC  
2 Branchville-Lawson  
Newton, NJ 07860  
Sussex County  
(973) 383-3592  
<https://brodheckerfarm.com/>

**Slaughterhouses**  
A&M Packing LLC  
268 Newton-Swartswood Rd  
Newton, NJ 07860  
Sussex County  
(873) 383-4291

Seugling Meat Packing Inc.  
9 Mandeville Ave  
Pequannock, NJ 07440  
Morris County  
(973) 694-3156

V Roche Butcher Shop  
9 High St  
Whitehouse Station, NJ 08889  
Hunterdon County  
(908) 534-2006

Green Village Packing Co.  
68 Britten Rd  
Green Village, NJ 07935  
Morris County  
(973) 377-0875  
<https://greenvillagepacking.com/>

Louie Chiu Slaughterhouse  
40 Montana Rd  
New Village, NJ 08886  
Warren County  
(908) 859-6635

### **Livestock Supplies**

Ackerman & Sons Livestock Hauling LLC  
932 Maple Ave  
Stillwater, NJ 07875  
Sussex County  
(973) 383-4240

### **Construction & Concrete**

Morton Buildings  
512 State Rt 57  
Phillipsburg, NJ 08865  
Warren County  
(908) 454-7900  
<https://mortonbuildings.com/phillipsburg-nj>

Fine Woodworking  
606 Rt 519  
Sussex, NJ 07461  
Sussex County  
(973) 875-8779

County Concrete Corp.  
50 Railroad Ave  
Kenvil, NJ 07847  
Sussex County  
(973) 584-7122  
<https://www.countyconcretenj.com/>

Lentini Ready Mix, Inc.  
217 Limecrest Rd  
Newton, NJ 07860  
Sussex County  
(973) 300-4146

SCC Concrete, Inc.  
1051 River Rd  
Phillipsburg, NJ 08865  
Warren County  
(908) 859-2172  
<https://www.sccconcreteinc.com/>

Sparta Redi-Mix  
33 Demarest Rd  
Sparta, NJ 07871  
Sussex County  
(888) 383-4651  
<https://www.spartaredimix.com/>

Flemington Precast & Supply, LLC  
18 Allen St  
Flemington, NJ 08822  
Hunterdon County  
(908) 782-3246  
<https://www.flemingtonprecast.com>

Franklin Precast  
95 Scott Rd  
Franklin, NJ 07416  
Warren County (973) 827-7563  
<https://www.franklinprecast.com/>

Precast Manufacturing Co.  
187 Stryker's Rd  
Phillipsburg, NJ 08865  
Warren County  
(908) 454-2122  
<https://www.precastmfgco.com/>

B&B Concrete Co.  
811 Rt 57  
Stewartsville, NJ 08886  
Warren County  
(908) 454-1622  
<http://www.bakermason.com/>

Donald Baker Mason Contractors, Inc.  
188 Thatcher Hill Rd  
Flemington, NJ 08822  
Warren County  
(908) 782-2115  
<http://www.bakermason.com/>

JM Lenze Construction  
69 Upper North Shore Rd  
Branchville, NJ 07826  
Sussex County  
(937) 948-5491

SMB Construction  
73 Mercer St  
Phillipsburg, NJ 08865  
Warren County  
(908) 454-9530

William R. Hunt Stonework & Masonry, LLC  
PO Box 346  
Whitehouse Station, NJ  
Hunterdon County  
(908) 534-2194

Bill Wroblewski, LLC  
5 Whitehall Rd  
Andover, NJ 07821  
Sussex County  
(973) 347-3888

Brad Lauyer Masonry Contractor, LLC  
611 Main St  
Pattensburg, NJ 08802  
Hunterdon County  
(908) 735-0875

A.A. Matulay  
PO Box, 539 70 Rt 202  
Ringoos, NJ 08551  
Hunterdon County  
(908) 782-7666

**Well Drilling**

Samuel Stothoff Co., Inc.  
PO Box, 59 Rt 31  
Flemington, NJ 08822  
Hunterdon County  
(908) 782-2116  
<https://www.stothoffwellwater.com/>

Colaluze Well & Pump Service  
2293 Rt 57  
Washington, NJ 07882  
Warren County  
(908) 454-8008  
<https://www.colaluzeWell.com/>

Dan Ballentine Well Drilling, Inc.  
PO Box 178, Port Murray Rd  
Port Murray, NJ 07865  
Warren County  
(908) 689-7666  
<https://www.ballentinedrilling.com/>

**Site Work Contractors**

Apgar Brothers Excavating Co.  
PO Box 91  
Whitehouse Station, NJ 08889  
Hunterdon County  
(903) 303-9758

Harrington Contractors  
50 Parker Pd  
Chester, NJ 07930  
Morris County  
(908) 879-7500  
<http://www.harringtoncontractors.com>

KOR Companies  
1 Greenwood Place  
Flemington, NJ 08822  
Hunterdon County  
(908) 284-2272

Charles T. Matarazzo Excavating & Masonry, LLC  
1024 Route 173  
Asbury, NJ 08802  
Warren County  
(908) 479-2025

John P. Martin Excavating, LLC  
112 Ferry Rd  
Flemington, NJ 08822  
(908) 782-2512  
Hunterdon County  
<https://www.jpmartinexcavating.com>

A.S. Milkowski & Sons Contracting  
249 Rocky Run Rd  
Glen Gardner, NJ 08826  
Hunterdon County  
(908) 537-2590

Rick Mueller Excavating, Inc.  
31 Rick Rd Milford, NJ 08848  
Hunterdon County  
(908) 996-3031

S Snook Excavating, Inc.  
150 Pelletown Rd  
Lafayette, NJ 07848  
Sussex County  
(973) 875-5754

Wantage Excavating Co.  
137 Holland Rd  
Sussex, NJ 07461  
Sussex County  
(973) 875-5670  
<https://www.wantageexcavating.com/>

Willever Excavating  
200 Creek Rd  
Phillipsburg, NJ 08865  
Warren County  
(908) 454-6242

Bill Wrobleski, LLC  
5 Whitehall Rd  
Andover, NJ 07821  
Sussex County  
(973) 347-3888

Petersen Excavating  
273 Mt. Lake Rd  
Belvidere, NJ 07823  
Warren County  
(908) 637-8531

Earthway Excavating  
16 Greengate Rd  
Lebanon, NJ 08833  
Hunterdon County  
(908) 534-4343

William R. Hunt Stonework & Masonry  
PO Box 346  
Whitehouse Station, NJ 08889  
Hunterdon County  
(908) 534-2194

The Viersma Companies  
PO Box 224, Airport Rd  
Allamuch, NJ 07820  
Warren County  
(908) 852-0552  
<https://www.viersma.com>

Richard Pfauth, Jr. & Son  
239 Halls Mill Rd  
Lebanon, NJ 08833  
Hunterdon County  
(908) 534-2535

John Peach Excavating  
PO Box 78, Pleasant Grove Rd  
Schooleys Mountain, NJ 07870  
Morris County  
(908) 852-5875

William H. Wilson Contracting Co., Inc.  
210 Houses Corner Rd  
Sparta, NJ 07871  
Sussex County  
(973) 579-5353

D&V Construction Co.  
83 Good Springs Rd  
Asbury, NJ 08802  
Warren County  
(908) 479-6911

A. Mokros Backhoe Service, Inc.  
17 Lynnbrook Dr  
Lambertville, NJ 08530  
Hunterdon County  
(609) 737-8311

Razz Construction  
79 Sky Manor Rd  
Pittstown, NJ 08867  
Hunterdon County  
(908) 996-3298



Ravcon Construction Group LLC  
PO Box 1098  
Whitehouse, NJ 08889  
Hunterdon County  
(908) 482-7037  
<https://www.ravcon.us/>

Paul W. Steinbeiser Landscape  
718 County Rd 519  
Frenchtown, NJ 08825  
Hunterdon County  
(908) 996-6609  
<https://www.pwsteinbeiser.com/>

### **Fence Installation**

Farmette Services  
67 Henry Rd  
Newton, NJ 07860  
Sussex County  
(973) 300-0103

Hunt's Fencing  
567 Rt 94  
Newton, Nj 07860  
Sussex County  
(973) 383-4426

The Fence Company  
3 Hill Hollow Rd  
Pittstown, NJ 08867  
Hunterdon County  
(908) 735-8879

J&M Fence & Sheds  
328 Rt 46 West  
Great Meadows, NJ 07838  
Warren County  
(908) 637-8799

### **Seamless Gutters**

Warren Valley Seamless Gutters  
17 Ernella Dr  
Belvidere, NJ 07823  
Warren County  
(908) 752-5397

Wayne Johnson & Sons, Inc.  
1167 NJ-23  
Kinnelon, NJ 07405  
Morris County  
(201) 838-2358  
<https://www.waynejohnsonandsons.net>

### **NJ Soil Conservation Districts**

Sussex Soil Conservation District  
186 Halsey Rd, Ste 2  
Newton, NJ 07860  
Sussex County  
(973) 579-5074  
<https://sussexscd.org/>

### **NJ County Agricultural Development Boards**

Sussex County Agricultural Development Board  
One Spring Street, First Floor  
Newton, NJ 07860  
(973) 579-0500  
[https://www.sussex.nj.us/cn/webpage.cfm?TPID=15772&utm\\_source=agriculture&utm\\_medium=web&utm\\_campaign=agriculturedevelopmentboard](https://www.sussex.nj.us/cn/webpage.cfm?TPID=15772&utm_source=agriculture&utm_medium=web&utm_campaign=agriculturedevelopmentboard)

### **Rutgers**

Cooperative Extension of Sussex County  
130 Morris Turnpike  
Newton, NJ 07860  
(973) 948-3040  
<https://sussex.njaes.rutgers.edu/>

### **United States Department of Agriculture (USDA) – Farm Service Agency (FSA)**

Hackettstown Service Center  
101 Bilby Rd, Suite 1H  
Hackettstown, NJ 07840  
(908) 852-2576  
<https://www.fsa.usda.gov/state-offices/New-Jersey/index>

**USDA – Natural Resources Conservation Service (NRCS)**

Hackettstown Service Center  
101 Bilby Rd, Suite 1H  
Hackettstown, NJ 07840  
(908) 852-2576  
<https://www.nrcs.usda.gov/wps/portal/nrcs/site/nj/home/>

**USDA Rural Development**

Hackettstown Service Center  
101 Bilby Rd, Suite 1H  
Hackettstown, NJ 07840  
(908) 852-2576  
<https://www.rd.usda.gov/nj>

**Auctions**

Hackettstown Livestock Auction  
225 W Stiger St  
Hackettstown, NJ 07840  
Warren County  
(908) 852-0444  
<https://www.hackettstownauction.com>

**Crop Insurance Agents**

Crop Growers, LLC  
9 County Rd 618  
Lebanon, NJ 08833  
Hunterdon County  
(800) 234-7012  
<https://www.croptgrowers.com/>

**Financial Services**

Farm Credit East  
9 County Road 618  
Lebanon, NJ 08833  
(908) 782-5215  
<https://www.farmcrediteast.com/>

**Licensed Foresters**

G. Lester Alpaugh  
PO Box 211  
Stockton, NJ 08559  
Hunterdon County  
(609) 397-0615

Andrew Bennett  
PO Box 790  
Lafayette, NJ 07848  
Sussex County  
(973) 729-7430  
<https://www.ridgeandvalleyforest.com/>

Dylan Borger  
PO Box 790  
Lafayette, NJ 07848  
Sussex County (570) 730-1977  
<https://www.ridgeandvalleyforest.com/>

