COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE







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for

Township of Frelinghuysen County of Warren

Prepared October 18, 2021 by:

The Land Conservancy of New Jersey

An accredited land trust 19 Boonton Avenue Boonton, NJ 07005

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Cover Photograph: Shaley Hill Farm

Section Banners:

Executive Summary: Shaley Hill Farm

Chapter 1. Murphy Farm

Chapter 2. New Hope Farm

Chapter 3. Vista near Jenny Jump State Park

Chapter 4. Shiloh Hill Farm

Chapter 5. Shaley Hill Farm

Chapter 6. Shaley Hill Farm

Chapter 7. Linz Farm

Chapter 8: Farm Across from Polowy Farm



Executive Summary

Frelinghuysen Township is 23.87 square miles (15,277 acres) in size. Of this, **8,495 acres** (**56%**) are under farmland assessment, which includes croplands, woodlands, farm structures, and wetlands/waterways that occur on an agricultural property. Since 1993, Frelinghuysen Township has preserved **33 farms** totaling **2,864 acres**.

Based upon the State's Minimum Eligibility Criteria for productive soils and tillable land, **2,475 acres** are potentially eligible for farmland preservation in Frelinghuysen Township. Of this, the Township has identified **21 farms**, or **2,143 acres** (farms greater than 20 acres in size) as "targeted" farms for preservation.

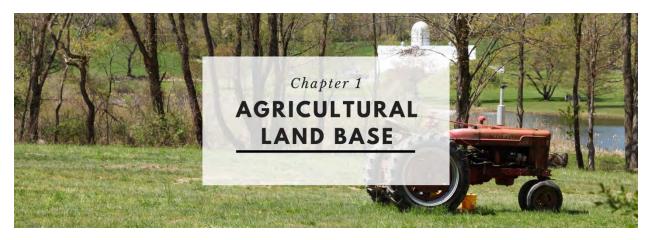
The Farmland Preservation Committee works in partnership with the Warren County Agriculture Development Board, the State Agriculture Development Committee, and its non-profit partners to preserve farmland in the municipality. Based upon the availability of farmland, landowner interest, and available funding, the goals for future preservation of farmland in Frelinghuysen Township are:

One-year target: 75 acres, 1 farm Five-year target: 375 acres, 5 farms Ten-year target: 800 acres, 9 farms

Since the completion of the 2008 Comprehensive Farmland Preservation Plan, 16 farms have been preserved, protecting 1,212 acres of agricultural land. The largest of these was the Murlan Farm (224 acres) in 2021 through the non-profit program with The Land Conservancy of New Jersey. The Township Committee remains committed to protecting the agricultural legacy and rural character of the municipality.

Public Meetings

The Township held two public meetings on the *Comprehensive Farmland Preservation Plan Update*. The first public meeting was held on June 17, 2020, as part of the regularly scheduled governing body meeting. The second public meeting was hosted by the Land Use Board on October 4, 2021, to review the final draft of the *Update*. The Agricultural Advisory Committee was involved in the development of the *Plan Update* and will approve the *Update* prior to adoption as an Element of the Master Plan. Meeting materials are included in **Appendix A**.



Chapter 1. Agricultural Land Base

Note about the data used in the Comprehensive Farmland Preservation Plan Update:

Chapters 1, 2 and 3 use the Farmland Tax Assessment Dataset, provided by the State Agriculture Development Committee for 2017and 2019. This is used in conjunction with the Census of Agriculture to provide summary information on the business of agriculture for the municipality and county. Chapters 4 and 5 of the Plan Update rely on the digital mapping acreage, derived from the GIS (Geographic Information Systems) software used to create the maps in the Plan Update. The GIS is the basis by which potentially eligible farms ("targeted farms") are identified and there may be slight discrepancies in acreage numbers from those provided in the Farmland Tax Assessment Data.

A. Agricultural Landscape

The Township of Frelinghuysen has **8,495 acres** of farm assessed land devoted to agricultural or horticultural use, including cropland, pasture, woodland, and equine operations (as of 2019).^a (**Map 1**) Preserved and public lands in Frelinghuysen Township are shown on **Map 2**.^b

Due to the nature of the topography, slightly less than half of Frelinghuysen's farm-assessed acreage is woodland/wetland (3,947 acres); with 4,490 acres designated active agriculture (cropland and pasture), and 59 acres designated as equine. (Figure 1)

Frelinghuysen Township lies mostly within the Ridge and Valley Physiographic Province. A small portion of the southeastern section of the town lies within the Highlands Province.

According to 2015 Land Use/Land Cover (LU/LC) data produced by the New Jersey Department of Environmental Protection (NJDEP), 22.3% (3,405 acres) of the town is used for agriculture. In part, this is because much of the Township is steeply sloped and woodland, with 46% of farm-assessed land identified as woodland. (**Figure 2**, **Figure 3**, and **Table 1**)

 $^{^{\}rm a}$ Farm assessed acreage from the 2019 and 2017 Tax Assessment reports.

^b See **Maps** section at the end of the document.

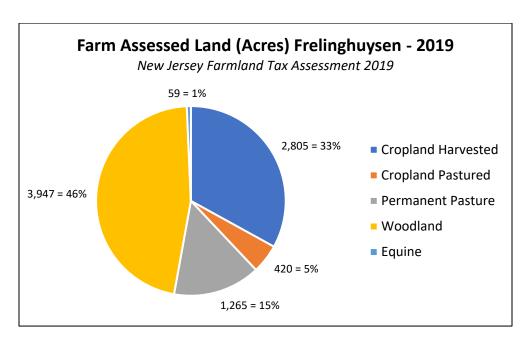


Figure 1. Farm Assessed Land in Frelinghuysen (2019 Tax Assessment)

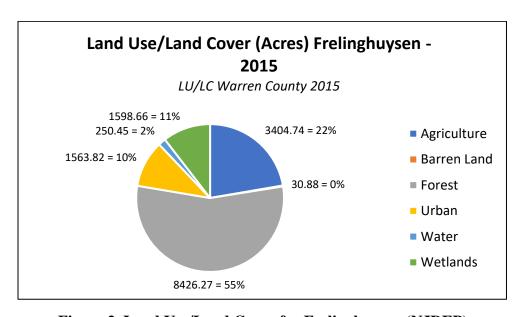


Figure 2. Land Use/Land Cover for Frelinghuysen (NJDEP)

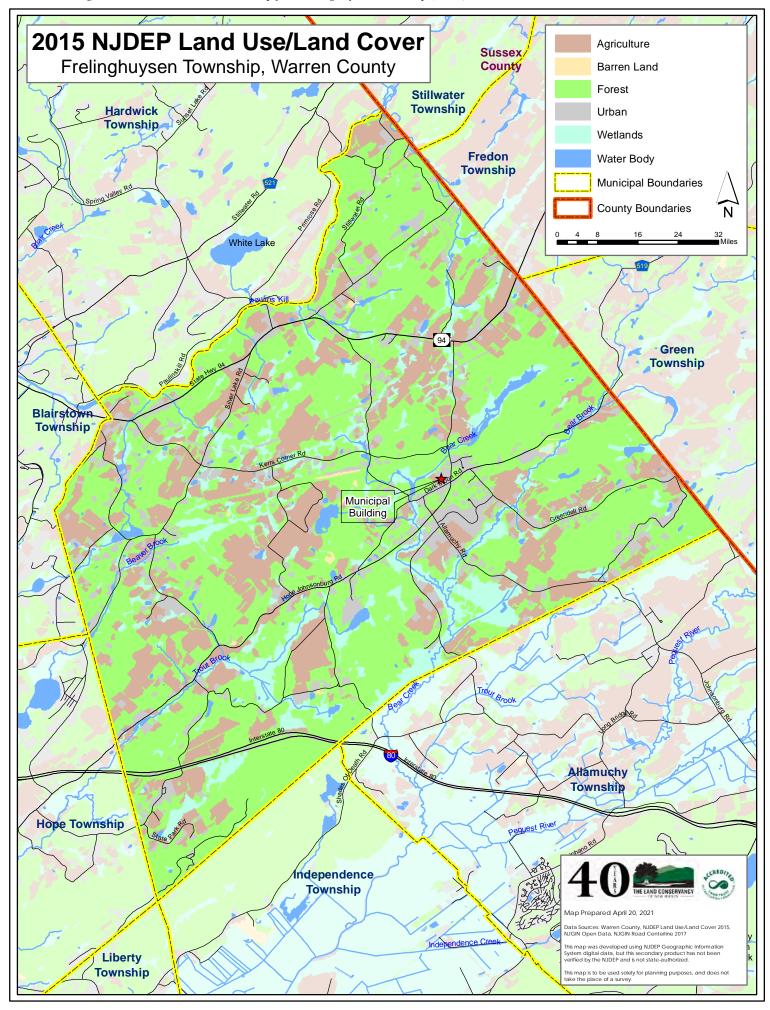


Table 1. 2015 Land Use/Land Cover for Frelinghuysen and Warren County						
	Freling	Frelinghuysen Warren County				
	Acres	Acres Percent		Percent		
Agriculture	3,404.74	22.29%	53,590.13	23.09%		
Barren	30.88	0.20%	1,450.88	0.63%		
Forest	8,426.27	55.16%	108,685.87	46.83%		
Urban	1,563.82	10.24%	41,001.00	17.67%		
Water	250.45	1.64%	5,852.96	2.52%		
Wetland	1,598.66	10.47%	21,480.52	9.26%		
Source: NJDEP 2015 Land Use/Land Cover						

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 themselves grouped into broader categories, called soil associations, which were formed through similar processes. ² 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 1,248 acres of prime farmland soils in Frelinghuysen Township, of which 577 are in active agricultural use. (**Table 2** and **Table 3**) Accounting for 8% of the total soils in the Township, these soils lie generally along the Paulins Kill and have been classified as belonging to the Hazen-Paulins Kill Complex series (Hdpx), which can be used for alfalfa hay, corn, grass (legume), wheat, soybeans, and oats.
- 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 493 acres of soils of statewide importance in Frelinghuysen Township, of which 248 acres are in agricultural use. Accounting for 3% of Frelinghuysen's soils, the soils of statewide importance belong to the Paulins Kill-Hazen Complex series (Pdua) and are generally adjacent to the prime farmland soils but on land with more slope. These soils can support hay, corn, small grains, vegetables, or deciduous fruits.

Unique soils exhibit specific qualities that may be favorable to the production of
specialized crops. There are 431 acres of soils with unique importance in Frelinghuysen
Township, of which less than five acres are in active agricultural use. These soils belong
to the Catden series (Catb) and are generally found in isolated pockets near water bodies
or the headwaters of streams.

The following major soil series are also found in Frelinghuysen Township:

- Nassau-Manlius (Nau) 5,271 acres, or 35%
- Rock outcrop (Chatfield-Hollis, Hollis, Farmington, Farmington-Galway, Farmington-Wassaic, Rockaway-Chatfield) 4,655 acres, or 30%
- Fredon-Halsey (Frd) 875 acres, or 5.7%

Table 2 identifies the major soils in Frelinghuysen Township, grouped by the NRCS classifications for agricultural soils and **Map 3** illustrates their location. Of the total land in Frelinghuysen, 2,172 acres, or 14% of the town is identified as agricultural soil by the NRCS.