Thomas S. Broddle  
217 Hickory Corner Rd  
Milford, NJ 08848  
Hunterdon County  
(908) 996-2333

E. Joseph Bruschetta  
1178 Bridge Rd  
Phillipsburg, NJ 08865  
Warren County  
(908) 475-8466

Donald Donnelly  
650 Jackson Valley Rd  
Oxford, NJ 07863  
Warren County  
(908) 752-2538

Thomas D. Doty  
45 Lilac Dr  
Flemington, NJ 08822  
Hunterdon County  
(973) 813-3222

Joseph Dunn  
49 Millbrook-Stillwater Rd  
Blairstown, NJ 07825

Lorens D. Fasano  
PO Box 72  
Brookside, NJ 07926  
Morris County  
(973) 214-8294

G. Mike Fee  
10 Paulinskill Rd  
Hardwick, NJ 07825  
Warren County  
(908) 362-5565

William Grundmann  
151 County Rd  
Frenchtown, NJ 08825  
Hunterdon County  
(908) 309-6611  
<https://www.organicplantcarellc.com/>

Kris Hasbrouck  
9 East Buena Vista Way  
Bloomington, NJ 07403  
Passaic County  
(201) 819-6454

Thomas Koepfel  
PO Box 54  
Pequanock, NJ 07440  
Morris County  
(973) 633-0360

John D. Linson  
PO Box 6089  
West Orange, NJ 07052  
Essex County  
(973) 766-2143

Robert A. Sidor  
154 President St  
Passaic, NJ 07055  
Passaic County  
(973) 356-8828

Timothy J. Slavin  
319 Route 515  
Stockholm, NJ 07460  
Sussex County  
(973) 697-6646

Douglas Tavella  
PO Box 313  
Newton, NJ 07860  
Sussex County  
(570) 350-5359

Richard S. Wolowicz  
4 Maude Lane  
Hackettstown, NJ 07840  
Warren County  
(973) 220-6797

**Veterinarians**

Dr. Carole Edwards AVCA, CHI, FIAMA  
Specialty: Equine  
PO Box 232  
Frenchtown, NJ 08825  
Hunterdon County  
(908) 575-7834  
<https://www.carole-edwards.com>

Mountain Pointe Equine Veterinary Services  
Specialty: Equine  
14 Schooleys Mountain Rd  
Long Valley, NJ 07853  
Morris County  
(908) 269-8451  
<https://www.mountainpointequine.com>

Woods End Equine Veterinary Services  
Specialty: Equine  
67 Rose Morrow Rd  
Wantage, NJ 07461  
Sussex County  
(973) 209-4994  
<https://www.woodsendequine.com>

Equihart Veterinary Services  
Specialty: Equine  
PO Box 215  
Califon, NJ 07830  
Hunterdon County  
(732) 616-6188  
<https://www.equiheartvet.com>

## Chapter 28

### RIGHT TO FARM

#### § 28-1. FINDINGS. [Ord. No. 99-1 § 1]

- a. The retention of agricultural activities would serve the best interest of all citizens of the Township by insuring the numerous social, economic and environmental benefits which accrue from one of the largest industries in the Garden State;
- b. Several factors have combined to create a situation wherein the regulations of various State agencies and the ordinances of individual municipalities may unnecessarily constrain essential farm practices;
- c. It is the express intention of this chapter to establish as the policy of this Township the protection of commercial farm operations from nuisance actions, where recognized methods and techniques of agricultural production are applied, while, at the same time, acknowledging the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in the Township.

#### § 28-2. DEFINITIONS. [Ord. No. 99-1 § 2]

As used in this chapter:

COMMERCIAL FARM — Shall mean any place producing agricultural or horticultural products worth \$2,500 or more annually.

#### § 28-3. PERMISSIBLE ACTS. [Ord. No. 99-1 § 3]

The owner or operator of a commercial farm which meets the eligibility criteria for differential property taxation pursuant to the "Farmland Assessment Act of 1964", P.L. 1964, c.48 (C.54:4-23.1 et seq.) and the operation of which conforms to agricultural management practices recommended by the State Agriculture Development Committee and to all relevant Federal, State, or municipal statutes, ordinances, rules and regulations and which does not pose a direct threat to public health and safety may:

- a. Produce agricultural and horticultural crops, trees and forest products, livestock, and poultry and other commodities as described in the Standard Industrial Classification for agriculture, forestry, fishing and trapping;
- b. Process and package the agricultural output of the commercial farm;
- c. Provide for the wholesale and retail marketing of the agricultural output of the commercial farm and related products that contribute to farm income, including the construction of building and parking areas in conformance with municipal land use and site plan ordinances;
- d. Replenish soil nutrients;
- e. Control pests, predators and diseases of plants and animals;
- f. Clear woodlands using open burning and other techniques, install and maintain vegetative and terrain alterations and other physical facilities for water and soil

- conservation and surface water control in wetland areas; and
- g. Conduct on-site disposal of organic agricultural wastes.

# **Inventory Tables**

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Inventory Table 1. Farm Assessed Property in Frankford Township

Inventory Table 2. Targeted Farms and Farm Units in Frankford Township

**Inventory Table 1A. Unpreserved Farmland in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Class</b>	<b>Location</b>	<b>Acres (Tax Data)</b>	<b>Acres (GIS)</b>
1	2	3B	755 COUNTY ROUTE 565	72.04	116.68
1	5	3B	43 PELLETOWN RD	45.10	46.36
1	11	3B	15 LOSEY RD	13.42	14.84
1	13	3B	3 PELLETOWN RD	110.58	103.65
1	14	3B	227 PLAINS RD	-	0.38
2	3	3B	214 PLAINS RD	102.50	99.77
2	5	3B	234 PLAINS RD	11.20	13.80
3	1	3B	227 PLAINS RD	6.09	10.46
3	2	3B	219 PLAINS RD	30.34	33.64
3	4	3B	191 PLAINS RD	46.09	50.57
3	5	3B	179 PLAINS RD	16.75	18.19
3	5.01	3B	177 PLAINS RD	14.70	14.24
3	5.02	3B	175 PLAINS RD	16.33	17.13
3	9.01	3B	658 COUNTY ROUTE 565	5.00	5.87
3	11	3B	704 COUNTY ROUTE 565	44.70	48.21
5	2	3B	95 FENWICK RD	41.36	32.87
5	3	3B	95 FENWICK RD	-	11.50
7	1	3B	51 FENWICK RD	44.41	47.07
7	2	3B	3 FENWICK RD	12.71	14.72
7	3	3B	599 COUNTY ROUTE 565	11.86	13.21
7	4	3B	27 FENWICK RD	103.14	104.50
7	5	3B	2 SKYLINE DR	5.22	10.94
8	2	3B	629 COUNTY RT 565	10.99	62.08
8	2.03	3B	629 COUNTY ROUTE 565	62.97	10.97
8	2.04	3B	639 COUNTY ROUTE 565	10.46	10.44
8	2.05	3B	649 COUNTY ROUTE 565	10.45	10.40
8	6	3B	8 FENWICK RD	11.00	10.56
9	2	3B	628 COUNTY ROUTE 565	29.12	28.01
9	3	3B	630 COUNTY ROUTE 565	14.55	15.32
9	6	3B	129 PLAINS RD	29.00	27.97
9	6.01	3B	137 PLAINS RD	14.40	16.72
9	6.02	3B	139 PLAINS RD	14.37	15.07
9	7	3B	117 PLAINS RD	31.91	32.45
9	9	3B	23 LINN SMITH RD	34.47	42.72
9	9.07	3B	17 LINN SMITH RD	24.90	26.95
9	11	3B	7 LINN SMITH RD	15.28	17.64
10	1	3B	578 COUNTY ROUTE 565	9.74	31.40
10	2	3B	8 LINN SMITH RD	15.57	20.12
10	3.02	3B	18 LINN SMITH RD	11.86	12.55
10	3.05	3B	81 PLAINS RD	18.62	19.63
10	7	3B	15 NORTHRUP RD	7.59	1.08
11	1	3B	552 COUNTY ROUTE 565	92.79	92.48
11	2	3B	20 NORTHRUP RD	0.37	0.23
11	13	3B	524 COUNTY ROUTE 565	23.14	24.39
11	13.04	3B	106 US HIGHWAY 206	26.00	27.28
11	13.05	3B	96 US HIGHWAY 206	14.21	17.62
11	13.06	3B	90 US HIGHWAY 206	8.73	10.65
11	13.07	3B	100 US HIGHWAY 206	11.18	13.36
11	13.10	3B	110 US HIGHWAY 206	24.03	24.16
11	13.14	3B	2 CHAMPIONSHIP DR	3.00	3.26
11.01	13.09	3B	506 COUNTY ROUTE 565	31.83	25.49
11.01	13.12	3B	506 COUNTY ROUTE 565	-	4.17
11.01	13.13	3B	506 COUNTY ROUTE 565	-	3.30

**Inventory Table 1A. Unpreserved Farmland in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Class</b>	<b>Location</b>	<b>Acres (Tax Data)</b>	<b>Acres (GIS)</b>
12	1	3B	553 COUNTY ROUTE 565	53.77	46.84
12	2.01	3B	579 COUNTY ROUTE 565	58.78	59.08
13	1	3B	505 COUNTY ROUTE 565	40.00	61.82
17	4.01	3B	62 PRICE RD	0.71	0.69
17	4.02	3B	50 PRICE RD	10.37	11.37
18	18	3B	12 AUGUSTA HILL RD	5.10	7.18
18	18.01	3B	30 AUGUSTA HILL RD	14.61	9.12
18	18.02	3B	30 AUGUSTA HILL RD	-	7.54
18	18.03	3B	18 AUGUSTA HILL RD	9.56	9.93
18	19	3B	71 PRICE RD	10.00	11.22
18	19.01	3B	53 PRICE RD	7.45	9.12
18	19.02	3B	44 AUGUSTA HILL RD	16.80	18.04
18	19.03	3B	63 PRICE RD	27.88	28.36
18	19.04	3B	55 PRICE RD	4.02	3.64
18	20.03	3B	27 PRICE RD	5.98	6.42
18	20.04	3B	15 PRICE RD	12.33	13.06
19	8.02	3B	35 NEWTON AVE	22.05	24.53
19	9	3B	59 NEWTON AVE	90.41	96.63
19	10.01	3B	91 NEWTON AVE	4.39	4.39
19	10.02	3B	93 NEWTON AVE	6.64	6.64
19	11	3B	207 COUNTY ROUTE 519	15.12	16.98
19	14.01	3B	65 AUGUSTA HILL RD	5.69	13.73
19	14.02	3B	195 COUNTY ROUTE 519	4.69	5.87
19	16	3B	23 AUGUSTA HILL RD	27.65	29.74
19	24	3B	167 US HIGHWAY 206	19.99	20.28
19	26	3B	181 US HIGHWAY 206	25.56	22.50
21	6.03	3B	67 MORRIS AVE	2.54	2.54
21	6.04	3B	63 MORRIS AVE	4.20	4.20
21	7.03	3B	50 NEWTON AVE	13.39	5.54
22	6	3B	138 MORRIS TNPk	22.62	19.15
22	7	3B	132 MORRIS TNPk	42.76	43.29
22	8.01	3B	591 KEMAH LAKE RD	-	13.54
22	8.02	3B	589 KEMAH LAKE RD	1.00	0.93
22	8.03	3B	180 MORRIS TURNPIKE	5.00	6.29
22	13	3B	591 KEMAH LAKE RD	9.00	0.94
23	1.03	3B	179 MORRIS TNPk	74.03	75.17
23	8	3B	66 MORRIS AVE	11.56	11.92
23	9	3B	34 MORRIS AVE	61.56	62.17
23	9.04	3B	40 MORRIS AVE	12.58	14.27
23	9.05	3B	54 MORRIS AVE	21.16	21.80
23	9.07	3B	24 MORRIS AVE	5.24	5.95
24	2	3B	1 WYKERTOWN RD	32.00	30.90
24	4	3B	57 FOX HILL RD	24.45	26.06
25	4	3B	24 FOX HILL RD	56.41	60.21
25	9	3B	40 FOX HILL RD	8.89	9.09
25	10	3B	64 FOX HILL RD	17.55	16.92
25	10.01	3B	46 FOX HILL RD	23.00	24.03
25	10.02	3B	56 FOX HILL RD	16.05	17.74
25	11	3B	68 FOX HILL RD	22.42	22.65
25	12.01	3B	17 WYKERTOWN RD	15.69	17.89
25	14	3B	86 GEORGE HILL RD	43.96	51.24
25	14.02	3B	84 GEORGE HILL RD	14.35	14.47
25	14.04	3B	70 GEORGE HILL RD	6.60	4.25



## Inventory Table 1A. Unpreserved Farmland in Frankford Township

Block	Lot	Class	Location	Acres (Tax Data)	Acres (GIS)
25	16	3B	54 PINES RD	129.09	127.20
26	1	3B	40 GEORGE HILL RD	14.00	12.94
26	2.02	3B	85 PINES RD	16.00	10.44
26	2.03	3B	85 PINES RD	-	8.59
26	2.04	3B	42 DICKERSON RD	5.76	6.57
26	3	3B	59 PINES RD	27.91	30.31
26	15	3B	164 US HIGHWAY 206	6.00	5.83
26	17	3B	152 US HIGHWAY 206	9.42	10.58
26	20.05	3B	26 PLAINS RD	10.00	5.25
26	20.06	3B	26 PLAINS RD	-	5.70
26	22	3B	38 PLAINS RD	156.10	157.13
26	23	3B	10 DICKERSON RD	27.96	27.73
26	24	3B	18 DICKERSON RD	4.37	5.71
26	25	3B	20 DICKERSON RD	5.00	6.14
26	26.01	3B	38 DICKERSON RD	17.39	16.12
26	26.02	3B	89 PINES RD	13.36	12.68
26	26.04	3B	26 DICKERSON RD	18.35	18.31
26	26.06	3B	75 PINES RD	6.65	8.21
27	2	3B	8 GEORGE HILL RD	8.50	17.50
27	2.01	3B	21 DICKERSON RD	6.03	7.34
27	4	3B	62 PLAINS RD	13.81	13.71
27	6	3B	80 PLAINS RD	5.25	7.13
27	6.02	3B	82 PLAINS RD	25.01	26.71
27	7	3B	86 PLAINS RD	3.67	6.53
28	1	3B	45 GEORGE HILL RD	11.72	4.65
28	2.02	3B	105 DICKERSON LN	5.47	6.14
29	1	3B	174 PLAINS RD	110.73	113.22
29	2	3B	228 MEYER RD	5.00	5.84
29	6.03	3B	260 MEYER RD	9.53	9.52
29	9	3B	153 WYKERTOWN RD	22.90	29.26
29	10	3B	137 WYKERTOWN RD	13.95	33.71
29	11	3B	100 DICKERSON RD	293.32	304.27
29	12	3B	61 DICKERSON RD	30.86	29.76
29	14.03	3B	27 GEORGE HILL RD	10.00	32.71
29	16	3B	110 PLAINS RD	145.80	145.98
29	16.02	3B	110 PLAINS RD	-	1.71
29	18	3B	144 PLAINS RD	69.91	70.50
29	18.02	3B	154 PLAINS RD	7.27	8.51
30	1	3B	105 DICKERSON RD	23.67	26.37
30	2	3B	69 GEORGE HILL RD	6.10	7.23
30	2.01	3B	65 GEORGE HILL RD	19.13	16.07
30	2.02	3B	65 GEORGE HILL RD	-	5.23
30	3.03	3B	79 GEORGE HILL RD	9.23	10.45
30	3.04	3B	75 GEORGE HILL RD	40.43	40.95
30	3.06	3B	71 GEORGE HILL RD	6.00	6.02
30	4	3B	101 GEORGE HILL RD	85.44	90.61
30	6	3B	105 WYKERTOWN RD	31.57	35.09
31	5	3B	88 WYKERTOWN RD	22.87	24.10
31	6	3B	26 HYATT RD	72.80	81.98
31	7	3B	76 HYATT RD	7.68	10.43
31	9	3B	51 GUNN RD	6.23	7.21
31	9.03	3B	41 GUNN RD	7.08	8.19
31	10	3B	31 GUNN RD	7.45	10.10

**Inventory Table 1A. Unpreserved Farmland in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Class</b>	<b>Location</b>	<b>Acres (Tax Data)</b>	<b>Acres (GIS)</b>
31	10.01	3B	27 GUNN RD	8.00	10.37
31	12	3B	63 WYKERTOWN RD	11.48	13.47
31	14	3B	58 GUNN RD	-	0.79
32	1	3B	234 WYKERTOWN RD	12.00	10.50
32	1.03	3B	228 WYKERTOWN RD	11.00	11.35
32	2	3B	25 DORY ROE RD	25.21	25.24
32	2.01	3B	73 HYATT RD	6.48	6.82
32	2.05	3B	87 HYATT RD	1.84	1.77
32	3.02	3B	71 HYATT RD	7.53	2.52
32	5	3B	53 HYATT RD	5.18	6.99
32	6	3B	33 HYATT RD	14.60	15.80
32	6.01	3B	7 HYATT RD	9.00	8.33
32	6.02	3B	43 HYATT RD	14.43	19.99
32	6.03	3B	31 HYATT RD	2.03	2.71
32	6.07	3B	27 HYATT ROAD	14.04	14.07
32	9	3B	118 WYKERTOWN RD	11.42	12.23
32	10	3B	130 WYKERTOWN RD	5.10	4.94
32	11	3B	138 WYKERTOWN RD	13.00	15.11
32	16	3B	166 WYKERTOWN RD	65.42	65.32
32	17	3B	204 WYKERTOWN RD	101.00	91.64
32	18	3B	61 HYATT RD	8.20	8.63
32	20	3B	69 HYATT RD	10.00	5.21
32	21	3B	69 HYATT RD	-	5.37
33	1	3B	1 HAGGERTY RD	9.39	10.93
33	4	3B	237 MEYER RD	67.34	64.94
33	5	3B	13 HAGGERTY RD	35.74	36.32
33	6	3B	31 HAGGERTY RD	5.00	5.97
33	6.01	3B	37 HAGGERTY RD	49.45	52.06
34	2	3B	200 PLAINS RD	70.59	71.38
35	1.04	3B	12 DAVIS RD	6.31	7.20
35	4.04	3B	55 BEEMER CHURCH RD	10.00	4.79
35	4.05	3B	55 BEEMER CHURCH RD	-	4.84
35	6	3B	53 HAGGERTY RD	15.61	14.76
35	7	3B	61 HAGGERTY RD	58.90	58.84
35	8	3B	63-65 BEEMER CHURCH RD	13.00	15.33
36	2.04	3B	42 HAGGERTY RD	6.56	8.14
37	1	3B	57 DALRYMPLE RD	16.00	20.48
37	2.01	3B	56 HAGGERTY RD	13.93	29.05
37	2.03	3B	15 LITTLE ROAD	34.37	21.69
37.01	1.01	3B	92 BEEMER CHURCH RD	3.50	4.32
38	4	3B	269 WYKERTOWN RD	108.77	132.71
38	5	3B	223 WYKERTOWN RD	65.09	65.22
38	5.02	3B	235 WYKERTOWN RD	5.00	5.95
38	6	3B	197 WYKERTOWN RD	75.93	76.21
38	6.04	3B	213 WYKERTOWN RD	9.46	10.45
38	8	3B	14 DALRYMPLE RD	19.70	19.73
38	8.02	3B	32 DALRYMPLE RD	5.77	6.86
38	8.03	3B	26 DALRYMPLE RD	9.00	11.88
38	8.04	3B	24 DALRYMPLE RD	27.00	30.78
38	10	3B	56 DALRYMPLE RD	14.65	20.72
39	5.02	3B	304 WYKERTOWN RD	6.49	0.61
39	6	3B	280 WYKERTOWN RD	12.00	21.72
39	6.05	3B	276 WYKERTOWN RD	7.00	2.98

**Inventory Table 1A. Unpreserved Farmland in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Class</b>	<b>Location</b>	<b>Acres (Tax Data)</b>	<b>Acres (GIS)</b>
39	7	3B	264 WYKERTOWN RD	68.04	66.06
39	9.02	3B	242 WYKERTOWN RD	7.40	8.41
39	10	3B	22 DORY ROE RD	8.03	8.13
39	12	3B	335 KLIMAS RD	25.68	28.65
39	12.02	3B	343 KLIMAS RD	10.00	11.12
39	17	3B	376 WANTAGE AVE	11.75	10.50
40	2	3B	322 KLIMAS RD	52.00	51.23
40	4	3B	101 GUNN RD	67.52	70.55
40	4.01	3B	97 GUNN RD	5.88	7.62
40	6	3B	101 GUNN RD	-	0.36
41	1	3B	371 WANTAGE AVE	36.00	38.16
41	7	3B	351 WANTAGE AVE	36.35	39.93
41	8	3B	191 DENNIS PHILLIPS RD	64.28	129.69
41	11	3B	334 MATTISON RESERVOIR AV	30.38	31.13
42	4	3B	296 MATTISON RESERVOIR AV	75.80	84.69
42	5	3B	258 MATTISON RESERVOIR AV	56.89	65.58
42	7	3B	214 MATTISON RESERVOIR AV	18.00	17.15
42	12	3B	169 UPPER NORTH SHORE RD	5.13	6.10
42	14.01	3B	180 MATTISON RESERVOIR AV	24.19	25.47
42	14.04	3B	173 UPPER NORTH SHORE RD	14.19	15.46
42	14.05	3B	185 UPPER NORTH SHORE RD	37.22	36.20
42	14.09	3B	163 UPPER NORTH SHORE RD	6.97	3.32
42	14.25	3B	179 UPPER NORTH SHORE RD	7.09	7.74
42	15	3B	204 UPPER NORTH SHORE RD	58.06	55.70
42	18	3B	69 KYMER RD	128.04	169.61
42	19	3B	297 WANTAGE AVE	67.78	68.14
42	19.01	3B	305 WANTAGE AVE	19.79	21.75
42	19.02	3B	97 KYMER RD	6.00	5.51
43	2	3B	275 WANTAGE AVE	5.03	5.90
43	2.05	3B	257 WANTAGE AVE	22.19	23.02
43	3	3B	42 KYMER RD	16.00	22.49
44	6	3B	58 GUNN RD	7.17	7.00
44	8	3B	38 GUNN RD	5.07	6.04
44	8.01	3B	48 GUNN RD	21.10	23.06
44	10.02	3B	204 WANTAGE AVE	9.89	12.55
44	11.05	3B	130 GUNN RD	8.24	8.73
44.01	1.04	3B	4 PERRY RD	7.60	8.86
44.01	3.05	3B	30 WYKERTOWN RD	5.50	6.92
44.01	4.02	3B	20 WYKERTOWN RD	7.18	8.43
45	1	3B	30 PERRY RD	19.05	19.20
45	2.08	3B	7 KICE RD	9.00	19.28
45	3	3B	55 PHILLIPS RD	23.66	24.46
45	3.04	3B	38 PERRY RD	5.50	6.12
45	4	3B	61 PHILLIPS RD	3.53	3.26
46	1	3B	99 PHILLIPS RD	7.80	8.20
46	1.01	3B	99 PHILLIPS RD	6.00	5.57
46	4	3B	83 PHILLIPS RD	8.31	8.81
46	4.03	3B	93 PHILLIPS RD	6.05	5.73
46	4.05	3B	81 PHILLIPS RD	8.31	8.86
47	2	3B	70 PHILLIPS RD	80.00	77.91
47	2.01	3B	82 PHILLIPS RD	10.23	13.40
47	2.03	3B	90 PHILLIPS RD	11.65	12.86
47	3	3B	66 PHILLIPS RD	62.00	62.87