	Table 2. Soil Categories – Frelinghuysen Township						
Abbr.	Name	Acres					
HdxpAb	Hazen-Hoosic complex, 0 to 3 percent slopes, very stony	407.91					
HdxpBb	Hazen-Hoosic complex, 3 to 8 percent slopes, very stony	840.26					
	Prime Farmland Total	1,248.17					
NetCb	Netcong loam, 8 to 15 percent slopes, very stony	33.04					
PaoC	Parker gravelly sandy loam, 3 to 15 percent slopes	10.47					
PduaCb	Paulins Kill-Hazen complex, 8 to 15 percent slopes, very stony	449.23					
	Farmland of Statewide Importance Total	493.00					
CatbA	Catden muck, 0 to 2 percent slopes	398.39					
TheaAt	Timakwa muck, 0 to 2 percent slopes, frequently flooded	33.03					
	Farmland of Unique Importance Total	431.42					
AhbBc	Alden silt loam, 0 to 8 percent slopes, extremely stony	359.16					
ChkE	Chatfield-Hollis-Rock outcrop complex, NJ Highlands 35 to 60% slopes	176.40					
ChwBc	Chippewa silt loam, 0 to 8 percent slopes, extremely stony	180.36					
FaxC	Farmington-Rock outcrop complex, 0 to 15 percent slopes	493.08					
FdwB	Farmington-Wassaic-Rock outcrop complex, 0 to 8 percent slopes	427.11					
FrdAb	Fredon-Halsey complex, 0 to 3 percent slopes, very stony	875.15					
GkanCc	Gladstone loam, 8 to 15 percent slopes, extremely stony	23.20					
GkanDc	Gladstone loam, 15 to 25 percent slopes, extremely stony	11.32					
HazAs	Halsey silt loam, 0 to 3 percent slopes, occasionally flooded	268.94					
HncD	Hollis-Rock outcrop-Chatfield complex, NJ Highlands, 15 to 35% slopes	54.40					
NauB	Nassau-Manlius very channery silt loams, 0 to 8 percent slopes, rocky	395.54					
NauC	Nassau-Manlius very channery silt loams, 8 to 15 percent slopes, rocky	2,032.95					
NauD	Nassau-Manlius very channery silt loams, 15 to 35 percent slopes, rocky	2,165.84					

	Table 2. Soil Categories – Frelinghuysen Township	
Abbr.	Name	Acres
NauEg	Nassau-Manlius very channery silt loams, 35 to 60% slopes, very rocky	676.33
PaoD	Parker gravelly sandy loam, 15 to 25 percent slopes	20.09
PduoEb	Paulins Kill-Otisville complex, 25 to 60 percent slopes, very stony	368.20
PHG	Pits, sand, and gravel	16.13
RnfC	Rock outcrop-Farmington-Galway complex, 8 to 15 percent slopes	986.33
RnfD	Rock outcrop-Farmington-Galway complex, 15 to 35 percent slopes	2,274.85
RokB	Rockaway-Chatfield-Rock outcrop complex, 0 to 8 percent slopes	17.39
RokC	Rockaway-Chatfield-Rock outcrop complex, 8 to 15 percent slopes	93.60
RokD	Rockaway-Chatfield-Rock outcrop complex, 15 to 35 percent slopes	131.81
UdaB	Udorthents, 0 to 8 percent slopes, smoothed	48.37
UdauB	Udorthents-Urban land complex, 0 to 8 percent slopes	112.10
VepBc	Venango silt loam, 0 to 8 percent slopes, extremely stony	307.87
VepCc	Venango silt loam, 8 to 15 percent slopes, extremely stony	78.70
WATER	Water	127.96
WusBc	Wurtsboro-Swartswood complex, 0 to 8 percent slopes, extremely stony	178.88
WusCc	Wurtsboro-Swartswood complex, 8 to 15 percent slopes, extremely stony	128.97
WusDc	Wurtsboro-Swartswood complex, 15 to 35 percent slopes, extremely stony	63.08
	Not prime farmland Total	13,094.11
	Grand Total	15,266.44
Source: N	CRS Soil Data Access (2020)	

The total land in active agricultural use (3,530 acres) represents 23% of Frelinghuysen. Notably, most of these active agricultural acres in Frelinghuysen Township are not prime farmland. (**Table 3**) Active agriculture includes the following LU/LC types: agricultural wetlands, cropland and pastureland, former agricultural wetland, orchards/vineyards/nurseries, and other agriculture.

Table 3. Agricultural Soils and Land in Active Agriculture							
Soil Classification Total Acres Ag Acres Ag % of Total							
Prime Farmland Soil	1,248	577	46%				
Soils with Statewide Importance	493	248	50%				
Soils with Unique Importance	431	4.7	1%				
Not Prime Farmland	13,094	2,700	21%				
Total: 15,266 3,530 23%							
Source: NRCS Soil Data Access 2020; 2015 NJDEP Land Use/Land Cover data							

Over one-third of Township land (5,942 acres) is located on slopes steeper than 15%.³ These soils tend to have a high risk of erosion, require management to control runoff and erosion and have some equipment limitations.

C. Irrigated Land & Water Sources

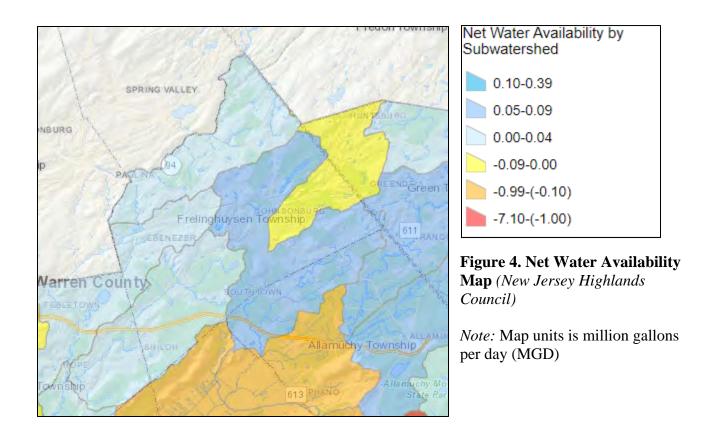
Groundwater provides the supply of water for irrigation in Frelinghuysen Township. Groundwater sources are generally preferred to surface water because they contain less sediment and particulates that may clog irrigation pipes and damage crops. Due to local climate and soils, most of the crops that are grown in the Township, such as hay and corn, do not require irrigation or are not cost effective to irrigate, even during drought periods, due to the large amounts of land they occupy.

The Township had 52 acres of vegetables in 2017, with seven acres in irrigation. One acre of ornamentals was irrigated, for a total of 8 acres of irrigated land. (**Table 4**) This trend is consistent when compared to those reported in Warren County. (**Table 5**)

Table 4. Irrigated Land (acres) in Frelinghuysen					
	1990	2000	2005	2017	
Field Crops	0	0	0	0	
Fruit	2	0	0	0	
Ornamental	0	0	0	1	
Vegetables	3	4	0	7	
Total	5	4	0	8	
Source: Farmland Assessments					

Table 5. Irrigated Land in Frelinghuysen and Warren County (acres)							
	1990	2000	2005	2017			
Frelinghuysen	5	4	0	8			
Warren County	376	335	379	618			
Percent of County 1.3% 1.2% 0% 1.3%							
Source: Farmland Asses	Source: Farmland Assessments						

The *Net Water Availability Map* in Frelinghuysen Township shows an overall abundance of water in the municipality. ⁴(**Figure 4**)



D. Farmland Trends & Statistics

The amount of farm assessed land base in Frelinghuysen Township shrank from 9,337 acres in 2010 to 8,495 acres in 2019, a 9% decrease. (**Figure 5**) Warren County farm assessed land base decreased 1.8% in the same period, from 105,937 to 104,014 acres. The composition of the Township's farm assessed land also changed during this time:

- Harvested cropland dropped 8.1% (3.5% for the County)
- Pastured cropland decreased 20% (18% for the County)
- Permanent pasture declined 7% (18% for the County)
- Woodland dropped by 9.2% (6.2% increase for the County)

Harvested cropland, the largest category of active agricultural land in Frelinghuysen, has declined 8% between 1983 and 2019, from 3,056 to 2,805 acres. Among the dominant crops in this category — hay and corn — the biggest losses occurred in corn, which declined 94% in the period 1983-2017 (the latest year for which data on individual crops is available), from 1,094 to 342 acres. This is most likely be explained by the loss of dairy farms in Frelinghuysen, with

^c General farmland assessment categories use the 2019 tax assessment data, while individual crop statistics are based on the most recent 2017 data.

dairy cattle showing a steady drop in numbers from 900 head in 1983 to 12 head in 2017. Hay production increased in the same period, from 1,463 acres to 2,202. Soybean acres are a new crop, with 126 acres in 2017. Other crops such as barley, rye, and sorghum, have virtually disappeared from production in Frelinghuysen. Fruit, vegetable, and nursery crops, while representing a small portion of Frelinghuysen's cropland, have dropped steadily since 1983, and together represented 95 acres, or 1% of total harvested cropland.

Pastured cropland decreased by 39%, and permanent pasture decreased by 33% in the same period. This loss tracks with the decline in beef cattle operations, as well as dairy, with beef cattle down 64% from 506 head in 1983 to 183 head in 2017. Equine operations surged, with ponies and horses increasing from 103 to 220. Inventory of goats, ducks, and meat chickens are on the rise.

The acreage of farm assessed woodlands in Frelinghuysen has also dropped (4,865 acres in 1983 to 3,947 acres in 2019). Conversely, Warren County has experienced an increase in farm assessed woodland acres. The increasing costs of farming and farmland in the state and the county may compel local farmers to produce less land-intensive products and leave parts of their farms fallow. Cropland left abandoned or fallow for extended periods of time undergoes ecological succession into forested land. Continuously rising property taxes and the USDA forest stewardship incentives have encouraged more landowners of forested properties to obtain farmland tax assessment, increasing the amount of forested farmland in the Township.

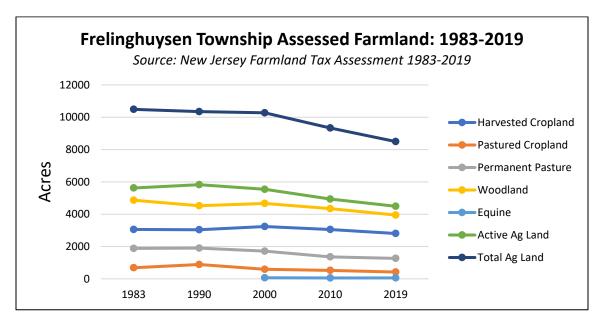


Figure 5. Assessed Farmland in Frelinghuysen Township

Between 1983 and 2019, all farmland assessed categories experienced losses, resulting in an overall loss in the farmland assessed agricultural land base in Frelinghuysen of 19%, from 10,489 acres in 1983 to 8,496 acres in 2019.

Frelinghuysen has lost permanent pasture acreage at a faster rate than the county, whereas cropland harvested, and cropland pastured decreased at roughly the same rate as the county. Between 1983 and 2019, active agricultural land has decreased 20% in Frelinghuysen. (**Table 6**)

	Table 6. Farmle		Table 6. Farmland Assessment in Frelin Cropland Harvested Cropland Pastured		nghuysen and Warren (Permanent Pasture		County Total Active Agriculture	
	Freling. Township	Warren County	Freling. Township	Warren County	Freling. Township	Warren County	Freling. Township	Warren County
1983	3,056	49,033	686	5,865	1,881	13,513	5,623	68,411
1990	3,038	53,057	887	6,588	1,902	15,172	5,827	74,817
2000	3,237	51,147	589	5,240	1,715	12,891	5,541	69,278
2010	3,053	45,056	524	4,244	1,360	11,861	4,937	61,161
2019	2,805	43,487	420	3,493	1,265	9,752	4,490	56,732
% Change	-8%	-11%	-39%	-40%	-33%	-28%	-20%	-17%
Source: T	ax Assessment	Data						

The trend towards smaller average and median farm sizes has been prominent throughout New Jersey and Warren County over the past forty years. In contrast to the county-wide 15% decrease in acreage of farmland since 1982, there has been a 51% increase in the number of farms, up from 608 to 918 in 2017. The average farm size has dropped from 144 to 80 acres. The 2017 *Census of Agriculture* indicates that for ZIP code 07825, which includes Frelinghuysen and Blairstown Townships, 197 of 272 farm operations were under 50 acres and 75 were 50 acres or greater. The ZIP code tabulations also indicated that of these 272 operations, 239 farmers operated only land they owned, 21 farmers worked both land they owned and land they rented from others, and 12 farmers were tenant farmers, operating only land rented from others or worked for shares.

The average size of Warren County farms was 80 acres in 2017, down from 159 acres in 1982. Additionally, the acreage within medium size farms (50 to 499 acres) is decreasing, indicating that many of these farms are breaking up into smaller operations. (**Figure 6**)

Frelinghuysen has the third highest number of farm parcels in farmland assessment in Warren County after Blairstown and Mansfield Townships. Its 211 approved farmland assessment forms represent 8.4% of the County total of 2,516 in 2019. However, average farm size, at 23.5 acres, is smaller than the County average of 80 acres. Median farm parcel size is 10.7 acres, with as many parcels below that number of acres as above. The largest farm parcel in Frelinghuysen is 339 acres. Despite the high number of farm parcels, and because of the comparatively smaller size of these parcels, Frelinghuysen ranks fourth in the County in total acres devoted to agricultural or horticultural use, at 8,495 acres, or 8.2%, versus number one ranked Franklin Township's 10,998 acres, or 10.6%. (**Table 7**)

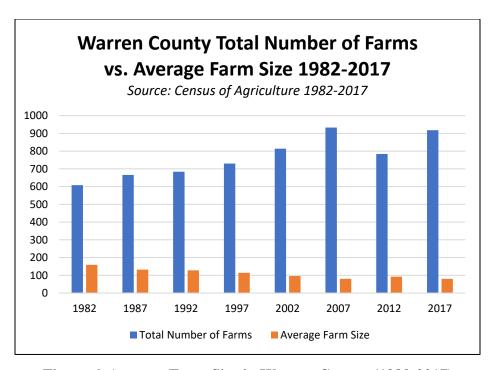
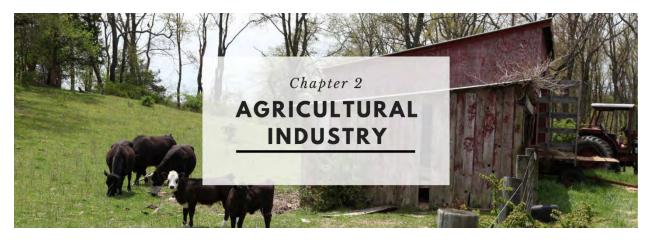


Figure 6. Average Farm Size in Warren County (1982-2017)

Table 7. Size of Individual Farm Parcels in Frelinghuysen						
Size	# of Farms					
Under 1 acre	15					
1-9 acres	183					
10-49 acres	165					
50-179 acres	53					
179+ acres 3						
Source: Frelinghuysen Township Tax Database (2019)						



Chapter 2. Agricultural Industry

A. Trends in Market Value of Agricultural Products Sold

Agriculture in Frelinghuysen Township is comprised of livestock and conventional field crops. Livestock sales in Warren County produced \$26.1 million in sales in 2017, an 18% decrease from \$31.8 million in 2007, but a 22% increase from 2002. Crop sales, including nursery and greenhouse products, rose 54% from \$43.6 million in 2007 to \$67.0 million in 2017. In total, agricultural sales gained 23% from \$75.4 million in 2007 to \$93.2 million in 2017. ⁸ (**Figure 7**)

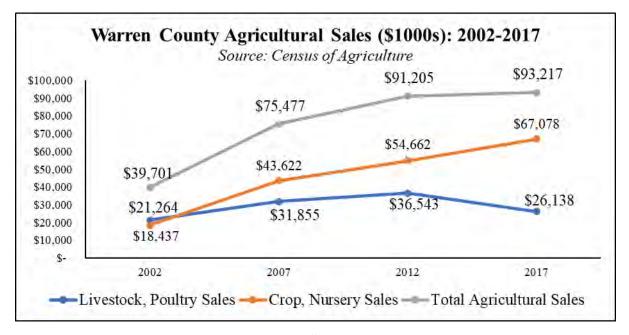


Figure 7. Agricultural Sales in Warren County

As of 2017, Warren County ranked sixth in the state in total agricultural sale revenues. (**Table 8**) At the same time, average sales per farm in Warren County dropped 12.7% from 2012 to 2017, the sixth-fastest rate of decline in New Jersey. (**Table 9**)

County	Sales
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
Sussex	\$ 18,226
Cape May	\$ 9,838
Passaic	\$ 2,863

In 2002, Warren County had the second largest concentration of dairy and livestock operations in New Jersey (236 farms). In 2017, with 182 farms in dairy and livestock, it is now third in the state.