**Inventory Table 1A. Unpreserved Farmland in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Class</b>	<b>Location</b>	<b>Acres (Tax Data)</b>	<b>Acres (GIS)</b>
47	4	3B	98 MATTISON RD	46.89	48.69
47	6	3B	120 MATTISON RESERVOIR AV	35.08	33.13
47	9	3B	144 MATTISON RD	6.35	6.59
47	12	3B	164 UPPER NORTH SHORE RD	14.70	14.38
47	12.01	3B	166 UPPER NORTH SHORE RD	5.20	6.77
47	12.02	3B	154 UPPER NORTH SHORE RD	9.18	8.60
48	3	3B	61 RIDGE RD	158.20	179.70
48	16	3B	95 MATTISON RD	50.10	54.36
48	18	3B	67 MATTISON RD	107.77	103.56
48	20.02	3B	28 ROSLYN RD	11.56	12.23
48	20.03	3B	28 ROSLYN RD	-	2.89
48	20.04	3B	57 MATTISON RD	5.07	6.03
48	20.06	3B	63 MATTISON RD	29.00	30.41
48	20.10	3B	3 COOK RD	17.15	18.80
48	21.10	3B	14 ROSLYN RD	5.63	5.90
48	21.14	3B	22 ROSLYN RD	5.00	5.69
48	26	3B	15 COOK RD	62.07	60.02
48.01	2.02	3B	34 PHILLIPS RD	7.00	7.63
48.02	3.04	3B	44 MATTISON RD	38.10	11.76
48.02	4.01	3B	35 KICE RD	29.68	30.26
48.02	4.07	3B	23 PHILLIPS RD	5.10	6.09
49	1	3B	29 ROSLYN RD	3.43	4.09
49	2.01	3B	35 MATTISON RD	3.48	3.29
51	2	3B	36 RIDGE RD	42.58	66.68
51	4	3B	22 RIDGE RD	31.40	30.81
51	4.01	3B	10 RIDGE RD	11.50	10.86
55	3.01	3B	15 SHARP RD	54.35	16.81
55	12	3B	15 SHARP RD	-	36.51
55	14	3B	18 STEMPERT RD	11.62	12.30
55	18	3B	223 MORRIS TNPk	11.07	11.19
55.02	8	3B	16 WILLOWBROOK DR	5.74	8.82
56	2	3B	522 KEMAH LAKE RD	52.80	53.13
57	4	3B	580 KEMAH LAKE RD	6.07	8.19
57	6.07	3B	210 MORRIS TNPk	5.62	2.80
57	6.08	3B	210 MORRIS TNPk	-	3.76
58	2	3B	40 MARTIN LN	90.45	87.85
58	16	3B	234 MORRIS TNPk	6.00	8.24
62	22	3B	71 WEST OWASSA TNPk	31.33	32.38
65	25	3B	26 MILL LN	24.06	24.40
65	25.02	3B	6 MILL LN	18.92	19.37
66	11	3B	151 MATTISON RD	29.50	29.83
66	12	3B	110 UPPER NORTH SHORE RD	127.00	125.81
67	2	3B	153 MATTISON RESERVOIR AV	5.14	6.71
68	1	3B	341 MATTISON RESERVOIR AV	6.57	11.53
68	1.01	3B	349 MATTISON RESERVOIR AV	-	1.20
68	2	3B	315 MATTISON RESERVOIR AV	125.27	120.00
68	2.01	3B	335 MATTISON RESERVOIR AV	6.12	6.64
68	2.02	3B	333 MATTISON RESERVOIR AV	8.36	10.05
68	2.03	3B	329 MATTISON RESERVOIR AV	7.89	9.78
68	2.04	3B	325 MATTISON RESERVOIR AV	7.50	8.00
68	2.06	3B	321 MATTISON RESERVOIR AV	22.25	11.28
68	4	3B	260 MATTISON RESERVOIR AV	221.73	231.66
68	5.01	3B	233 MATTISON RESERVOIR AV	18.32	20.84

**Inventory Table 1A. Unpreserved Farmland in Frankford Township**

<b>Block</b>	<b>Lot</b>	<b>Class</b>	<b>Location</b>	<b>Acres (Tax Data)</b>	<b>Acres (GIS)</b>
68	6.01	3B	11 RISDON DR	14.00	46.45
68	6.02	3B	7 RISDON DR	16.00	18.24
68	6.04	3B	6 RISDON DR	8.74	13.56
68	7	3B	23 RISDON DR	102.90	166.71
68	9.01	3B	187 MATTISON RESERVOIR AV	13.00	15.22
68	14	3B	123 UPPER NORTH SHORE RD	142.10	153.21
68.03	7	3B	3 GIGI LN	-	2.34
68.03	8	3B	3 GIGI LN	17.00	3.02
68.03	9	3B	3 GIGI LN	-	3.06
68.03	10	3B	3 GIGI LN	-	3.01
68.03	11	3B	3 GIGI LN	-	3.02
68.03	12	3B	3 GIGI LN	-	3.05
84	11.02	3B	40 IVY TR	26.13	27.50
109	34	3B	224 EAST SHORE CULVER RD	7.46	8.63
114	7	3B	110 UPPER NORTH SHORE RD	-	1.60
130	21	3B	16 MC NEEL RD	16.52	18.18
130	21.02	3B	10 MC NEEL RD	11.98	11.90
267	1.01	3B	74 WEST OWASSA TNPK	8.02	8.47
270	12	3B	69 BLACKFORD RD	8.42	9.86
270	12.01	3B	77 BLACKFORD RD	12.04	8.93
270	12.02	3B	73 BLACKFORD RD	7.80	11.82
271	30	3B	80 BLACKFORD RD	1.54	2.97
271	31.01	3B	80 BLACKFORD RD	6.14	5.44
			<b>Total Unpreserved Farm Assessed Land:</b>	<b>8,573.15</b>	<b>9,269.18</b>
			<b>Total Preserved Farm Assessed Land:</b>	<b>1,662.02</b>	<b>1,658.52</b>
			<b>Total Farm Assessed Land:</b>	<b>10,235.17</b>	<b>10,927.70</b>

### Inventory Table 1B. Preserved Farms in Frankford Township

Block	Lot	Class	Location	Acres (Tax Data)	Acres (GIS)
10	3	3B	65 PLAINS RD	44.10	47.81
17	3	3B	32 PRICE RD	35.06	35.83
19	10	3B	71 NEWTON AVE	72.15	73.15
19	15	3B	47 AUGUSTA HILL RD	77.68	78.72
19	8	3B	47 NEWTON AVE	44.08	43.82
21	3	3B	53 MORRIS AVE	28.36	30.69
21	6	3B	64 NEWTON AVE	141.24	136.72
22	8	3B	180 MORRIS TNPk	109.41	107.91
25	15.02	3B	60 GEORGE HILL RD	30.90	30.90
25	15.03	3B	50 GEORGE HILL RD	30.90	30.90
25	15	3B	80 PINES ROAD	37.12	37.12
25	19.01	3B	30 PINES RD	27.53	29.39
25	20	3B	30 PINES RD	11.75	12.32
26	14	3B	164 US HIGHWAY 206	12.11	12.61
26	16	3B	156 US HIGHWAY 206	107.42	106.47
26	20.10	3B	6 PLAINS RD	6.27	6.36
28	1.04	3B	55 GEORGE HILL RD	7.42	7.64
29	17	3B	128 PLAINS RD	102.75	104.34
32	12	3B	148 WYKERTOWN RD	76.00	78.85
35	1	3B	8 DAVIS RD	54.04	52.04
35	2	3B	20 DAVIS RD	118.13	130.72
35	4.02	3B	73 HAGGERTY RD	8.02	9.27
35	4	3B	57-61 BEEMER CHURCH RD	78.00	70.71
37.01	1	3B	96-100 BEEMER CHURCH RD	2.77	1.65
39	2	3B	320 WYKERTOWN RD	45.77	39.95
43	4	3B	207 WANTAGE AVE	33.16	28.83
44	4	3B	108 GUNN RD	102.22	100.03
44	5	3B	72 GUNN RD	69.79	68.86
46	2	3B	167 WANTAGE AVE	57.80	54.18
48	20.07	3B	59 MATTISON RD	17.55	18.27
48	20	3B	40 ROSLYN RD	58.68	58.86
68	1.03	3B	349 MATTISON RESERVOIR AV	13.84	13.60
			<b>Preserved Farmland (Acres):</b>	<b>1,662.02</b>	<b>1,658.52</b>
			<b>Preserved Farmland Within ADA (Acres):</b>	<b>1,513.34</b>	<b>1,505.30</b>

**Inventory Table 2. Target Farms in Frankford Township**

*Farm Parcel = Individual Lot  
Farm Unit = Multiple Lot Farm*

<b>Block</b>	<b>Lot</b>	<b>Class</b>	<b>Location</b>	<b>Acres (Tax Data)</b>	<b>Acres (GIS)</b>
1	11	3B	15 LOSEY RD	13.42	14.84
7	4	3B	27 FENWICK RD	103.14	104.50
8	6	3B	8 FENWICK RD	11.00	10.56
9	11	3B	7 LINN SMITH RD	15.28	17.64
9	6.01	3B	137 PLAINS RD	14.40	16.72
9	6.02	3B	139 PLAINS RD	14.37	15.07
9	6	3B	129 PLAINS RD	29.00	27.97
9	7	3B	117 PLAINS RD	31.91	32.45
10	1	3B	578 COUNTY ROUTE 565	9.74	31.40
10	2	3B	8 LINN SMITH RD	15.57	20.12
10	3.02	3B	18 LINN SMITH RD	11.86	12.55
10	3.05	3B	81 PLAINS RD	18.62	19.63
18	18.03	3B	18 AUGUSTA HILL RD	9.56	9.93
18	18	3B	12 AUGUSTA HILL RD	5.10	7.18
18	19.02	3B	44 AUGUSTA HILL RD	16.80	18.04
18	19.03	3B	63 PRICE RD	27.88	28.36
18	19	3B	71 PRICE RD	10.00	11.22
19	11	3B	207 COUNTY ROUTE 519	15.12	16.98
19	24	3B	167 US HIGHWAY 206	19.99	20.28
19	9	3B	59 NEWTON AVE	90.41	96.63
2	3	3B	214 PLAINS RD	102.50	99.77
24	4	3B	57 FOX HILL RD	24.45	26.06
25	14.02	3B	84 GEORGE HILL RD	14.35	14.47
25	4	3B	24 FOX HILL RD	56.41	60.21
27	4	3B	62 PLAINS RD	13.81	13.71
27	7	3B	86 PLAINS RD	3.67	6.53
29	18	3B	144 PLAINS RD	69.91	70.50
30	3.03	3B	79 GEORGE HILL RD	9.23	10.45
30	4	3B	101 GEORGE HILL RD	85.44	90.61
30	6	3B	105 WYKERTOWN RD	31.57	35.09
31	12	3B	63 WYKERTOWN RD	11.48	13.47
32	2.01	3B	73 HYATT RD	6.48	6.82
34	2	3B	200 PLAINS RD	70.59	71.38
37	1	3B	57 DALRYMPLE RD	16.00	20.48
37	2.01	3B	56 HAGGERTY RD	13.93	29.05
38	4	3B	269 WYKERTOWN RD	108.77	132.71
38	8.03	3B	26 DALRYMPLE RD	9.00	11.88
38	8	3B	14 DALRYMPLE RD	19.70	19.73
41	8	3B	191 DENNIS PHILLIPS RD	64.28	129.69
42	4	3B	296 MATTISON RESERVOIR AV	75.80	84.69
44.01	1.04	3B	4 PERRY RD	7.60	8.86
44.01	3.05	3B	30 WYKERTOWN RD	5.50	6.92
44	8	3B	38 GUNN RD	5.07	6.04
45	1	3B	30 PERRY RD	19.05	19.20
46	4.03	3B	93 PHILLIPS RD	6.05	5.73
46	4	3B	83 PHILLIPS RD	8.31	8.81
48	18	3B	67 MATTISON RD	107.77	103.56
48	20.06	3B	63 MATTISON RD	29.00	30.41
55	18	3B	223 MORRIS TNP	11.07	11.19
68	2.06	3B	321 MATTISON RESERVOIR AV	22.25	11.28
			<b>Total Farm Parcels (Acres):</b>	<b>1,512.21</b>	<b>1691.41</b>
				<b>50</b>	<b>Farms</b>



**Inventory Table 2. Target Farms in Frankford Township**

*Farm Parcel = Individual Lot  
Farm Unit = Multiple Lot Farm*

Block	Lot	Class	Location	Acres (Tax Data)	Acres (GIS)	Unit: Acres (GIS)
5	2	3B	95 FENWICK RD	41.36	32.87	44.38
5	3	3B	95 FENWICK RD	-	11.50	
12	2.01	3B	579 COUNTY ROUTE 565	58.78	59.08	72.29
7	3	3B	599 COUNTY ROUTE 565	11.86	13.21	
32	17	3B	204 WYKERTOWN RD	101.00	91.64	204.16
33	5	3B	13 HAGGERTY RD	35.74	36.32	
38	6	3B	197 WYKERTOWN RD	75.93	76.21	
35	4.04	3B	55 BEEMER CHURCH RD	10.00	4.79	9.62
35	4.05	3B	55 BEEMER CHURCH RD	-	4.84	
28	2.02	3B	105 DICKERSON LN	5.47	6.14	57.20
29	12	3B	61 DICKERSON RD	30.86	29.76	
30	2.01	3B	65 GEORGE HILL RD	19.13	16.07	
30	2.02	3B	65 GEORGE HILL RD	-	5.23	
48	20.02	3B	28 ROSLYN RD	11.56	12.23	21.15
48	20.03	3B	28 ROSLYN RD	-	2.89	
48	20.04	3B	57 MATTISON RD	5.07	6.03	
25	16	3B	54 PINES RD	129.09	127.20	157.51
26	3	3B	59 PINES RD	27.91	30.31	
3	11	3B	704 COUNTY ROUTE 565	44.70	48.21	81.85
3	2	3B	219 PLAINS RD	30.34	33.64	
39	7	3B	264 WYKERTOWN RD	68.04	66.06	74.47
39	9.02	3B	242 WYKERTOWN RD	7.40	8.41	
29	16.02	3B	110 PLAINS RD	-	1.71	147.68
29	16	3B	110 PLAINS RD	145.80	145.98	
66	11	3B	151 MATTISON RD	29.50	29.83	378.54
68	14	3B	123 UPPER NORTH SHORE RD	142.10	153.21	
68	6.04	3B	6 RISDON DR	8.74	13.56	
68	7	3B	23 RISDON DR	102.90	166.71	
68	9.01	3B	187 MATTISON RESERVOIR AV	13.00	15.22	
8	2.03	3B	629 COUNTY ROUTE 565	62.97	10.97	137.22
8	2.04	3B	639 COUNTY ROUTE 565	10.46	10.44	
8	2.05	3B	649 COUNTY ROUTE 565	10.45	10.40	
8	2	3B	629 COUNTY RT 565	10.99	62.08	
9	2	3B	628 COUNTY ROUTE 565	29.12	28.01	
9	3	3B	630 COUNTY ROUTE 565	14.55	15.32	
29	1	3B	174 PLAINS RD	110.73	113.22	506.66
29	11	3B	100 DICKERSON RD	293.32	304.27	
3	4	3B	191 PLAINS RD	46.09	50.57	
30	1	3B	105 DICKERSON RD	23.67	26.37	
32	9	3B	118 WYKERTOWN RD	11.42	12.23	
18	18.01	3B	30 AUGUSTA HILL RD	14.61	9.12	16.66
18	18.02	3B	30 AUGUSTA HILL RD	-	7.54	
26	15	3B	164 US HIGHWAY 206	6.00	5.83	16.40
26	17	3B	152 US HIGHWAY 206	9.42	10.58	
			<b>Total Farm Units (Acres):</b>	<b>1,810.09</b>	<b>1,925.81</b>	<b>15 Farms</b>
			<b>Total Farm Parcels (Acres):</b>	<b>1,512.21</b>	<b>1,691.41</b>	<b>50 Farms</b>
			<b>Total Target Farms (Acres):</b>	<b>3,322.30</b>	<b>3,617.23</b>	<b>65 Farms</b>

# Literature Cited

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- <sup>1</sup> Comprehensive Farmland Preservation Plan for the County of Sussex. Compiled by Morris Land Conservancy with Sussex County Agriculture Development Board. May 2008.
- <sup>2</sup> New Jersey Department/Division of Taxation. New Jersey Farmland Data Report: Tax Year 2021.
- <sup>3</sup> Sussex County New Jersey. Preserved Farmland by Municipality 2021. <https://www.sussex.nj.us/documents/Planning/Farmland/Preserved%20Farmland%20by%20Municipality.pdf>. Accessed February 2022.
- <sup>4</sup> New Jersey Department of Environmental Protection. Land Use/Land Cover Data 1995/97 and 2007.
- <sup>5</sup> United States Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/>. Accessed August 2010.
- <sup>6</sup> USDA/NRCS Soil Survey of Sussex County, New Jersey. 2009. [http://soils.usda.gov/survey/online\\_surveys/new\\_jersey/NJ037/Sussex\\_NJ.pdf](http://soils.usda.gov/survey/online_surveys/new_jersey/NJ037/Sussex_NJ.pdf). Accessed April 2011.
- <sup>7</sup> New Jersey Department of Agriculture, State Agriculture Development Committee, 2017 Sussex County Agricultural Profile. Accessed March 2022.
- <sup>8</sup> United States Department of Agriculture, National Agricultural Statistics Service. 2007 Census of Agriculture – County Data. New Jersey. County Summary Highlights. <http://www.agcensus.usda.gov> Accessed August 2010.
- <sup>9</sup> Frankford Township. 2016 Frankford Township Housing Element and Fair Share Plan Addendum.
- <sup>10</sup> Frankford Township. Chapter 18: Sewer and Water. <https://ecode360.com/35911336>. Accessed July 2022.
- <sup>11</sup> Frankford Township. Open Space and Recreation Plan Update. 2012.
- <sup>12</sup> New Jersey Department of Environmental Protection. 2009 State Development & Redevelopment Plan Endorsement Opportunities & Constraints Analysis for: Township of Frankford, Sussex County. [https://www.nj.gov/dep/opsc/docs/oca\\_frankford.pdf](https://www.nj.gov/dep/opsc/docs/oca_frankford.pdf). Accessed July 2022.
- <sup>13</sup> County of Sussex. 2017Sussex County Wastewater Management Plan: Frankford Township <https://www.sussex.nj.us/documents/Planning/wmp/2017/Chap-Frankford-WMP-Chapter-rev-9-2017.pdf>. Accessed July 2022.
- <sup>14</sup> Frankford Township. Article X: Zoning: 30-1003.1 Established. <https://ecode360.com/35912571?highlight=zoning&searchId=10454081920251970>. Accessed July 2022.

- 
- <sup>15</sup> Frankford Township. 2013 Frankford Township Zoning Map. <https://frankfordtownship.org/departments/zoning/Fk-Zone-October2013.pdf>. Accessed August 2022.
- <sup>16</sup> Personal Communication. Frankford Township. Bob Canace, President of Conservation Advising Services. August 2022.
- <sup>17</sup> Frankford Township. Article VI: Design and Development Principles and Standards: Section 30-513 Basic Design Principles. <https://ecode360.com/35912253?highlight=buffer,buffer&searchId=19595242011385821#35912253>. Accessed July 2022.
- <sup>18</sup> United State Census Bureau. Quick Facts: Frankford township, Sussex County, New Jersey. <https://www.census.gov/quickfacts/frankfordtownshipsussexcountynewjersey>. Accessed July 2022.
- <sup>19</sup> New Jersey Department of Labor & Workforce. 2019 New Privately Owned Residential Housing Units Authorized To Be Built. <https://www.nj.gov/labor/labormarketinformation/assets/PDFs/industry/bp/hist/bpann19.htm>. Accessed July 2022.
- <sup>20</sup> New Jersey Department of Labor & Workforce. 2019 Annual Residential Building Permits by County. <https://www.nj.gov/labor/labormarketinformation/assets/PDFs/industry/bp/hist/county19.htm>. Accessed July 2022.
- <sup>21</sup> New Jersey Department of Labor & Workforce. 2007  
New Privately Owned Residential Housing Units Authorized To Be Built. <https://www.nj.gov/labor/labormarketinformation/assets/PDFs/industry/bp/hist/bpann07.htm>. Accessed July 2022.
- <sup>22</sup> New Jersey Department of Labor & Workforce. 2019 Annual Residential Building Permits by County. <https://www.nj.gov/labor/labormarketinformation/assets/PDFs/industry/bp/hist/county19.htm>. Accessed July 2022.
- <sup>23</sup> New Jersey Department of Labor & Workforce. 2000 Annual Residential Building Permits by County <https://www.nj.gov/labor/labormarketinformation/assets/PDFs/industry/bp/hist/county00.htm>. Accessed July 2022.
- <sup>24</sup> Frankford Township. Annual Financial Statement for the Year 2021. Accessed July 2022
- <sup>25</sup> Personal Communication with Robert Baumley, Deputy Executive Director, State Agriculture Development Committee, August 8, 2008.
- <sup>26</sup> Personal Communication. Corey Tierney, Sussex County Administrator. April 2021.
- <sup>27</sup> Personal Communication. Steve Bruder. State Agriculture Development Committee. September 2020.