Dairy sales have declined 64% in Warren County from \$9.0 million in 1997 to \$3.2 million in 2017. This is accompanied by a 74% decline of dairy farms, from 63 in 1997 to 16 in 2017.

As of 2017, cattle and calves (2,346) are the most common livestock in Warren County, with beef cows (1,450 head) more prominent than dairy cows (896 head). Sheep (1,691 head) represent the second highest livestock animal, with meat chickens as third highest (842 count).

Crops in Warren County sold for a total of 66.3 million in 2017, a 22% increase from 2012. (**Figure 8** and **Table 10**) One crop subsector, nursery and greenhouse operations, continues to exceed other crop types in Warren County. In 2017, Warren County had 26,364 acres of nursery stock crops, under glass or other protection. Annual sales comprised for about 41% of total agricultural revenue in 2007 (\$22.0 million) and increased to 61% of total revenue by 2017 (\$40.7 million).

Table 9. 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		
14	Sussex	\$ 21,078	-14.22%	\$ 18,081		
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: U.S. Census of Agriculture 2012, 2017						

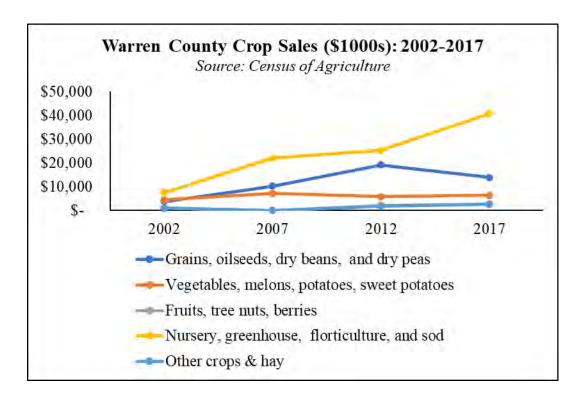


Figure 8. Crop Sales in Warren County (2002-2017)

Table 10. Warren County Crop Sales (\$1000s)						
	2002	2007	2012	2017		
Grains, oilseeds, dry beans, and dry peas	\$3,802	\$10,205	\$19,209	\$13,922		
Vegetables, melons, potatoes, sweet potatoes	\$4,406	\$7,114	\$5,769	\$6,388		
Fruits, tree nuts, berries	\$918	N/A	\$2,198	\$2,601		
Nursery, greenhouse, floriculture, and sod	\$7,601	\$22,053	\$25,248	\$40,793		
Other crops & hay	\$1,114	N/A	\$1,808	\$2,656		
Total	\$17,841	\$39,372	\$54,232	\$66,360		
Source: U.S. Census of Agriculture (2002-2017)						

Vegetables were the third highest-grossing crop in 2017, generating more than \$6.3 millionin sales. Since 2002, vegetables sales have risen by 44%.

Grains, which include corn and soybeans, ranked second to vegetable sales in 2017 and will most likely remain one of the top-grossing field crops.

A small but significant portion of Warren County's agricultural sales come from other crops, including hay. Sales revenues for this category increased by 138% between 2002 to 2017.

Warren County is home to many fruit farms. Farm sales began growing rapidly during the mid-2000s, going from \$0.91 million in 2002 to \$2.6 million in 2017. Much of this revenue derives from peach and grape sales. Peach farms increased by over 29% in this period, despite acreage falling 49%.

B. Agricultural Production Trends

From 2005 to 2017, agricultural production in Frelinghuysen declined for beef cattle (44%), and mature dairy (80%). 10 The number of beef cattle has trended downward with a high of 329 head in 2005 and a low of 161 head in 2015. Meat chickens have increased 15% from 2005-2017. (Figure 9) Corn for grain increased 19 acres from 2005 to 2017, and acreage in hay also increased 10% at the same time. Soybeans have seen the largest rate of growth in the Township, increasing from 26 to 126 acres. 11 (Table 11, Figure 10, Figure 11, and Figure 12)

The variation in milk sales has contributed to a reduction in dairy output. From 2002 to 2017, mature dairy decreased by 71%, with an average five year-loss of 33%. The biggest drop occurred between 2007 and 2012, when dairy production fell by 45%.

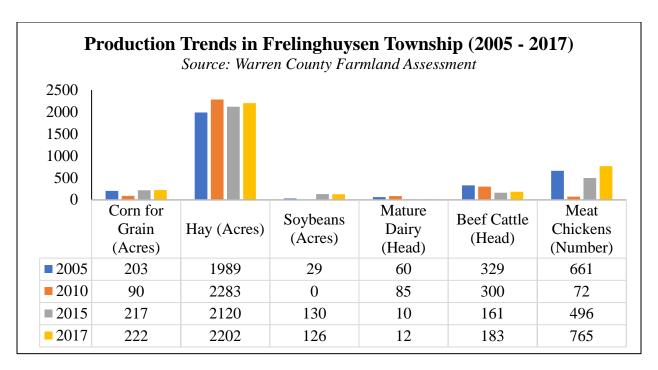


Figure 9. Production Trends in Frelinghuysen Township

Table 11. Dominant Crops in Frelinghuysen Township					
Top 10 Dominant Crops	2017	% Change			
Other Hay	1849	-			
Alfalfa Hay	353	-80.91%			
Corn for Grain	222	-37.11%			
Soybeans	126	-43.24%			
Corn for Silage	120	-4.76%			
Christmas Trees	21	-82.50%			
Pumpkins	19	-9.52%			
Oats for Grain	16	-15.79%			
Other Mixed Vegetables	11	-31.25%			
Other Field Crops	10	-9.09%			
Total	2747	-			
		% of Total			
Field Crops	2696	98.14%			
Nursery Crops	21	0.76%			
Fruits & Berries	0	0.00%			
Vegetables	30	1.09%			
Source: Farmland Assessment Data					

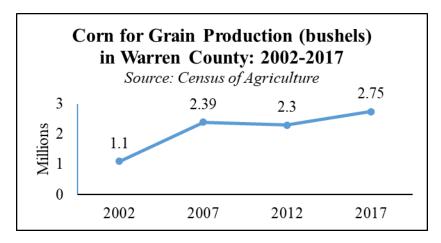


Figure 10. Corn Production in Warren County

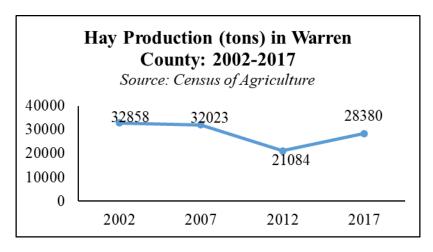


Figure 11. Hay Production in Warren County

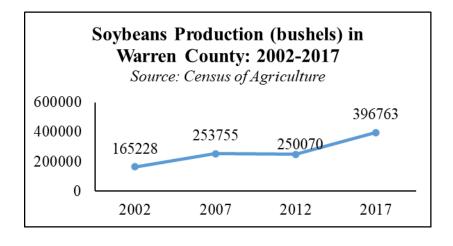


Figure 12. Soybean Production in Warren County

Livestock production, including beef cattle and meat chickens, have either had slight growth or remained stable since 2002. Chicken production grew by 2% from 2002 to 2007 but dipped 9% by 2017. Beef cattle fell by 8% in 2007, then rose by 20% by 2017, netting a 12% growth rate through the 2000s. (**Figure 13**)

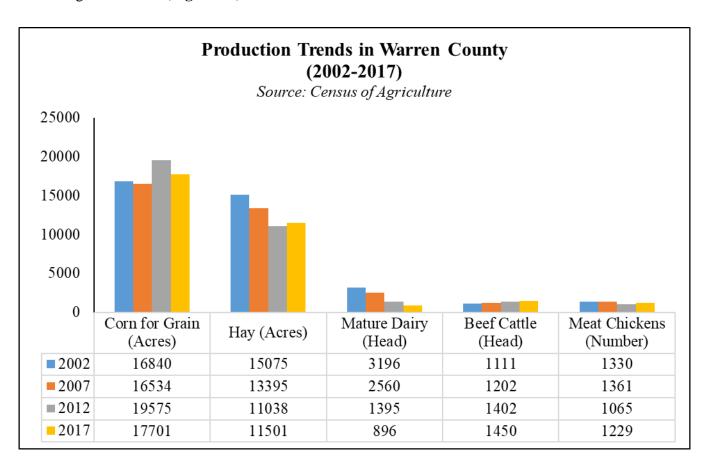


Figure 13. Production Trends in Warren County

C. Agricultural Support Services and Related Industries

Agricultural support services in Warren County and Frelinghuysen Township include tractor sales and supply stores, feed vendors, and hardware/equipment retailers. Retailers include Frank Rymon and Sons, Tractor Supply Co, and Growmark in Bloomsbury. Major feed vendors in and around Frelinghuysen include Blairstown Ace Hardware/Agway. In Hackettstown, the Livestock Auction operates as an independently funded co-operative. As the last remaining auction in New Jersey, the Livestock Auction gives county farmers and farm suppliers a unique marketplace in which to trade and sell products.

Local support businesses are often insufficient to meet all the needs of the agricultural community. Consequently, local farmers minimize repair services by fixing a variety of mechanical problems themselves. The Township's farmers also rely heavily upon mail order and out-of-state retailers for their agricultural supplies. Processing facilities such as creameries

and lumber mills are now absent in the area, which forces farmers to ship their products out-of-town to be processed. In May 2021, Ruth Perretti won approval from the Frelinghuysen Land Use Board to start a grain mill for local farmers. ¹³ 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.

Despite the loss of support businesses from the region, local farms 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. ¹⁴ (**Appendix B**)



Chapter 3: Land Use Planning

A. State Development and Redevelopment Plan

The *State Development and Redevelopment Plan* (SDRP) outlines general policy objectives concerning land use and future development in the State.¹⁵ The combination of Planning Areas and Designated Centers establishes a comprehensive framework for pursuing land use and development regulation throughout New Jersey. Land in Frelinghuysen Township is included within the Rural Planning Area (PA4), the Rural Environmentally Sensitive Planning Area (PA4B), and the Environmentally Sensitive Planning Area (PA5): (**Figure 14**)

- Rural Planning Areas (PA4): 1,748 acres (~11% of the municipality), located south and west of Johnsonburg section of the Township.
- Rural-Environmentally Sensitive Planning Area (PA4B): 5,964 acres (~37%) spread throughout the Township.
- Environmentally Sensitive Planning Areas (PA5): There are pockets of environmentally sensitive land surrounding local bodies of water. This Planning Area occupies approximately 6,806 acres (~42%) of the Township.
- Parks and Natural Areas: 770 acres (~3%) located mostly within the Jenny Jump State Forest.

Centers are defined by the New Jersey State Planning Commission as "compact forms of development that, compared to sprawl development, consume less land, deplete fewer natural resources, and are more efficient in the delivery of public services." Frelinghuysen does not contain any existing centers.