- 
- <sup>28</sup> New Jersey Department of Agriculture, State Agriculture Development Committee. Construction of Agricultural Labor Housing. <https://www.nj.gov/agriculture/sadc/farmpreserve/appraisals/Permitted%20Uses%20-%20Part%20IIB.pdf>. Accessed December 2021.
- <sup>29</sup> State Agriculture Development Committee, New Jersey Farmland Preservation Program Appraiser Handbook. June 22, 2017. <https://www.nj.gov/agriculture/sadc/farmpreserve/appraisals/2017%20Handbook%20as%20adopted%206-22-17%20meeting.pdf>. Accessed December 2021.
- <sup>30</sup> Ibid.
- <sup>31</sup> Ibid.
- <sup>32</sup> The State of New Jersey. P.L.2019, Chapter 136. “Preserve New Jersey Act.” <https://www.state.nj.us/gsppt/pdf/2TEXTPAGEShandout.pdf>
- <sup>33</sup> Township of Frankford Open Space and Recreation Plan Update. April 2009.
- <sup>34</sup> Sussex County. 2022 Budget.
- <sup>35</sup> Township of Frankford. 2022 User Friendly Budget.
- <sup>36</sup> Township of Frankford. Katie Radler Finance Clerk. December 2022.
- <sup>37</sup> New Jersey Department of Agriculture. Agricultural Smart Growth Tool Kit “Planning for Agriculture”. <http://www.state.nj.us/agriculture/toolkit.htm>. Accessed January 14, 2021.
- <sup>38</sup> New Jersey Department of Agriculture, 2006 Agricultural Smart Growth Plan. <https://www.state.nj.us/agriculture/smartgrowthplan.pdf>. Accessed January 14, 2021.
- <sup>39</sup> New Jersey Department of Agriculture. 2011 Economic Development Strategies. <http://www.nj.gov/agriculture/pdf/11EcoDevStrategies.pdf>. Accessed January 18, 2021.
- <sup>40</sup> New Jersey Farmland Assessment 2017. TAX YEAR 2018 – Sussex County. Data from Steven Bruder, SADC.
- <sup>41</sup> Jersey Fresh. Retail Partners. <https://findjerseyfresh.com/find/partners/>. Accessed January 18, 2021.
- <sup>42</sup> SADC. Farmland Assessment Forms. 2020.
- <sup>43</sup> Jersey Fresh. Find Jersey Fresh. <https://findjerseyfresh.com/explore/#findfresh>. Accessed January 18, 2021.
- <sup>44</sup> Ibid.
- <sup>45</sup> Rutgers New Jersey Agricultural Experiment Station. Agritourism in New Jersey. <https://sustainable-farming.rutgers.edu/agritourism-in-new-jersey/>. Accessed January 18, 2021.

- 
- <sup>46</sup> Natural Jersey. New Jersey Farms and Farm Stands. [http://www.naturaljersey.com/farms-open-to-the-publicfarm-standspick-your-own.html#/. Accessed January 18, 2021.](http://www.naturaljersey.com/farms-open-to-the-publicfarm-standspick-your-own.html#/)
- <sup>47</sup> Sussex County Fairgrounds. <http://sussexcountyfairgrounds.org/>. Accessed May 2022.
- <sup>48</sup> GrowNYC. Greenmarket Farmers Markets. <https://www.grownyc.org/greenmarket>. Accessed January 18, 2021.
- <sup>49</sup> Rutgers New Jersey Agricultural Experiment Station. Ultra-niche Crops. <https://njaes.rutgers.edu/ultra-niche-crops/>. Accessed March 26, 2020.
- <sup>50</sup> Rutgers New Jersey Agricultural Experiment Station. Growing Alternative Vegetables and Herb Crops from around the World. <https://sustainable-farming.rutgers.edu/alternative-world-crops/>. Accessed March 26, 2020.
- <sup>51</sup> United States Department of Agriculture National Agricultural Statistic Service. 2017 Census of Agriculture. [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/New\\_Jersey/st34\\_2\\_0002\\_0002.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/st34_2_0002_0002.pdf). Accessed January 18, 2021.
- <sup>52</sup> Jersey Grown. Garden Centers and Nurseries Search Results. <https://www.nj.gov/cgi-bin/agriculture/jerseygrown/gcnsearch.pl?county1=Sussex>. Accessed January 18, 2022.
- <sup>53</sup> Rutgers New Jersey Agricultural Experiment Station. Sustainable Farming on the Urban Fringe. Growing Alternative Vegetable and Herb Crops from Around the World. <https://sustainable-farming.rutgers.edu/alternative-world-crops/>. Accessed January 18, 2022.
- <sup>54</sup> World Crops for the Northeastern United States. <http://worldcrops.org/>. Accessed January 18, 2022.
- <sup>55</sup> USDA, National Agricultural Statistics Service. Sheep and Goats (January 2020). [https://www.nass.usda.gov/Publications/Todays\\_Reports/reports/shep0120.pdf](https://www.nass.usda.gov/Publications/Todays_Reports/reports/shep0120.pdf). Accessed January 21, 2022.
- <sup>56</sup> Certified Naturally Organic. New Jersey. <https://certified.naturallygrown.org/producers/list/227/NJ>. Accessed January 21, 2022.
- <sup>57</sup> United States Department of Agriculture. Agricultural Marketing Service. Do I Need To Be Certified Organic? <https://www.ams.usda.gov/sites/default/files/media/DoINeedTobeCertifiedOrganicFactSheet.pdf> . Accessed January 21, 2022.
- <sup>58</sup> New Jersey Department of Agriculture. New Jersey Equine Advisory Board. Directory of Facilities. 2020. <https://www.jerseyequine.nj.gov/equinefacilities.pdf>. Accessed January 21, 2022.

- 
- <sup>59</sup> New Jersey Department of the Treasury. Out-of-State Winery License for Direct Ship Wine Sales to New Jersey. <http://www.state.nj.us/treasury/taxation/os-wine-sales.shtml>. Accessed January 21, 2022.
- <sup>60</sup> New Jersey Department of Agriculture. News From the NJDA. July 2014, Volume 2, Issue 4. <http://www.nj.gov/agriculture/pdf/njdnewsletter1407.pdf>. Accessed January 21, 2022.
- <sup>61</sup> LegiScan. New Jersey Assembly Bill 2773. <https://legiscan.com/NJ/bill/A2773/2020>. Accessed January 21, 2022.
- <sup>62</sup> New Jersey Department of Agriculture. Tourist Oriented Destination Signage (TODS). <http://www.nj.gov/agriculture/home/farmers/todsagritourism.html>. Accessed January 21, 2022.
- <sup>63</sup> Rutgers New Jersey Agricultural Experiment Station. <https://sustainable-farming.rutgers.edu/agritourism-in-new-jersey/>. Accessed January 21, 2022.
- <sup>64</sup> New Jersey Department of Agriculture. State Agriculture Development Committee. Rule Proposals. <http://www.nj.gov/agriculture/sadc/ruleprop/>. Accessed January 21, 2022.
- <sup>65</sup> USDA 2012 Census of Agriculture. Appendix B. [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/New\\_Jersey/njappxb.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/njappxb.pdf). Accessed January 21, 2022.
- <sup>66</sup> Agritourism Industry Development in New Jersey. Brian J. Schilling. Rutgers. [http://www.dvrpc.org/food/pdf/Schilling\\_AgTourism\\_2008.pdf](http://www.dvrpc.org/food/pdf/Schilling_AgTourism_2008.pdf). Accessed January 21, 2022.
- <sup>67</sup> The Farm Institute. About. <http://www.thetrustees.org/places-to-visit/cape-cod-islands/the-farm-institute.html>. Accessed April 21, 2022.
- <sup>68</sup> New Jersey Department of Agriculture. Marketing and Development. <http://www.state.nj.us/agriculture/divisions/md/prog/wic.html>. Accessed April 21, 2022.
- <sup>69</sup> New Jersey Department of Labor and Workforce Development. New Jersey's Minimum Wage Postcard. [https://www.nj.gov/labor/forms\\_pdfs/wagehour/minimumwage\\_postcard.pdf](https://www.nj.gov/labor/forms_pdfs/wagehour/minimumwage_postcard.pdf). Accessed May 11, 2022.
- <sup>70</sup> New York State Department of Labor. Minimum Wage. <https://labor.ny.gov/workerprotection/laborstandards/workprot/minwage.shtm>. Accessed May 11, 2022.
- <sup>71</sup> New Jersey Department of Agriculture, Agricultural Economic Development Services. <https://www.nj.gov/agriculture/divisions/md/prog/agricultureeconomic.html#top>. Accessed May 12, 2022.
- <sup>72</sup> New Jersey Department of Agriculture. Farm Link. <https://www.nj.gov/agriculture/sadc/farmlink/>. Accessed April 30, 2022.

---

<sup>73</sup> New Jersey State Agriculture Development Committee. Annual Report For FY2018. <https://www.nj.gov/agriculture/sadc/publications/fy2018AnnualReportFinalWeb.pdf>. Accessed May 18, 2022.

<sup>74</sup> New Jersey Department of Agriculture State Agricultural Development Committee. Farm Transfer, Succession, and Retirement Planning. <https://www.nj.gov/agriculture/sadc/farmlink/resources/farmtransition.html>. Accessed May 18, 2022.

<sup>75</sup> California Farm Link. Farm Succession Guidebook. <https://www.californiafarmlink.org/resources/farm-succession-guidebook/>. Accessed May 18, 2022.

<sup>76</sup> New Jersey Agricultural Society. New Jersey Agricultural Leadership Development Program (NJALDP). <http://www.njagsociety.org/nj-agricultural-leadership-development-program.html>. Accessed April 30, 2022.

<sup>77</sup> Rutgers New Jersey Agricultural Experiment Station. Grow Healthy. <http://growhealthy.rutgers.edu/>. Accessed May 11, 2022.

<sup>78</sup> New Jersey State Horticultural Society. <http://www.horticulturalnews.org/advertising.pdf>. Accessed May 12, 2022.

<sup>79</sup> Community Involved in Sustaining Agriculture. Resources for Farmers. Tipsheets and Resources. <http://www.buylocalfood.org/resources-for-farmers/tipsheets/>. Accessed May 12, 2022.

<sup>80</sup> New Jersey Department of Agriculture, Marketing and Development. Jersey Fresh. <http://www.nj.gov/agriculture/divisions/md/prog/jerseyfresh.html>. Accessed May 12, 2022.

<sup>81</sup> United States Department of Agriculture, National Agricultural Library, Alternative Farming Systems. Information Center, Community Supported Agriculture. <http://www.nal.usda.gov/afsic/pubs/csa/csa.shtml>. Accessed May 18, 2022.

<sup>82</sup> New Jersey Agricultural Convention. 2020 Resolution #1 Hemp. <https://www.nj.gov/agriculture/conventions/2020/2020%20Resolution%20%201%20-%20Hemp%20FINAL%20FOR%20WEB.pdf>. Accessed May 19, 2022.

<sup>83</sup> N.J.A.C. 7:13 Flood Hazard Area Control Act Rules. Amended February 2, 2015. [http://www.nj.gov/dep/rules/rules/njac7\\_13.pdf](http://www.nj.gov/dep/rules/rules/njac7_13.pdf). Accessed December 8, 2021.

<sup>84</sup> US Department of Agriculture. Grants and Loans. <https://www.usda.gov/topics/farming/grants-and-loans>. Accessed May 18, 2022.

<sup>85</sup> New Jersey Department of Agriculture, Sustainable Agriculture Research and Education (SARE). <https://www.nj.gov/agriculture/grants/sare.html>. Accessed May 12, 2022.



- 
- <sup>86</sup> New Jersey Department of Agriculture. 2020 Specialty Crop Block Grants. <https://www.nj.gov/agriculture/grants/>. Accessed May 18, 2022.
- <sup>87</sup> New Jersey Department of Agriculture State Agriculture Development Committee. Farmland Preservation Programs. <https://www.nj.gov/agriculture/sadc/farmpreserve/programs/>. Accessed May 18, 2022.
- <sup>88</sup> New Jersey Farm Bureau. <https://njfb.org/>. Accessed May 14, 2022.
- <sup>89</sup> New Jersey Department of Agriculture. Agricultural Education. New Jersey FFA Association. [http://www.state.nj.us/agriculture/ag\\_ed/ffa/](http://www.state.nj.us/agriculture/ag_ed/ffa/). Accessed May 14, 2022.
- <sup>90</sup> United States Department of Agriculture, Natural Resources Conservation Service, Information for Farmers. <http://www.nj.nrcs.usda.gov/farmers.html>. Accessed July 2022.
- <sup>91</sup> United States Department of Agriculture, Natural Resources Conservation Service New Jersey. <http://www.nj.nrcs.usda.gov/contact/index.html#Hackettstown>. Accessed July 2022.
- <sup>92</sup> Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. July 2020.
- <sup>93</sup> New Jersey NRCS Technical Resources. Electronic Field Office Technical Guide (eFOTG). <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/fotg/>. Accessed July 2022.
- <sup>94</sup> USDA Announces Updated Conservation Practice Standards <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/releases/?cid=NRCSEPRD1692218>. July 2022.
- <sup>95</sup> New Jersey Department of Agriculture, Agricultural and Natural Resources. <https://www.nj.gov/agriculture/divisions/anr/nrc/>. Accessed July 2022.
- <sup>96</sup> Upper Delaware Soil Conservation District, Home Page. <http://www.upperdelawarescd-nj.com/contact.html>, Accessed July 2022.
- <sup>97</sup> Ibid.
- <sup>98</sup> New Jersey Department of Environmental Protection, Division of Parks and Forestry, Private Lands Management Program. [http://www.nj.gov/dep/parksandforests/forest/njfs\\_private\\_lands\\_mgt.html](http://www.nj.gov/dep/parksandforests/forest/njfs_private_lands_mgt.html). Accessed July 2022.
- <sup>99</sup> New Jersey Department of Environmental Protection, NJ Forest Service. New Jersey Farmland Assessment. [https://www.state.nj.us/dep/parksandforests/forest/njfs\\_farm\\_assess.html](https://www.state.nj.us/dep/parksandforests/forest/njfs_farm_assess.html). Accessed July 2022.
- <sup>100</sup> New Jersey Treasury, Division of Taxation, N.J.A.C. 18:15-2.7. <https://www.state.nj.us/treasury/taxation/pdf/lpt/regs/reg1815.pdf>. Accessed July 2022.

---

<sup>101</sup> New Jersey Department of Environmental Protection, Division of Parks and Forestry, State Approved Foresters List. <https://www.state.nj.us/dep/parksandforests/forest/ACF.pdf>. Accessed July 2022.

<sup>102</sup> New Jersey Division of Taxation, Farmland Assessment. <https://www.state.nj.us/treasury/taxation/pdf/lpt/2021farmland.pdf>. Accessed July 2022.

<sup>103</sup> Ibid.

<sup>104</sup> New Jersey Department of Environmental Protection, Division of Fish and Wildlife. [https://www.state.nj.us/dep/fgw/habitat\\_mgt.htm](https://www.state.nj.us/dep/fgw/habitat_mgt.htm). Accessed May 2022.

<sup>105</sup> Personal Communication with Michael Hart, Regional Forester, New Jersey Forest Service, July 2020.

<sup>106</sup> Personal Communication with Michael Hart, Regional Forester, New Jersey Forest Service, April 2021. Due to the COVID-19 Pandemic, updated numbers were not accessible for individual municipalities in Sussex County.

<sup>107</sup> Personal Communication with Michael Hart, Regional Forester, New Jersey Forest Service, November 2021.

<sup>108</sup> New Jersey Department of Environmental Protection, Division of Parks and Forestry. NJ Forest Stewardship Program. [http://www.njparksandforests.org/forest/stw\\_inc\\_prog.html](http://www.njparksandforests.org/forest/stw_inc_prog.html). Accessed July 2022.

<sup>109</sup> New Jersey Department of Environmental Protection, NJ Forest Service. <https://www.nj.gov/dep/easyaccess/nathisres.htm>. Accessed July 2022.

<sup>110</sup> River Friendly Farm. <https://www.riverfriendlyfarm.org/>. Accessed July 2022.

<sup>111</sup> New Jersey Department of Agriculture, Soil and Water Conservation Grants. <https://www.nj.gov/agriculture/sadc/farmpreserve/grants/>. Accessed July 2022.

<sup>112</sup> New Jersey State Agricultural Development Committee, Farmland Stewardship Deer Fencing Grants. <https://www.nj.gov/agriculture/sadc/publications/deerfencinggrants.pdf>. Accessed July 2022.

<sup>113</sup> United States Department of Agriculture, Conservation Programs Offered In New Jersey, Programs Available in 2020. <https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/>. Accessed July 2022.

<sup>114</sup> United States Department of Agriculture, Farm Service Agency, 2018 Farm Bill. <https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/farmbill/>. Accessed July 2022.

<sup>115</sup> United States Department of Agriculture, Economic Research Service. <https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/crop-commodity-program-provisions-title-i/>. Accessed July 2022.

---

<sup>116</sup> United States Department of Agriculture, Economic Research Service.  
<https://www.ers.usda.gov/agriculture-improvement-act-of-2018-highlights-and-implications/crop-commodity-programs/>. Accessed July 2022.

<sup>117</sup> United States Department of Agriculture, Economic Research Service.  
<https://www.ers.usda.gov/agriculture-improvement-act-of-2018-highlights-and-implications/conservation/>. Accessed July 2022.

<sup>118</sup> United States Department of Agriculture, Farm Service Agency.  
<https://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index>. Accessed July 2022.

<sup>119</sup> State of New Jersey, Department of Agriculture.  
<https://www.nj.gov/agriculture/divisions/anr/agriassist/crep.html>. Accessed July 2022.

<sup>120</sup> United States Department of Agriculture, NJNRCS.  
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/financial/equip/>. Accessed July 2022.

<sup>121</sup> Ibid.

<sup>122</sup> Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. August 2022.

<sup>123</sup> United States Department of Agriculture, NJNRCS.  
[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/cig/?cid=nrcs141p2\\_018671#2018](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/cig/?cid=nrcs141p2_018671#2018). Accessed July 2022..

<sup>124</sup> United States Department of Agriculture, NJNRCS.  
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/programs/financial/csp/>. Accessed July 2022.

<sup>125</sup> United States Department of Agriculture, NJNRCS.  
[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/equip/?cid=nrcs141p2\\_018990](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/equip/?cid=nrcs141p2_018990). Accessed July 2022.

<sup>126</sup> United States Department of Agriculture, NRCS.  
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/acep/>. Accessed July 2022.

<sup>127</sup> United States Department of Agriculture, NRCS. News Release. Updates to Conservation Easements Strengthens Protection for Farmlands, Grasslands, and Wetlands.  
<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/newsroom/releases/?cid=NRCSEPRD1738421>. Accessed July 2022.

<sup>128</sup> United States Department of Agriculture, NRCS,  
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/rcpp/>. Accessed July 2022.

- 
- <sup>129</sup> SADC. New Jersey Farmland Assessments. Sussex County municipal data. Received January 2021.
- <sup>130</sup> University of Nebraska-Lincoln, United States Drought Monitor. <https://droughtmonitor.unl.edu/Data/Timeseries.aspx>. Accessed July 2022.
- <sup>131</sup> NJ Highlands Council. Highlands Regional Master Plan. [http://www.highlands.state.nj.us/njhighlands/master/rmp/final/highlands\\_rmp\\_112008.pdf](http://www.highlands.state.nj.us/njhighlands/master/rmp/final/highlands_rmp_112008.pdf). November 2008. Accessed July 2022.
- <sup>132</sup> Office of the New Jersey State Climatologist at Rutgers University. NJ Weather & Climate Network. <http://njweather.org/>. Accessed July 2022.
- <sup>133</sup> USDA, Soil Conservation Service. Agricultural Waste Management Systems. <https://www.wcc.nrcs.usda.gov/ftpref/wntsc/AWM/handbook/ch9.pdf>. Accessed July 2022.
- <sup>134</sup> New Jersey Treasury, Division of Taxation, <https://www.state.nj.us/treasury/taxation/lpt/farmland.shtml>. Accessed July 2022.
- <sup>135</sup> Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. April 2021.
- <sup>136</sup> New Jersey Department of Agriculture. Animal Waste Management. <https://www.nj.gov/agriculture/divisions/anr/pdf/animalwastemanagementrule.pdf>. Accessed July 2022.
- <sup>137</sup> Personal Communication with Scott Eichlin. Chair of the Frankford Township Agricultural Advisory Committee. May 2020.
- <sup>138</sup> New Jersey Department of Agriculture. Animal Waste Management. <https://www.nj.gov/agriculture/divisions/anr/agriassist/animalwaste.html>. Accessed July 2022.
- <sup>139</sup> Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. April 2021.
- <sup>140</sup> Sussex County Solid Waste and Recycling Services. <https://www.scmua.org/>. Accessed July 2022.
- <sup>141</sup> Frankford Township Recycling. <https://frankfordtownship.org/residents/recycling/>. Accessed July 2022.
- <sup>142</sup> New Jersey Department of Agriculture. Division of Marketing and Development. Programs and Services. Recycling. <https://www.nj.gov/agriculture/divisions/anr/nrc/recycling.html>. Accessed July 2022.
- <sup>143</sup> P.L.2009 Chapter 13. An Act concerning agriculture and biomass, solar, and wind energy, supplementing P.L.1983, c.32 and amending and supplementing P.L.1983, c.31 and P.L.1964, c.48.

---

<http://www.nj.gov/agriculture/sadc/news/hottopics/solar%20wind%20biomass%20pamphlet%20law.pdf>. Accessed July 2022.

<sup>144</sup> State of New Jersey, Energy Master Plan. <https://www.nj.gov/emp/energy/>. Accessed July 2022.

<sup>145</sup> U.S. Department of Agriculture, Rural Development. <https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency>. Accessed July 2022.

<sup>146</sup> United States Department of Agriculture, Natural Resources Conservation Service of New Jersey. [https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/equip/?cid=nrcs141p2\\_018755](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nj/programs/financial/equip/?cid=nrcs141p2_018755). Accessed July 2022.

<sup>147</sup> Personal Communication with Nick Saumweber. USDA Assistant State Conservationist for Field Operations, Somerset State Office. April 2021.

<sup>148</sup> State Agriculture Development Committee. Subchapter 24 in Chapter 71, Solar Energy Generation on Preserved Farms <https://www.nj.gov/agriculture/sadc/ruleprop/SUBCHAPTER%2024%20unofficial%20copy%20solar.pdf>. Accessed July 2022.

<sup>149</sup> State Agriculture Development Committee. AMPs for Construction, Installation, Operation and Maintenance of Solar Energy Generation Facilities, Structures and Equipment on Commercial Farms <https://www.nj.gov/agriculture/sadc/rtfprogram/amps/adoptedamps/solar.html>. Accessed July 2022.

<sup>150</sup> New Jersey NRCS. <https://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/contact/>. Accessed July 2022.

<sup>151</sup> New Jersey's Clean Energy Program. <https://www.njcleanenergy.com/renewable-energy/technologies/wind/wind>. Accessed July 2022.