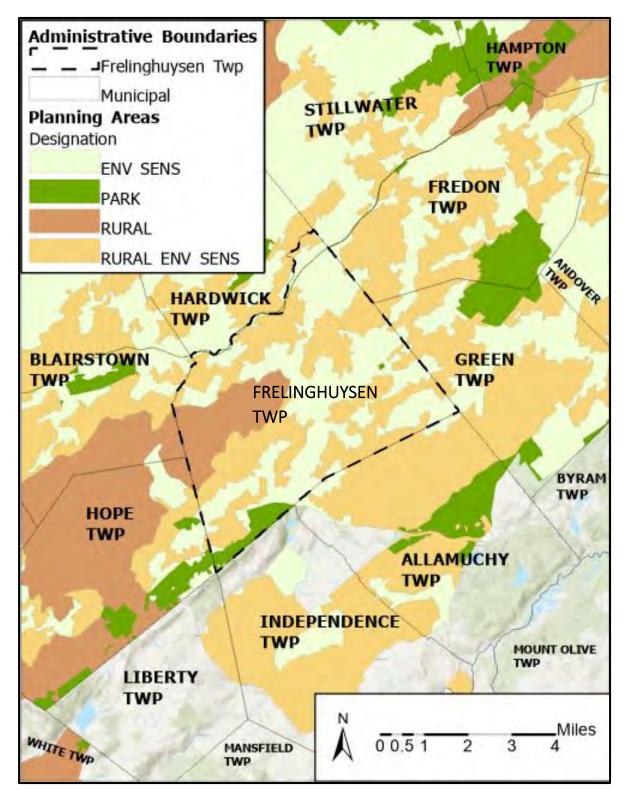


Figure 14. State Development and Redevelopment Plan: Frelinghuysen Township

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. Frelinghuysen Township is included within the Highlands Region, as mapped within the *Highlands Regional Master Plan* (RMP). The western boundary of the Highlands Region ends at Frelinghuysen's border with neighboring Hope and Blairstown Townships. The Highlands Act expands mandatory buffers around the region's streams and water bodies, sets limits on impervious coverage for individual properties and requires conformance with the RMP from towns designated within the "Preservation Area" of the Highlands Region. Frelinghuysen Township is not subject to these requirements because it falls within the Planning Area of the Highlands Region. (**Figure 15**).

The Highlands Council – the regional planning body charged with implementing the Highlands Act – established the preservation of farmland and the industry of farming as one of its principal objectives. To this end, the RMP identifies an Agricultural Resource Area that contain contiguous farmbelts and quality agricultural soils. Almost all of Frelinghuysen Township falls within the Agricultural Resource Area. (**Figure 16**)¹⁶ The Highlands Council also identifies Agricultural Priority Areas – subsets of the larger Agricultural Resource Area that are particularly well-suited to agricultural production. Criteria include soil quality, tillable acreage, buffers, development potential, local commitment, contiguity with other farm parcels, and size.¹⁷ High, medium, and low priority areas cover most of Frelinghuysen Township's land area outside Johnsonburg and Marksboro. (**Figure 17**)

C. Municipal Master Plan

The introduction to the September 2007 *Reexamination Report and Land Use Plan Amendment* states "Frelinghuysen is a relatively low-density municipality with the vast majority of its land area in vacant land and farmland." The Township's Master Plan (2005, 2007¹⁸, 2016¹⁹) include the following statements:

- "To provide for the growth of the Township in such a way that its open rural character and natural beauty is preserved."
- "Ensure that protection of natural resources is an integral part of the planning process."

2005 Land Use Plan Element²⁰ (amended in 2007 and 2016) recommended "implement[ing] a reduced residential density more consistent with the policy objectives of farmland preservation." This was addressed in the 2007 Land Use Plan Element with the elimination of the AR-4 zone, to create the AR-6 zone. In 2013, the Township passed Ordinance No. 2013-09, which revised the design standard of the Neighborhood Commercial (NC) Zone to be more aligned with Frelinghuysen's character. In 2020, the Township passed Ordinance No. 2020-07, which added an additional NC zone along Route 94.

There have been no additional changes to the land use zoning since 2020.

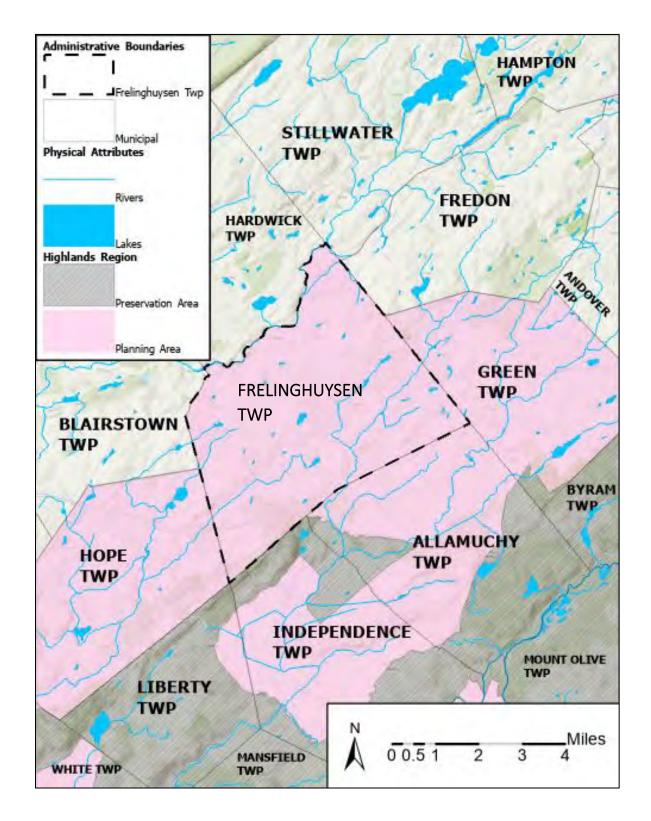


Figure 15. Highlands Region in Frelinghuysen Township

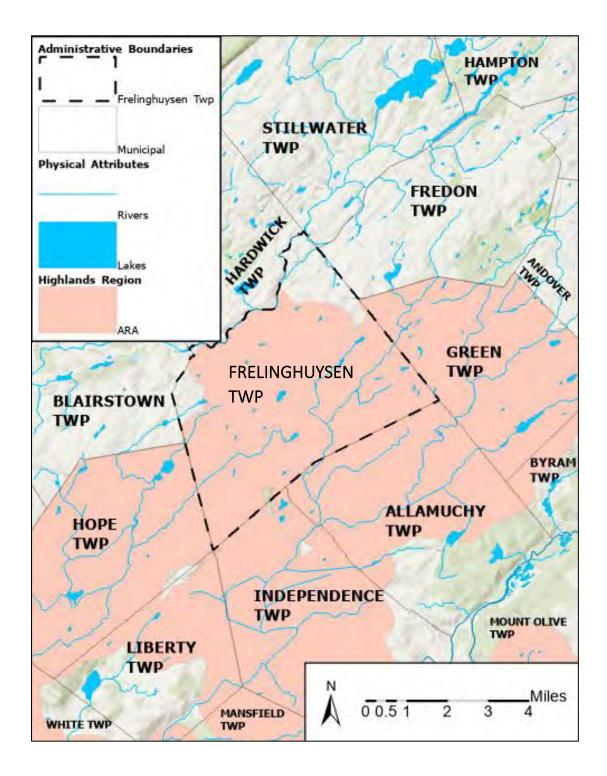


Figure 16. Agricultural Resource Areas Identified by the Highlands Regional Master Plan

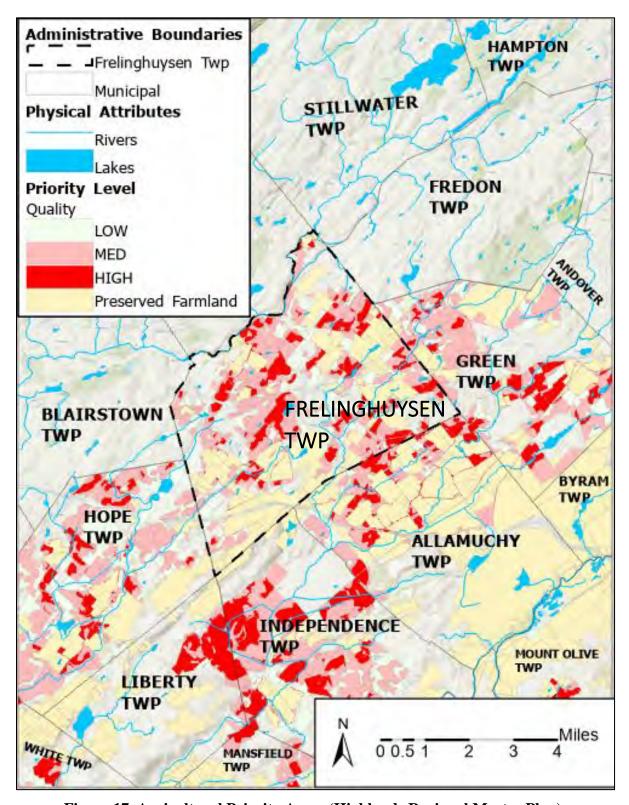


Figure 17. Agricultural Priority Areas (Highlands Regional Master Plan)

D. Land Use Trends

The land use patterns of Frelinghuysen Township have historically been determined by the regional transportation routes that cross it. Stagecoach lines and, later, the Lackawanna Rail line intersected at Johnsonburg, making it the Township's traditional center of commercial and social life. According to the 2015 NJDEP LU/LC data, forested areas make up the largest percent of Frelinghuysen's lands (55%), with agricultural and urban uses, second and third at 22% and 10% respectively. (**Figure 18** and **Figure 3**)

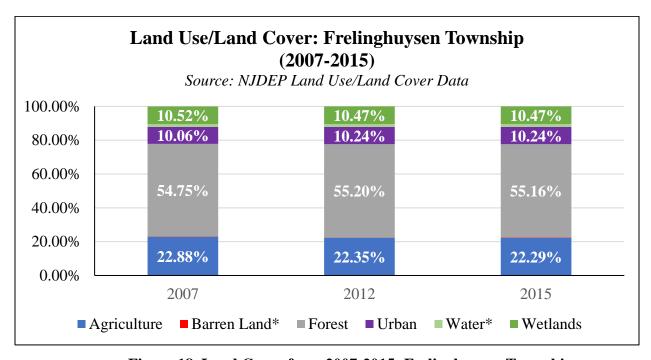


Figure 18. Land Cover from 2007-2015: Frelinghuysen Township

Note: *Barren land represents less than 2% of the total land coverage in Frelinghuysen

E. Public Infrastructure – Sewer and Water

Frelinghuysen contains two private wells at the Forest Manor Retirement Home. There are currently no public water or sewer services. ²¹ These wells are part of a community water system, in which the NJDEP classifies as having at least 15 service connections. The main source of drinking water in Frelinghuysen is groundwater stored in aquifers.

F. Municipal Zoning

1. Types, Lot Size and Distribution in the Municipality

The AR-6 (Agricultural Residential) and NC (Neighborhood Commercial) Zones comprise the two largest land percentages of all zones, reflecting the agricultural priorities of the Township. As of 2020, the Township has no zone with a minimum lot size of <1 acre/unit, 2.95% as

medium lots (1-5 acres/unit), and 97.05% as large lots (>5 acres/unit). (**Table 12** and **Figure 19**) All zones allow farms as principal permitted uses. Per the adoption of Ordinance No. 2013-09 and Resolution No. 2016-135, the "PO" Professional Office Zone was removed. Ordinance 2020-07 expanded the NC Zone along Route 94 near Blairstown. As commercial and residential uses grow, the Township will monitor its proximity to, and potential disturbance of, farmlands.

Table 12. Frelinghuysen Township Zoning Districts by Lot Size, Acres, and Share of Land					
Zone	Acres	% of Land	Min. Lot Size		
AR-6: Agricultural Residential	14,826	97.05%	6 acres		
NC: Neighborhood Commercial	167	1.09%	2 acres		
ROM: Research-Office-Manufacturing	148	0.97%	3 acres		
VN-1: Village Neighborhood	74	0.48%	2 acres		
VN-2: Village Neighborhood	62	0.41%	2 acres		
Total:	15,277	100.00%			
Source: Warren County Department of Planning, Frelinghuysen Township Code					

2. Adopted Redevelopment Areas

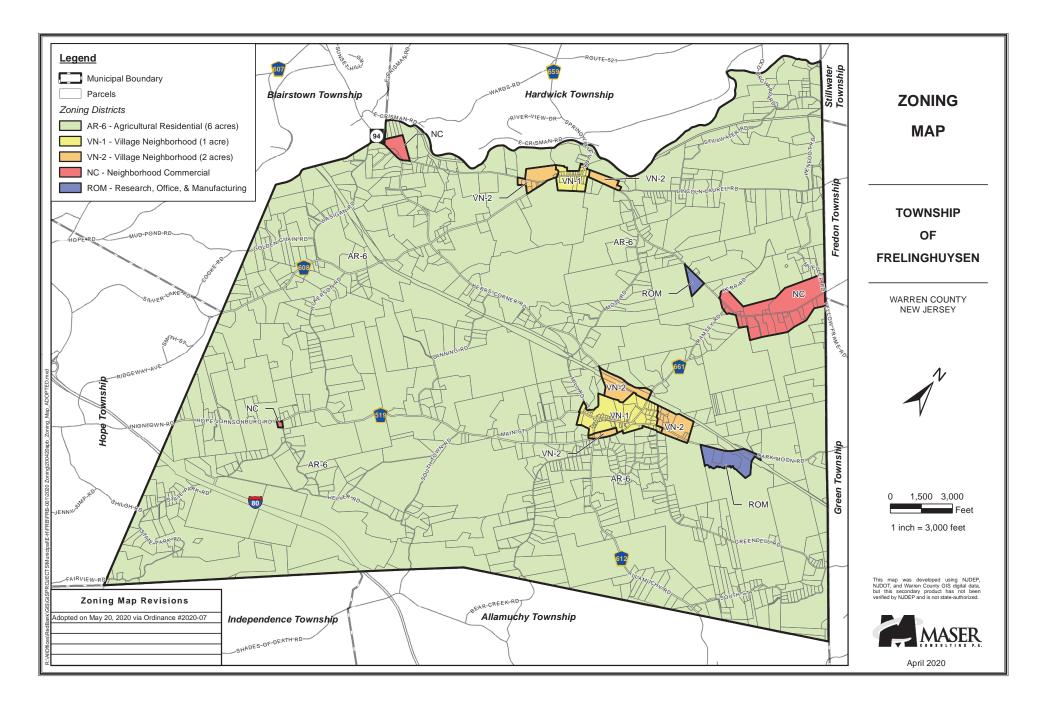
There are no adopted redevelopment areas in Frelinghuysen Township.

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 Farmland Preservation Committee (FPC) 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.

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.²³

Figure 20. Zoning Map



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. The undeveloped portions are permanently deed restricted, which helps to ensure the permanence of local farming. Cluster zoning is not currently used in Frelinghuysen Township, where there is minimal opportunity for new development in the higher density zones that accommodate residential development.

Lot size averaging is another planning tool that 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 to accommodate affordable housing units, neighborhood commercial stores, or "village" development densities, while other lots can be very large to encompass active farms or natural areas.

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 Frelinghuysen Township to preserve farmland.

The New Jersey State Transfer of Development Rights Act (N.J.S.A. 40:55D-140) authorizes the transfer of development rights by municipalities and outlines what a town must do to adopt or amend a TDR ordinance. First, the municipality must amend its master plan to include a Development Transfer Plan Element that outlines a mechanism for assigning development credits to areas in the sending zone and reapplying them to areas in the receiving zone. An updated Utility Service Plan and Capital Improvement Program for the receiving zone should be adopted as well. The municipality must also prepare a Real Estate Market Analysis (REMA) that quantifies the development potential of the sending zone(s) and the capacity of the receiving zone(s) to accommodate additional development. Finally, a town must receive approval from the State Planning Commission to adopt the TDR ordinance. (N.J.S.A. 40:55D-140)

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.

5. Development Pressures and Land Value

Frelinghuysen's current population, based on New Jersey Department of Labor figures, was 2,173 individuals in 2019. ²⁴ This is a 3% decrease from 2010, consistent with what has been occurring county-wide with individuals leaving or not resettling back into the rural sections of northwestern New Jersey (both Sussex and Warren Counties). (**Figure 20** and **Table 13**)

In the period between 2009 and 2019, growth slowed, due to the 2008 economic recession. Both historically and up to 2019, building permits in Frelinghuysen were exclusively for single family homes.²⁵ (**Figure 21**)

Four residential permits were approved in 2018 compared to 14 in 2005, when permit numbers peaked. Warren County has experienced a similar trend, only issuing 12% of permits in 2018 compared to its numbers in 2000.

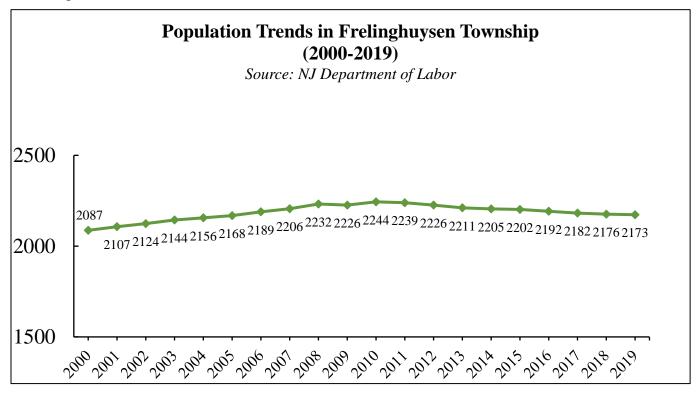


Figure 20. Population Trends in Frelinghuysen Township

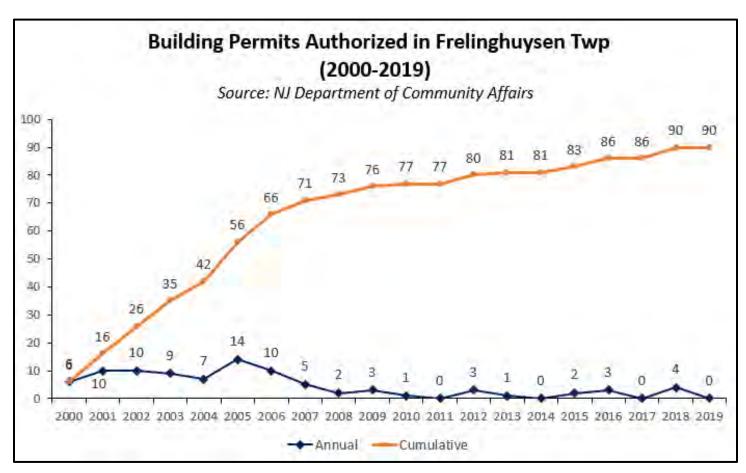


Figure 21. Building Permits Authorized in Frelinghuysen Township

Table 13. Population of Warren County (2000-2019)				
Year	% Change	Population		
2000	-	102,902		
2001	2.23%	105,201		
2002	1.50%	106,774		
2003	1.30%	108,163		
2004	0.30%	108,491		
2005	0.34%	108,855		
2006	0.19%	109,059		
2007	0.11%	109,179		
2008	0.66%	109,897		
2009	-0.24%	109,638		
2010	-0.94%	108,605		
2011	-0.36%	108,218		

Table 13. Population of Warren County (2000-2019)					
2012	-0.45%	107,733			
2013	-0.53%	107,157			
2014	0.19%	107,358			
2015	-0.07%	107,282			
2016	-0.41%	106,845			
2017	-0.04%	106,798			
2018	-0.47%	106,293			
2019	-0.97%	105,267			
Source: U.S. Bureau of C	ensus				

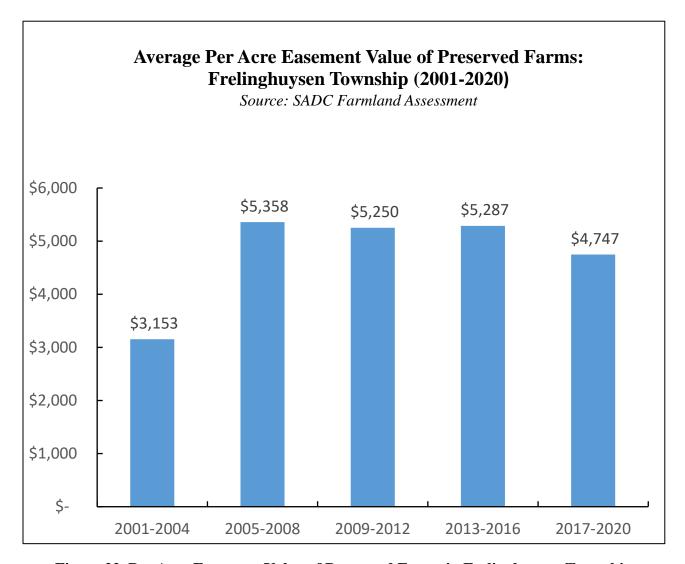


Figure 22. Per Acre Easement Value of Preserved Farms in Frelinghuysen Township

As the Township transitions into a post-recession world, development pressure may intensify in Frelinghuysen, due to the relative scarcity of land for new residential development in the northwestern part of the state.

From the perspective of land values, there has been a general trend upward in the per-acre easement values paid to preserved farms. From the 2001 to 2004, the average value paid per acre was \$3,153, which rose to \$5,250 from 2009 to 2012. It has since fell to \$4,747 from 2017-2020. Between 2001 and 2020, the average easement values have fluctuated, primarily due to the drop in land value from the 2008 recession. (**Figure 22**)

G. Density Transfer Opportunities

One program Frelinghuysen 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 RMP. The New Jersey TDR Bank and the Office of Planning Advocacy 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 backing on loans secured using development credits as collateral and keep records of all development credit transfers within the State. Frelinghuysen Township may benefit from participating in a TDR program, primarily as a municipality with sending areas.

Non-contiguous cluster zoning is a planning technique that allows one parcel to be preserved while its density is transferred and developed instead on a different, noncontiguous parcel. This technique, first authorized in 1996, allows a municipality to approve "planned developments" consisting of two different parcels, where the "sending area" parcel is preserved, for example, as farmland or open space, and the "receiving area" parcel is developed at a higher than otherwise normally permitted density. Non-contiguous cluster zoning is not currently used in Frelinghuysen Township, where there is minimal opportunity for new development in the higher density zones that accommodate residential development. The general sentiment in Frelinghuysen regarding density transfer programs is that management of such a program on the local level is beyond the capacity of the municipal government.



Chapter 4. Farmland Preservation Program

There are **9,522 acres** of farm-assessed land in Frelinghuysen Township.^d (**Inventory Table 1** and **Map 1**) Farms in the Township have been preserved using a variety of programs, and the town remains firmly committed to farmland protection.

A. Warren County Agricultural Development Area (ADAs)

1. Statutory and County Criteria

The Warren County Agriculture Development Board (CADB) developed the Warren 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 2008, the entire County had been designated as the Agricultural Development Area (ADA) with the exceptions of Hackettstown, Belvidere, Philipsburg, and Washington Borough. As part of the 2008 *Warren County Comprehensive Farmland Preservation Plan*²⁶, the CADB updated their ADA using the following criteria:

• Land is currently in agricultural production or has strong potential for agricultural production or is farm assessed through a woodland management plan.

^d *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.

- Agriculture is the preferred, but not necessarily the exclusive use.
- Agriculture is a use permitted by current municipal zoning ordinance or is allowed as a non-conforming use.

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. Beginning in 2011, the Warren County Department of Land Preservation and the CADB amended the ADA to include farmland whose owners had expressed interest in preserving their property, but the land had not been included in the 2008 ADA. This was summarized in the 2017 Farmland Plan Update, and with the following changes to the County ADA in Frelinghuysen Township: ²⁷

 Addition of 65.6 acres of farmland for the Heather Hills Farm (Block 201, Lot 17), Sue DeCamp Farm (Block 201 Lot 17.02), Robert Canace Farm (Block 201, Lot 21), IHM Realty (Block 201, Lots 22 and 23), Frelinghuysen Township (Block 201, Lot 31), and Charles Muller Farm (Block 201, Lot 32). The CADB and Township passed resolutions supporting this amendment in 2014 and 2016.

2. Agricultural Development Area – Frelinghuysen Township

Overall, there are **9,522 acres** of farm assessed parcels in Frelinghuysen Township. Of this, **9,057 acres** (95%) of farm assessed land in Frelinghuysen is included within the Warren County ADA. All lands in Frelinghuysen Township are included in the Warren County ADA except for lands south of Stillwater Road and north of NJ-94. Lands within the Johnsonburg Swamp Preserve and Jenny Jump State Forest are excluded from the ADA.

Map 1 and **Map 2** show the farm assessed lands in the Township, including all preserved farms. A map of the location of the ADA in Frelinghuysen is included within **Map 4**. The Northeast Project Area, in which Frelinghuysen Township is located is shown on **Map 5**.

B. Farmland Preserved to Date by Program

As of April 2021, there are **33 farms** totaling **2,864 acres** preserved in Frelinghuysen Township, at an average cost of \$3,882 per acre. (**Table 14**)

- The State of New Jersey, through the SADC, has provided \$6,936,403, or approximately 62% of the total cost share.
- The County has spent a total of \$3,484,459, or approximately 31% of the total cost share.
- Frelinghuysen Township has spent a total of \$700,483, or approximately 6% of the total cost share.

As of June 2021, there are three farms pending preservation through the Non-profit Easement program in Frelinghuysen.