<sup>152</sup> Frankford Township. Chapter 30 Land Use Code. <https://ecode360.com/34874823?highlight=wind&searchId=3641232007499571#34874823>. Accessed July 2022.

<sup>153</sup> New Jersey Board of Public Utilities, NJCEP Combined Heat & Power – Fuel Cell (CHP-FC) Program. [https://www.njcleanenergy.com/files/file/FY20%20Program%20Guide\\_CHP-FC%20Final.pdf](https://www.njcleanenergy.com/files/file/FY20%20Program%20Guide_CHP-FC%20Final.pdf). Accessed July 2022.

<sup>154</sup> Renewableenergyworld.com. Measuring the Potential of Switchgrass Pellets. April 2013. <https://www.renewableenergyworld.com/2013/04/01/measuring-the-potential-of-switchgrass-pellets/>. Accessed July 2022.

---

<sup>155</sup> BioDiesel. <https://www.biodiesel.org/using-biodiesel/finding-biodiesel>. Accessed October 2022.

<sup>156</sup> Ibid.

<sup>157</sup> New Jersey Clean Energy Program. SREC Registration Program. <https://www.njcleanenergy.com/renewable-energy/programs/solar-renewable-energy-certificates-srec/new-jersey-solar-renewable-energy>. Accessed July 2022..

<sup>158</sup> New Jersey Clean Energy Program. Anemometer Loan Program. <https://www.njcleanenergy.com/renewable-energy/technologies/wind/small-wind-systems/anemometer-loan-program>. Accessed July 2022..

<sup>159</sup> New Jersey Clean Energy Program. SmartStart Buildings Program Guide modified 02/02/2021. <https://www.njcleanenergy.com/files/file/NJSSB/FY21/FY21%20SmartStart%20Buildings%20Program%20Guide%2001%20-%20Ready%20to%20post.pdf>. Accessed July 2022.

<sup>160</sup> United States Department of Agriculture, Rural Development. <https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency>. Accessed July 2022.

<sup>161</sup> United States Department of Agriculture, Rural Development. [https://www.rd.usda.gov/sites/default/files/fact-sheet/508\\_RD\\_FS\\_RBS\\_AdvancedBioFuel.pdf](https://www.rd.usda.gov/sites/default/files/fact-sheet/508_RD_FS_RBS_AdvancedBioFuel.pdf). Accessed July 2022.

<sup>162</sup> United States Department of Agriculture, Rural Development. <https://www.rd.usda.gov/programs-services/biorefinery-renewable-chemical-and-biobased-product-manufacturing-assistance>. Accessed July 2022.

<sup>163</sup> New Jersey Department of Agriculture, State Agriculture Development Committee. <https://www.nj.gov/agriculture/sadc/rtfprogram/>. Accessed June 2022.

<sup>164</sup> New Jersey Department of Agriculture, State Agriculture Development Committee, Right to Farm (RTF) Program: Eligibility Criteria for RTF Act Protection. <https://www.nj.gov/agriculture/sadc/rtfprogram/eligibility/>. Accessed June 2022.

<sup>165</sup> New Jersey Department of Agriculture, State Agricultural Development Committee. <https://www.nj.gov/agriculture/sadc/rtfprogram/amps/>. Accessed June 2022.

<sup>166</sup> New Jersey Department of Agriculture, State Agriculture Development Committee, Formal Conflict Resolution Process. <https://www.nj.gov/agriculture/sadc/rtfprogram/conflictres/formal/index.html>. Accessed June 2022.

<sup>167</sup> Frankford Township, Sussex County, New Jersey. Municipal Code, Chapter 28: Right to Farm Ordinance. 1999.

- 
- <sup>168</sup> SADC Model Ordinance. <https://www.nj.gov/agriculture/sadc/rtfprogram/resources/modelrtfordinance.pdf>. Accessed June 2022.
- <sup>169</sup> New Jersey Department of Agriculture, New Jersey’s Farmland Assessment Act, An Informational Guide on Basic Requirements. July 2006.
- <sup>170</sup> NJ Division of Taxation Farmland Data Reports. Numbers from 2009 and 2019. <https://www.state.nj.us/treasury/taxation/lpt/farmland.shtml>. Accessed June 2022.
- <sup>171</sup> United States Department of Agriculture. National Agricultural Statistics Service. Quick Stats. <https://quickstats.nass.usda.gov/>. Accessed June 2022.
- <sup>172</sup> Comprehensive Farmland Preservation Plan Update – 2012. <https://www.nj.gov/agriculture/sadc/documents/home/genpub/Frankford%20Farm%20Plan%20Update-Final-2012.pdf>. Accessed August 2022.
- <sup>173</sup> Ibid.
- <sup>174</sup> New Jersey Department of Labor and Workforce Development. [https://www.nj.gov/labor/lwdhome/press/2021/20211221\\_minwageincrease.shtml#:~:text=Agricultural%20workers%20are%20guided%20by,to%20%2411.05%2C%20up%20from%20%2410.44](https://www.nj.gov/labor/lwdhome/press/2021/20211221_minwageincrease.shtml#:~:text=Agricultural%20workers%20are%20guided%20by,to%20%2411.05%2C%20up%20from%20%2410.44). Accessed June 2022.
- <sup>175</sup> New Jersey State Board of Agriculture, Position on New Jersey Minimum Wage Increases. <https://njfb.org/wp-content/uploads/2018/12/State-Board-Minimum-Wage-Positions-002.pdf>. Accessed June 2022.
- <sup>176</sup> Comprehensive Farmland Preservation Plan Update – 2012. <https://www.nj.gov/agriculture/sadc/documents/home/genpub/Frankford%20Farm%20Plan%20Update-Final-2012.pdf>. Accessed August 2022.
- <sup>177</sup> Comprehensive Farmland Preservation Plan Update – 2012. <https://www.nj.gov/agriculture/sadc/documents/home/genpub/Frankford%20Farm%20Plan%20Update-Final-2012.pdf>. Accessed August 2022.
- <sup>178</sup> Rutgers Cooperative Extension of Sussex County. New Jersey Agricultural Experimental Station. <https://sussex.njaes.rutgers.edu/>. Accessed August 2022.
- <sup>179</sup> Sussex County Community College. [https://sussex-county-community-college-community-college.business.site/?utm\\_source=gmb&utm\\_medium=referral](https://sussex-county-community-college-community-college.business.site/?utm_source=gmb&utm_medium=referral). Accessed June 2022.
- <sup>180</sup> Northeast Organic Farming Association – New Jersey. <https://nofanj.org/>. Accessed June 2022.
- <sup>181</sup> Hudson Farm Club & Hudson Farm Foundation. <https://hudsonfarmnj.com/>. Accessed August 2022.
- <sup>182</sup> Salem County NJAES. <https://salem.njaes.rutgers.edu/contact.html>. Accessed June 2022.

- 
- <sup>183</sup> New Jersey Department of Agriculture. Training. <https://www.nj.gov/agriculture/grants/training.html>. Accessed June 2022.
- <sup>184</sup> New Jersey Farm Bureau. Information for Farmers. <https://njfb.org/issues-policies/information-for-farmers/>. Accessed June 2022.
- <sup>185</sup> United States Department of Agriculture. National Agricultural Statistics Service. Quick Stats. <https://quickstats.nass.usda.gov/>. Accessed June 2022.
- <sup>186</sup> Ibid.
- <sup>187</sup> United States Department of Agriculture. 2017 Census of Agriculture County Profile. [https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/New\\_Jersey/cp34041.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/New_Jersey/cp34041.pdf). Accessed June 2022.
- <sup>188</sup> 2017 Census of Agriculture. Young Producers & New and Beginning Producers. [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/New\\_Jersey/st34\\_2\\_0056\\_0057.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/st34_2_0056_0057.pdf). Accessed August 2022.
- <sup>189</sup> USDA/NASS QuickStats. <http://quickstats.nass-usda.gov>. Accessed June 2022.
- <sup>190</sup> National Future Farmers of America Organization. Our Membership. <https://www.ffa.org/our-membership/>. Accessed June 2022.
- <sup>191</sup> State of New Jersey Department of Agriculture. Agricultural Education. FFA Convention. [http://www.nj.gov/agriculture/ag\\_ed/ffa/convention/](http://www.nj.gov/agriculture/ag_ed/ffa/convention/) Accessed June 2022.
- <sup>192</sup> Newton Public Schools. FFA (Future Farmers of America). <https://www.newtonnj.org/nhs/clubs-groups/ffa>. Accessed August 2022.
- <sup>193</sup> Foodshed Alliance. Sustainable Agricultural Enterprise (SAGE). <https://foodshedalliance.org/sage/>. Accessed August 2022.
- <sup>194</sup> Sunset View Farms. <http://www.sunsetviewfarm.com/Index.htm>. Accessed August 2022.
- <sup>195</sup> Rutgers New Jersey Agricultural Extension Station. 4-H Development. <https://warren.njaes.rutgers.edu/4h/>. Accessed June 2022.
- <sup>196</sup> NJ Land Link. <https://www.njlandlink.org/>. Accessed January 2021.
- <sup>197</sup> New Jersey Department of Environmental Protection, Division of Fish and Wildlife. Information for Farmers. <https://www.njfishandwildlife.com/farmer.htm>. Accessed June 2022.
- <sup>198</sup> Rutgers New Jersey Agricultural Experiment Station. Perimeter Planning for Pest Management. <https://njaes.rutgers.edu/organic/perimeter-planting.php>. Accessed June 2022.
- <sup>199</sup> New Jersey Department of Agriculture, Division of Plant Industry, Programs. <http://www.state.nj.us/agriculture/divisions/pi/prog/>. Accessed June 2022.



---

<sup>200</sup> Comprehensive Farmland Preservation Plan Update – 2012.  
<https://www.nj.gov/agriculture/sadc/documents/home/genpub/Frankford%20Farm%20Plan%20Update-Final-2012.pdf>. Accessed August 2022.

<sup>201</sup> New Jersey Department of Agriculture. New Jersey Gypsy Moth Aerial Defoliation Survey, 2017.  
<https://www.nj.gov/agriculture/divisions/pi/pdf/2017%20NJ%20GM%20Aerial%20Defoliation%20Survey.pdf>. Accessed June 2022.

<sup>202</sup> Animal and Plant Health Inspection Service. U.S. Department of Agriculture. Areas Quarantined in the United States for Gypsy Moth.  
[https://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/gypsy\\_moth/downloads/quarantine.pdf](https://www.aphis.usda.gov/plant_health/plant_pest_info/gypsy_moth/downloads/quarantine.pdf). Accessed August 2022.

<sup>203</sup> 2018 Farm Bill Primer: Rural Development Programs.  
<https://crsreports.congress.gov/product/pdf/IF/IF11225>. Accessed June 2022.

<sup>204</sup> United States Department of Agriculture, Rural Development. <https://www.rd.usda.gov/>. Accessed June 2022.

<sup>205</sup> United States Census.  
<https://www.census.gov/quickfacts/uniontownshiphunterdoncountynewjersey>. Accessed June 2022.

<sup>206</sup> United States Department of the Treasury. Internal Revenue Service. Farmers Tax Guide.  
<https://www.irs.gov/publications/p225>. Accessed June 2022.

<sup>207</sup> United States Department of Agriculture, Farm Service Agency.  
<https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/beginning-farmers-and-ranchers-loans/index>. Accessed June 2022.

<sup>208</sup> United States Department of Agriculture, Farm Service Agency, Farm Loan Programs, Background. <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=landing>. Accessed June 2022.