Table 14. Preserved Farms in Frelinghuysen Township								
Farm	Program	Year	Acres	Total Cost	State Cost	County Cost	Municipal Cost	Cost per Acre
Genesis	County EP	1998	139	\$318,916	\$237,107	\$81,809	•	\$2,300
Moore, Chan	County EP	1998	72	\$186,009	\$137,361	\$48,649		\$2,600
Bennett, Thomas	County EP	2000	90	\$269,292	\$197,481	\$71,811		\$3,000
Young, Joseph	County EP	2000	65	\$225,852	\$161,323	\$64,529		\$3,500
Parrott / Simonetti	County EP	2001	117	\$203,465	\$153,729	\$49,736		\$1,739
Smolha / Jean	County EP	2001	79	\$236,145	\$172,906	\$63,238		\$3,000
Smolha / Feldman	County EP	2001	103	\$289,069	\$212,672	\$76,397		\$2,800
Smolha / Lolas	County EP	2001	51	\$162,963	\$118,148	\$44,815		\$3,200
Nature Conservancy	NP Fee	2002	203	\$913,000	\$444,496	\$0	\$228,332	\$4,502
Silverside	SADC Direct	2003	49	\$161,799	\$161,799	\$0		\$3,300
Staufenberger	County EP	2003	140	\$463,233	\$328,019	\$135,214		\$3,700
Gurba, Stephen #1	County EP	2003	179	\$679,790	\$479,430	\$679,790		\$3,800
Westbrook, Jacob*	County EP	2004	8*	\$20,817	\$15,414	\$5,402		\$2,470
Gurba, Stephen #2	County EP	2004	88	\$299,115	\$0	\$299,115		\$3,400
Gurba, Stephen #3	County EP	2005	123	\$345,794	\$254,400	\$91,394		\$2,800
Van Grouw, William	SADC Direct	2005	102	\$356,318	\$356,318	\$0		\$3,500
Peck	County EP	2006	44	\$228,386	\$153,726	\$74,659		\$5,200
Smith	County PIG	2008	22	\$163,387	\$101,300	\$31,043	\$31,043	\$7,500
Polowy	NP EP	2009	140	\$853,200	\$426,600	\$426,600		\$6,100
Woodcock	NP EP	2010	29	\$219,532	\$109,766	\$109,766		\$7,471
Greene	Muni PIG	2010	32	\$157,084	\$98,812	\$29,136	\$20,136	\$4,832
Linz	Muni PIG	2012	123	\$429,828	\$307,020	\$61,404	\$61,404	\$3,498
Windkissed	NP EP	2013	17	\$130,642	\$63,288	\$0		\$7,740
Stonebridge	SADC Direct	2014	45*	\$178,828	\$114,002	\$0		\$3,956
Cooke	County EP	2015	1*	\$179,028	\$84,931	\$0		\$3,700
Municipal Farm	County EP	2015	28*	\$100,000	\$0	\$50,000		\$3,596
Shiloh	Muni PIG	2016	96	\$550,620	\$361,494	\$94,563	\$94,563	\$5,750
Post	Muni PIG	2017	40	\$177,108	\$122,366	\$27,230	\$37,434	\$4,393
Murphy	Muni PIG	2018	204	\$978,124	\$668,385	\$154,869	\$154,869	\$4,800

Table 14. Preserved Farms in Frelinghuysen Township								
Farm	Program	Year	Acres	Total Cost	State Cost	County Cost	Municipal Cost	Cost per Acre
Pittenger	NP EP	2019	94	\$345,765	\$181,137	\$0	\$63,702	\$3,696
Gang	NP EP	2019	14	\$80,007	\$40,003	\$40,003		\$5,600
Murlan	NP EP	2021	224	\$897,716	\$448,858	\$448,858		\$4,000
Hidden Woods	NP EP	2021	103	\$425,748	\$224,429	\$224,429		\$4,150
Total (33):			2,864	\$11,226,580	\$6,936,403	\$3,484,459	\$700,483	\$3,882

^{*} The Westbrook Farm was preserved by Sussex County in 2004. The farm overlapped the border between Sussex and Warren County. Warren County paid Sussex County for the 8 acres located in Frelinghuysen Township.

Sources: SADC and Warren County Department of Land Preservation

Muni PIG: Municipal Planning Incentive Grant program County PIG: County Planning Incentive Grant program

County EP: County Easement Purchase program

SADC Direct: State Direct program

Since the completion of the 2008 Farmland Plan, **16 farms** have been preserved, protecting **1,212 acres** of agricultural land. The largest of these was the Murlan Farm (224 acres) in 2021 through the non-profit program with The Land Conservancy of New Jersey. The Township Committee remains committed to protecting the agricultural legacy and rural character of the municipality.

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

- Almost half of the acres (1,312 acres or 46% of the total preserved farmland) are protected through the County EP Program.
- The SADC Non-profit program and farms owned by non-profit organizations protected nearly 29% (824 acres).
- The County and Municipal PIG programs covered 18% (517 acres).
- The SADC Direct Easement Purchase program supported the remaining 6% (196 acres) in Frelinghuysen.

^{*} The Stonebridge (Kleindienst) Farm is partially located in Sussex County with 45 acres located in Frelinghuysen Township.

^{*}The main portion of Cooke Farm is in Hope Township with approximately 1 acre located in Frelinghuysen Township.

^{*}The Frelinghuysen Township farm refers to the southern portion of Block 201, Lot 31.01.

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 Frelinghuysen, 17 farms have been preserved through the County Easement purchase program, protecting 1,312 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. Warren County completed their 2008 Comprehensive Farmland Preservation Plan to bring it into compliance for the County Planning Incentive Grant program. In Frelinghuysen Township, one farm has been preserved through the County PIG program, protecting 22 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. 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.

Frelinghuysen Township is currently enrolled in the Municipal Planning Incentive Grant program. As of May 2021, five farms in Frelinghuysen, totaling 495 acres, have been preserved through this 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 Frelinghuysen, the state has preserved 3 farms on 196 acres at a cost of \$696,945 in state funds. (**Table 15**)

Table 15. SADC Direct Easement Farms in Frelinghuysen					
Farm	Acres	Total Cost	Year		
Silverside	49	\$161,799	2003		
Van Grouw, William	102	\$356,318	2005		
Stonebridge	45	\$178,828	2014		
Total SADC Direct	196	\$696,945			

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. No farms in Frelinghuysen have been preserved through a SADC fee simple acquisition.

6. Non-profit Grant Program

Grants from the SADC to non-profit organization fund up to 50% of the fee simple or development easement values on farms. Several non-profits used this program to preserve eight farms, listed below, for a total of 824 acres in Frelinghuysen. (**Table 16**)

Table 16. Non-profit Farms in Frelinghuysen Township					
Farm	Acres	Total Cost	Year		
Nature Conservancy	203	\$913,000	2002		
Polowy	140	\$853,200	2009		
Woodcock	29	\$219,532	2010		
Windkissed	17	\$130,642	2013		
Pittenger	94	\$345,765	2019		
Gang	14	\$80,007	2019		
Murlan	224	\$897,716	2021		
Hidden Woods	103	\$425,748	2021		
Total Non-profit	824	\$3,865,610			

7. 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 Frelinghuysen Township to preserve farmland.

8. Other Programs and Partnerships

Municipal Farmland Preservation Program. Through the Municipal Farmland Preservation Program, farms can be preserved directly by a municipality either using SADC grant funding or with the intention of later receiving cost share participation from the SADC. To date, no farms in Frelinghuysen 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 Frelinghuysen 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. Frelinghuysen has a Municipal Open Space and Farmland Preservation Trust Fund, which is used to preserve farmland and open space. The Township updated its *Open Space and Recreation Plan* in 2012.

E. Farmland Preservation Program Funding Expended to Date by Source

The Frelinghuysen Farmland Preservation Trust Fund was approved in 1999 by voter referendum. The fund created a tax that collected two cents (\$.02) per one hundred dollars (\$100) of assessed property value. In 2005, voters approved a referendum to amend the Farmland Trust Fund to create a combined Open Space and Farmland Preservation Trust Fund. The Open Space and Farmland Preservation Trust Fund is used exclusively for the acquisition of farmland or development rights on farms for farmland preservation purposes and for maintenance of lands acquired for recreation and conservation purposes. The Fund currently generates approximately \$58,000 per year and has a balance of approximately \$52,492 as of June 2020. ** Table 17* details the amount generated per year for the past seven years

Table	Table 17. Frelinghuysen Open Space Trust Fund					
Year	Tax Rate	Amount Generated				
2015	0.02	\$58,378				
2016	0.02	\$58,322				
2017	0.02	\$58,298				
2018	0.02	\$58,186				
2019	0.02	\$58,038				
2020	0.02	\$57,907				
2021	0.02	\$57,960				

To date, the Township has expended \$807,508 funds from their Open Space and Farmland Preservation Trust Fund to cover the costs of appraisals, survey, and title work on pending farmland preservation projects.

F. Monitoring the Easements

Warren County monitors the property to verify that compliance with the deed restrictions on the preserved property is taking place. The Township's FPC will notify the Warren CADB if violations are suspected. The Upper Delaware Soil Conservation District performs annual inspections of the preserved farmland property for the Warren CADB. 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
- Presence of expansion of non-agricultural activity since the previous inspection
- If the non-agricultural practice has been abandoned
- Evidence of 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, Frelinghuysen Township is not currently enrolled in or developing a TDR program.



Chapter 5. Future Farmland Preservation

A. Preservation Goals

Frelinghuysen Township is 23.87 square miles (15276.8 acres) in size. Of this, **9,522 acres** (**63%**) are under farmland assessment, which includes croplands, woodlands, farm structures and wetlands/waterways that occur on an agricultural property. Since 1993, Frelinghuysen Township has preserved **2,864 acres** of farmland. (**Table 14**) Based upon the State's Minimum Eligibility Criteria for productive soils and tillable land, **2,475 acres** are potentially eligible for farmland preservation in Frelinghuysen Township.

Of the **2,475 acres** which are potentially eligible for preservation:

✓ 21 farms, or 2,143 acres, are greater than 20 acres and are located within the ADA.

In Frelinghuysen, a locally important farm can be greater than 20 acres in size. These are the "targeted" farms though 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 Frelinghuysen Township:

One-year target: 75 acres, 1 farm Five-year target: 375 acres, 5 farms Ten-year target: 800 acres, 9 farms

^e *Note:* For the ADA and Project Area analyses, the farmland assessed data is derived from the GIS digital data, which is slightly different from that reported for 2019 in the NJ Division of Taxation's 2019 Farmland Data Report (see *Chapter 1*). Preserved farm acreage for this chapter is also derived from the GIS digital data, which also differs slightly from the historical data on individual farm preservation (see *Chapter 4*).

B. Description of Project Areas

There are **9,522 acres** of farm assessed land in Frelinghuysen Township. Of this, **9,057 acres** are included within the County's ADA. Within the County's ADA in Frelinghuysen Township, **3,338 acres** are in active agriculture. In the *2017 Comprehensive Farmland Preservation Plan*, the Warren CADB identified seven project areas within the County's ADA for farmland preservation. Frelinghuysen Township falls within Project Area Northeast for Warren County. The Northeast Project Area in Frelinghuysen includes **9,057 acres** of farm assessed land. (**Table 18**)

Table 18. Northeast Project Areas in Frelinghuysen						
(acres)	Total Farm Assessed Properties	Unpreserved Farmland	Preserved Farm Parcels	Preserved Farm Assessed as Farmland	Preserved Open Space Assessed as Farmland	
Frelinghuysen	9,522	6,931	2,876	2,644	192	
Project Area Northeast	9,057	6,466	2,876	2,644	175	

C. Minimum Eligibility Criteria

Minimum Eligibility Criteria are based upon the SADC's rules for farmland preservation and project eligibility. 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
- 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

^f Adopted by the SADC May 21, 2007, and July 25, 2019.

- 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 Warren 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 Frelinghuysen will not cost share on applications that do not meet SADC minimum standards. In all cases, the Frelinghuysen Township FPC will work closely with the Warren CADB to review and process applications from landowners for farmland preservation. The Frelinghuysen FPC will follow all County and State procedures to ensure consistency in application review and processing.

Within the identified project area, 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 soils), **Map C** (farms meeting both criteria – target farms).

Farmland that meets the SADC Criteria for Tillable Land

Tillable acreage was determined using the N.J. Department of Environmental Protection 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:

Farm Size	Requirements
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 Frelinghuysen 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.³⁰

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

Farm Size	<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 i 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

Utilizing the tillable acreage determined from the NJDEP 2015 Land Use/Land Cover mapping for agricultural lands and soil acreage determined using the Soil Survey as prepared by the NRCS 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 Frelinghuysen that meet the minimum eligibility criteria are shown on **Map C** and listed in **Inventory Table 2.** In Frelinghuysen, 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
- ✓ >20 acres: Locally important farm

Overall, there are **2,475** acres of farm assessed land which meet the minimum eligibility criteria for the state's farmland preservation program and are located within the ADA. Of this, **21 farms**, **totaling 2,143 acres**, are over 20 acres in size. These are the "target farms" for Frelinghuysen Township. (**Table 19**) More detailed information can be found in **Inventory Table 2**.

	Table 19. Target Farms in Frelinghuysen Township				
Farm Parcel	Farm Parcels which are not part of a Farm Unit				
Block	Lot	Owner/ Farm	Acres (GIS Data)		
103	6	DICRISTINA VALERIE C & VITO G CO-TR	72.96		
1401	9	PEACEFUL VALLEY FARMS LLC	25.85		
1501	16	GRABOVETZ, GREGORY	32.91		
1701	9	SCHWARTZ, DAVID A	116.46		
601	4	GIORDANO, THOMAS & MELISSA S	36.36		
301	18.01	KAUFMAN D / DALVA / CATE TRACY	177.94		
501	27	PERRETTI, RUTH MARY	34.77		
602	3.03	MIDKIFF, ALAN H	31.25		
801	15	THE EMILY PANTALEONI FAMILY 2018 TR	93.70		
801	19	FINN, THOMAS J	112.49		
Total Farm Parcel Acreage (10 farm parcels): 734.					
Farm Parcel	ls that are part of a Farm	Unit			
701	18.08, 21	BONZULAK	27.77		
902	12, 7, 9.06, 4, 7.03, 2	CARSON	430.43		
1501	13.01, 13, 13.03, 13.04	CEDAR VIEW LLC	36.62		
201	17.02, 17.03	DECAMP	59.67		
1401; 1501	5; 11	FRIDMAN	224.01		
1201; 201	6; 23, 22	IHM	108.06		
1601	19.04, 19	KLEBER	20.19		
201	32.07, 32, 34, 35, 32.06	MULLER	95.46		
1201; 1101	3, 12.01; 10	NATYZAK	129.75		
301	14.04, 14.02, 14, 17.01, 14.03, 14.05, 17	ROGERS 2	195.10		
502; 601	27; 6	WILLIAMS	81.20		
Total Farm Unit Acreage (11 farm units): 1,408.25					
	Total Target Farms (21 farms): 2,142.94				

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: 75 acres, 1 farm Five-year target: 375 acres, 5 farms Ten-year target: 800 acres, 9 farms

D. County and Municipal Ranking Criteria

The Warren 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.³¹ 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 Warren CADB uses the SADC Minimum Eligibility Criteria as the basis for participating with the local municipality.

Frelinghuysen's FPC 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 FPC considers the following criteria when prioritizing farms for preservation in the Township as part of the Municipal PIG program:

- quality of the local soils
- proximity to existing preserved lands
- continuity of farmland corridors
- existing infrastructure for farm operations
- hybrid of both open space and farmland preservation
- small, viable farms
- willing sellers
- regional connectivity

E. Municipal and County Policies Related to Farmland Preservation Applications

Frelinghuysen Township follows the policies established by Warren County regarding housing opportunities, division of premises, and exception areas. These policies are documented in the 2017 Warren County Comprehensive Farmland Preservation Plan Update. The Warren CADB follows the SADC's policies regarding these issues.

1. Approval of Housing Opportunities

Agricultural labor housing: 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. ³² 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.³³

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 FPC for Frelinghuysen 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." 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 Township FPC and Warren 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 Warren CADB and Frelinghuysen Township FPC, 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." ³⁵ 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." ³⁶

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 Warren CADB and Frelinghuysen Township FPC follow the exception policies as identified by the SADC. The FPC 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 2014* established that a portion of the Corporate Business Tax was to be dedicated to preservation efforts. Of this revenue, 60% is allotted to Green Acres, 4% goes to Blue Acres (administered by Green Acres), 31% is set aside for farmland preservation (SADC), and the remaining 5% goes to Historic Preservation (New Jersey Historic Trust).

1. Municipal and County Funding Sources

The Warren County Land Preservation Department is responsible for administering Warren County's Farmland, Historic, and Open Space Preservation Programs. In 1993, Warren County voters approved a non-binding public referendum by a margin of 2-1 which allowed for the collection of an additional tax of up to 2 cents per \$100 of assessed valuation. In November 1999 and again in November 2002, county voters approved non-binding open space referendums by large margins, each time recommending an increase in the open space tax of another 2 cents per \$100 of assessed property value.

The Open Space Trust Fund, which currently collects 2 cents per \$100 of assessed property value, has enabled Warren County to preserve over 20,000 acres of farmland, 1,700 acres of county parkland, and participate in numerous historical and open space preservation efforts with local non-profits and municipalities throughout the county.³⁷The funds are allocated as follows:

- 55% to the CADB for farmland preservation.
- 25% to the Municipal and Charitable Conservancy Trust Fund Committee (MCCT) for non-profit and municipal sponsored open space and historic preservation projects.
- 20% to the Board of Recreation Commissioners (BORC) for acquisition of county parkland.

The Frelinghuysen Farmland Preservation Trust Fund was approved in 1999 by voter referendum and set at two cents (\$.02) per one hundred dollars (\$100) of assessed property value. It was amended to create a combined Open Space and Farmland Preservation Trust Fund in 2005. The Fund currently generates approximately \$58,000 per year and has a current balance of \$52,492.

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

Frelinghuysen Township works with Warren County according to its current cost-share requirements for preserving farms. The Warren 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 Planning Incentive Grant program. The remainder is funded by the municipality.

Frelinghuysen 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 Warren 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 Frelinghuysen Township Trust Fund generates \$58,000 per year and has a current balance of \$52,492. The average cost was \$3,882 per acre 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 \$58,000 per year.
- Average price per acre is \$3,882.
- The average price per acre will increase 5% over the next five to ten years.
- The Township is purchasing land in partnership with County and State (no direct purchase by Township).
- The municipal cost share is on average 15%.

Based upon the above assumptions and the FPC's goal of preservation nine farms (800 acres) in the next ten years, it is anticipated that the Township will have a total project cost of \$3,105,600 and contribute \$465,840 over the same time, if their percent contribution remains at 15%. If it increases to 30%, the municipal share will be \$931,680.

Utilizing the SADC sliding scale for cost-sharing, and the estimated per acre value of the purchase of a farmland easement in Frelinghuysen 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 FPC meets as needed to discuss farmland projects and issues. With the Open Space Committee, the FPC developed the Township's initial Farmland Preservation Plan and administers the program for the municipality. The Land Conservancy of New Jersey assists Frelinghuysen Township with their farmland program.

2. Legal support

Legal support for Frelinghuysen 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 FPC maintains the database of farmland in the municipality and works with the Warren 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 Frelinghuysen Township for the *Comprehensive Farmland Preservation Plan Update*.

H. Factors Limiting Farmland Preservation Implementation

Frelinghuysen Township has a strong commitment to preserve its farmland. The high rate of farmland preservation in Frelinghuysen Township has been attributable to the willingness and the ability of the Township to leverage its own funding to protect farmland. Frelinghuysen Township strongly supports the municipal PIG program. Frelinghuysen Township's program faces financial challenges as it moves forward in purchasing and preserving land during the next ten years.

Landowner interest in the farmland preservation program continues to be a challenge for the FPC in attracting new projects.



Chapter 6: Economic Development

A. Economic Development Plans and Initiatives

Frelinghuysen continues to be mainly agricultural, with **8,915 acres** of land for agricultural or horticultural use. The primary crops are corn, hay, livestock, and meat chickens. Throughout the state, the marketing and profitability of the agricultural industry has gained renewed focus. The farmland preservation program is a critical component of the farming industry, and the success of the farmland preservation program in Frelinghuysen 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 Frelinghuysen Township is being shaped by market forces and social trends that are occurring throughout New Jersey. Among the most substantial trends shaping local agriculture has been the decline in the dairy market. Dairy was the foundation of the region's agricultural industry, but the lack of support and demand, combined with the amount of labor involved, contributed to the closing of the last dairy farm in Frelinghuysen. The absence of dairy farms has changed the agricultural landscape in Frelinghuysen. While hay and corn are the primary crops, and farms that supported the dairy industry have moved towards different agricultural activities, such as agritourism and produce crops.

Land prices in Warren County have remained relatively stable for the past 5 to 10 years, though there has been recent development pressure from warehouse and solar projects. Development continues for commercial and light industrial purposes and can take land out of agricultural production.³⁸ Frelinghuysen Township government is aware of this potential pressure and has established methods to limit development through its planning initiatives and zoning regulations.

The combination of declining traditional agricultural markets and increasing land pressure will likely promote innovation in the ways farmers supplement their incomes. Farmers in Warren County are meeting these challenges by producing goods with higher rates of return. As traditional farming practices become less economically feasible, these initiatives are going to be important for Frelinghuysen farmers.

New Jersey offers Frelinghuysen 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. ^{39, 40} 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 agritourism⁴¹.

The Warren CADB and its Department of Land Preservation are directly and administratively involved with the preservation and enhancement of farming in the County. This includes acquisition, monitoring, assisting with Right to Farm disputes, working with municipalities to create farm-friendly atmospheres where possible, and coordinating with the state, County, and other organizations to maximize the agricultural potential of the County, including an awareness of the need to support agriculture from an economic development perspective. 42

In 2017, 86 of Warren County's 918 farms, or 9% of all farms, had sales of more than \$100,000, accounting for 92% of the total revenue. This leaves 91% of farms accounting for just 8% 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 Warren County farms had a net cash farm income of \$21,227 in 2017. The average farm market value of \$101,543, was lower than the statewide average of \$111,095. (Table 20)

Table 20. Warren County Agricultural Economic Overview						
	2007	2017	% Change to 2017			
Market Value/Products Sold (\$1,000)	\$75,477	\$93,217	24%			
Average/Farm (\$)	\$80,897	\$101,543	26%			
Production Expenses (\$1,000)	\$59,355	\$77,551	31%			
Average/Farm (\$)	\$63,617	\$84,478	33%			
Net Income (\$1,000)	\$20,843	\$21,227	2%			
Average/Farm (\$)	\$22,340	\$26,650	19%			
Farms w/Net Gains	358	309	-14%			
Average/Farms (\$)	76,983	101,820	32%			
% of All of Farms	38%	34%	-11%			

^g Census of Agriculture data is available through the USDA NASS portal:

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.

Table 20. Warren County Agricultural Economic Overview										
Farms w/Net Losses	575	609	6%							
Average/Farm (\$)	11,682	16,807	44%							
% of All of Farms	62%	66%	6%							
Total Acres	74,975	73,874	-1%							
All Farms	933	918	-2%							
Average Acres/Farm	80	80	0%							
Source: Census of Agriculture										

Using the *Census of Agriculture*, crop sales climbed from \$8.3 million in 1987 to \$18.4 million in 2002, before jumping to \$43.6 million in 2007 and continuing to climb to \$54.7 million in 2012 and to \$67.1 million in 2017. Within the crop sector, nursery/greenhouse was the largest sub-sector in 2017 with 61% of the market share, more than the 46% market share in 2012. The grains sub-sector came in second, with 21%, and vegetables, fruits, hay, and Christmas trees all lagged with 10%, 4%, 4%, and 1%, respectively. Over this same 30-year period (1987-2017), livestock sales went from \$27 million in sales in 1987 before slightly improving to \$31.9 million in 2007 then declining to \$26 million in 2017.

As part of this emphasis on the business of agriculture, the NJDA issued its 2011 Economic Development Strategies, which identify and propose 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."⁴³

Using recommendations outlined in the *2011 Economic Development Strategies* report, Warren County towns, including Frelinghuysen 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. Frelinghuysen has *210* Farmland Assessment forms for *2017*. h, 44

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

^h Farmland Assessment data has been accessed from datasets shared by the SADC; data referenced as Farmland Assessment refers to data from the following reports: either Warren County data for the years 2000, 2005, 2015, and 2017, and/or for state data for 2017.

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. Frelinghuysen 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, Target, ACME, and Foodtown (among others) carrying and promoting produce from the Jersey Fresh program.⁴⁵

Produce, which includes vegetables and fruits, is a leading agricultural commodity in New Jersey. In 2017, Warren County vegetable growers on 94 farms harvested 1,671 acres, with resulting sales of \$6,388,000. Fruit, tree nut, and berry combined sales totaled \$2,601,000 in 2017, an increase of 16% from 2012. Total produce sales increased after 2002, from \$5,324,000 in 2002 to \$8,989,000 in 2017, a 69% increase.

Frelinghuysen had a total of 65 acres which were harvested for fruits and vegetables in 2017, an increase from 46 acres in 2015. Prominent crops in 2017 were apples (9 acres), pumpkins (19 acres), and other mixed vegetables (11 acres). Some of these crops do not require as much land as field and forage crops such as soybeans and 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 than crops such as hay, and in that respect can benefit from economies of scale.

Farmers with roadside stands or markets should have their own websites, and utilize other websites and regional events, to gain visibility. Opportunities for promoting products (and, in many cases, numerous other agricultural products) include:

- NJDA Jersey Fresh website listings have recorded five Frelinghuysen farms, including Silver Lake Farm & Greenhouses and the Community Supported Garden at Genesis Farm.⁴⁶
- *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. Growing Dirt in Frelinghuysen is a community supported farm.⁴⁷
- *NJAES-RCE* created an educational website dedicated to agritourism for the public, planning and policy professionals, farmers, and educators. ⁴⁸
- A training website was also developed by the Rutgers Agritourism Team for farmers and can be found at http://agritourism.rutgers.edu/training/.
- New Jersey Skylands promotes agritourism throughout Warren County, offering descriptions of the Warren County Farmers Fair, wineries, farmers markets, and other attractions. The website offers a comprehensive list of different types of produce

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ⁱ These websites are not meant to exclusively promote produce-centric farms, but rather to highlight various farms and events throughout Warren County, including Frelinghuysen.

- available and the best time to attend pick-your-own operations for each produce category;⁴⁹
- *Natural Jersey* is a site promoting local natural health products and sustainable living. They highlight producers, such as farms, farm stands, farmers markets throughout New Jersey which align with their mission, and nearby farms and vineyards;⁵⁰
- *Tour de Farm New Jersey* holds an annual cycling event in both Sussex and Warren Counties, with the goal of supporting local farmers. Farmers provide samples, as well as goods for sale along the route;⁵¹
- Warren County Farms Fair is a weeklong festival in nearby Hope featuring many local farms offering products for sale, as well as hot air balloons, artwork, and other attractions:⁵²
- *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.⁵³
- Other resources listing direct marketing opportunities for produce in Frelinghuysen include VisitNJfarms.org, NJ Farmers Direct Marketing Association (http://njfarmmarkets.org/), Northeast Organic Farming Association New Jersey (http://nofanj.org), LocalHarvest.org, and EdibleJersey.com (pick-your-own listings).

Specific recommendations include:

- Utilize consistent, inclusive, and up to date accurate information from state, county, and regional/association websites.
- Establish or reestablish community farmers markets with help from the CADB, the NJAES-RCE and the Warren County Economic Development Advisory Council.
- 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, and resources: https://njaes.rutgers.edu/ultra-niche-crops/, 54 https://sustainable-farming.rutgers.edu/alternative-world-crops/. 55
- Utilize state promotional campaigns, free signage, and other signage opportunities.
- Offer Community Supported Agriculture 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 highest-ranking category of agricultural commodities in Warren County in both 2012 and 2017, bringing in \$25,248,000 and \$40,793,000, respectively. It accounted for 28% of total agricultural sales in 2012, and 44% in 2017, versus 40% and 45% statewide. This sub-

sector exhibited steady growth from \$1 million in countywide in 1987, to \$7.6 million in 2002, before jumping to \$25.2 million in 2012, and jumping again to \$40.8 million in 2017. The county experienced a 232% revenue increase from nursery/greenhouse products from 2002 to 2012, and a 62% increase from 2012 to 2017. The sales increase is attributed in part to businesses taking advantages of market niches and new technologies, supplying specialty products to customers throughout the region.

Frelinghuysen had a total of 34 acres dedicated to nursery (including cultivated sod and floriculture) in 2017, down from 36 acres in 2015, and the 127 acres in 2005. The town has no certified garden centers or nurseries registered on the Jersey Grown website⁵⁷ or state certification list.⁵⁸

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 Warren 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 provide 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 Frelinghuysen are corn and hay, with an emerging soybeans presence.

In 2017, the County reported total sales of grains, oilseeds, dry beans, and dry peas to be \$13.9 million, a -28% change since 2012 (\$19.2 million) with hay and other crops totaling \$2.7 million, a 47% change since 2012 (\$1.8 million), together representing approximately 23% of total agricultural sales in Warren County.

Corn In 2017, Warren County ranked second in the State for Corn, with a total of 18,431 harvested acres (17,701 acres of corn for grain, and 730 acres of corn for silage), which brought in a total of \$9.9 million in sales. In 2012, Warren County harvested 20,883 acres of corn (19,575 acres of corn for grain, and 1,308 acres of corn for silage), resulting in sales of \$15.4 million. Though the total monetary amount for corn sales is not released on a municipal level, Frelinghuysen farmers harvested a total of 342 acres of corn (222 acres of corn for grain, and 120 acres of corn for silage) in 2017, an increase from 2015 when a total of 315 acres of corn was harvested (217 acres of corn for grain, and 98 acres of corn for silage).

Hay Frelinghuysen harvested 2,202 acres of hay, including alfalfa in 2017, an increase from 2,120 acres harvested in 2015. Warren County farmers harvested 10,340 acres of hay (including

alfalfa, excluding haylage) in 2017, bringing in a total of 24,669 tons, and increase from 10,155 acres harvesting 18,836 tons in 2012.

Soybeans Warren County ranked fifth in the state for soybeans in 2017, with 63 farms harvesting 8,285 acres of Soybeans, bringing in a total of \$3.7 million in sales. The 2017 numbers show a strong increase from 5,661 acres harvested in 2012 totaling \$3.4 million in sales, and the 5,382 acres harvested in 2007 bringing in a total of only \$1.7 million. While the acres of soybeans harvested and the total yield both increased from 2007-2017 by 54% and 56% respectively, the increase in total sales grew by 118%. Frelinghuysen farmers harvested a total of 126 acres of Soybeans in 2017, a decrease from the 130 acres in 2015.

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."⁵⁹
- 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

Dairy has historically been one of the dominant agricultural sectors throughout Warren County but is now almost completely gone. In 2017, Warren County had 22 farms with milk cows, and only 16 farms that sold milk from cows, bringing in a total of \$3.3 million. As of 2017, Frelinghuysen had 12 head of dairy cattle compared to approximately 112 head of dairy cattle in 2005. This decrease in dairy production reflects the larger trend seen throughout Warren County. There are no active commercial dairy farms in Frelinghuysen, though there is one farm with a few dairy cows that sells to a small group of residents. ⁶⁰

The NJDA 2011 Economic Development Strategies for dairy included establishing a premium price for New Jersey-produced milk and ensuring stable pricing; increasing the demand for milk through sale and promotion of Jersey Fresh milk and milk products at community and retail markets; promoting FIN-PAK and risk-management software programs to producers; implementing dairy-quality benchmarks; and establishing a health and safety standard for sale of raw milk directly to consumers.

Strategies for reviving the Frelinghuysen dairy industry include:

- If applicable, license under the Jersey Fresh Quality Grading Program, which allows raw milk to be used in goods bearing the logo *Made With Jersey Fresh Milk*.
- Take advantage of the services offered by the Garden State Dairy Alliance, including disease control, milk quality, marketing and promotion, and technical assistance.
- Explore various additional products, such as cheeses and markets for dairy, including local restaurants and grocery markets.
- Aggressively market value-added dairy products, especially those that can carry the *Made With Jersey Fresh Milk* logo.
- Consider and encourage the NJDA's campaign to establish a process to allow sales of raw milk direct from the farmer to the producer and the positive effects it might have for dairy farmers in Warren County.
- Encourage passage of proposed raw milk legislation that would permit sale of raw milk under certain conditions and establishes a raw milk permit program (A585, re-introduced in the 2020-2021 State Legislative session).⁶¹

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 Frelinghuysen include cattle and calves, sheep and goats, hogs, bees, fur, and poultry and eggs. (**Table 21**)^j

Table 21. Livestock and Poultry Numbers in Frelinghuysen											
	Cattle and	Sheep and			Fur		Meat	Egg			
	Calves	Goats	Swine	Bees	Animals	Ducks	Chickens	Chickens	Turkeys		
2005	441	449	72	71	29	246	661	1,315	0		
2010	405	380	44	89	25	41	72	882	99		
2015	174	245	36	76	20	329	496	1,480	61		
2017	195	287	28	72	13	84	765	1,583	101		
% change (2005- 2017)	-56%	-36%	-61%	1%	-55%	-66%	16%	20%	100%		
Source: Farmland Assessments 2005-2017											

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^j In the 2017 Farmland Assessment, equine species are included under "Livestock and Poultry;" however, for the purposes of this document, and in alignment with the categories put forward by the NJDA in its 2011 Economic Development Strategies, they are discussed later in this chapter in a separate section on the Equine industry.

Between the years 2005 and 2017, the cattle stock dropped by 56%, reflective of the end of dairy, and a corresponding reduction in beef cattle. There may be a good market for non-dairy cattle, provided they can be USDA certified^k to increase direct sales to consumers. ⁶²

Other livestock that shows downward trends in Frelinghuysen are swine (-61%), fur animals (-55%), and ducks (-66%). Growing animal herds are meat chickens (16% growth) and egg chickens (20% growth). Bees showed relatively steady operations and turkeys emerged as a new industry.

While sheep and goat numbers fell by 36% over this twelve-year time, these might still be a niche sector for farmers to explore to provide specialty meat and value-added products, such as milk, cheeses, soaps, and mohair 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. ⁶³, ¹ *Grown in Warren* highlights the growing demand for sheep and goats due to growing ethnic food market. ⁶⁴

To strengthen and expand its place in the Frelinghuysen 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.
- 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 Hackettstown Livestock Auction) and special events (such as the Warren County Farm 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 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

^k This has been referred to as a "chicken-or-the-egg" dilemma – the USDA generally does not certify cuts of beef for direct sales because they feel there are insufficient numbers of cattle in the county, and farmers cannot sell more cuts for direct sales because the USDA has not come to certify their products.

¹Wool prices were not available at the county level or at the state level after 1997.

Organic brand alongside *Jersey Fresh*; and working with NOFA-NJ towards research and technical assistance for organic growers.

Organic crops and animals have the potential to be an important market for Frelinghuysen and Warren 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, like 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, Warren 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.

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. ⁶⁶

In 2017, the Census reported two Warren County farms with the USDA NOP certification, one farm making the transition to NOP certification, and one farm which was 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.

Warren County and Frelinghuysen can:

- Improve marketing of organic and natural produce.
- Explore various additional markets, including local restaurants and grocery markets.
- Promote agritourism for organic and natural farms 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, and including youth programs. The 2017 Census of Agriculture indicates that New Jersey produced over \$28 million in equine sales. Sales and farm sizes have varied since the category was created in 2002, where 39 farms averaged \$9,380 in sales. 2007 saw a much higher average sales figure, in part to a low of 35 farms, but largely due to a huge spike in total equine revenues, resulting in a \$22,770 sales average per farm. 2012 saw the lowest average sales, dropping to \$5,188 per farm.

Many equine farms in Warren County consist of pasture and stable horses. Part of the value of this small but viable sector comes from services offered, which are not included in total sales figures. The New Jersey Equine Advisory Board reports no equine facilities in Frelinghuysen.⁶⁷

Equine rules on the state level, adopted August 4, 2008, established Agricultural Management Practices (AMP) for Equine Activities on Commercial Farms (N.J.A.C. 2:76-2A.10) and expanded the list of equine activities eligible for Right to Farm protections (N.J.A.C. 2:76-2B.3). While breeding, raising, pasture, and hay production had always been eligible, the following were newly added: boarding, keeping, training, rehabilitation of horses, and complementary activities including but not limited to clinics, open houses, demonstrations, educational camps, farm events, competitions and rodeos, as long as these activities are related to the marketing of horses that are raised, bred, kept, boarded, trained, or rehabilitated on the farm, and are in compliance with municipal requirements. This state level support is important to the sustainability and viability of the equine sector in Warren County.

To grow and then retain growth in this sector, Frelinghuysen can:

- Present equine ventures as viable businesses.
- Ensure the health of equine animals.
- Educate farmers about the benefits of equine rules and seek guidance from Warren County about the rights of equine farmers.
- Promote the industry at shows and festivals, such as the Warren County Farm Fair.
- Promote the industry through enhanced listings of Warren County and Frelinghuysen 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

According to the 2011 Economic Development Strategies, the state's grape production has not kept pace with its wine production. Strategies are focused on expanding the locally grown content of New Jersey wine; supporting licenses to distill fruit-based spirits; expanding the number of eligible retail outlets supporting the ability to sell wines at farmers markets; and promoting New Jersey's wine trails.

In January 2012, Governor Christie signed into law in a bill permitting direct shipping by New Jersey wineries, ⁶⁸ 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. ⁶⁹ In February of 2020, A2773 was introduced which would "allow preserved farms to hold 14 special events per year," ⁷⁰ essentially establishing the pilot program in law. The legislation was voted out of Assembly Committee.

A portion of western Warren County, along the Delaware and Musconetcong rivers and their tributaries, has also been designated by the federal government as a wine grape-growing region. In 2017, Frelinghuysen did not have any acres dedicated to growing grapes, a decrease from one acre in 2005. Warren County had a total of 141 acres growing grapes in 2017, an increase of 117% from the 65 acres in 2005. Frelinghuysen may consider:

- Exploring the feasibility for additional Warren County and Frelinghuysen 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.
- Encouraging promotion of Warren County and future Frelinghuysen 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. Warren County aquaculture operations rank third in the state in 2017 and include catfish, trout, baitfish, sport or game fish, and other food fish. To support a growing aquaculture and seafood economy, Warren County and Frelinghuysen 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 farmraised 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 Frelinghuysen and Warren County. A highly successful example of agritourism is the seven-day Warren County Farmers Fair held annually. The Farmers Fair, which highlights the past and

present agriculture heritage of Warren County, has been operating since 1937, and is extremely popular, drawing thousands of visitors each year.

Because of a limited number of potential customers within the Warren County region and high levels of competition among agribusinesses^m involved in agritourism, marketing and strategy is imperative to the success of the agribusiness. One advantage for Frelinghuysen 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.

The strategy to expand roadside promotion included expanding participation of agritourism operations in the Tourist Oriented Destination Signage (TODS) program through the NJDOT, gaining a discounted agritourism rate and increasing the maximum distance (set at three miles) an operation can be from a state road to be eligible for the signage promotion. At least two of these goals have been achieved: In 2014, 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.⁷²

Visitnjfarms.org, mentioned in the 2011 Strategies, is a website sponsored by Rutgers, the New Jersey Farmers Direct Marketing Association, and the New Jersey Farm Bureau (NJFB). 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.⁷³

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."⁷⁴

Township of Frelinghuysen - Comprehensive Farmland Preservation Plan Update

^m Agribusiness refers to the industry of farming, while agritourism is a subsector of tourism drawing visitors to agricultural areas and farm related activities.

The 2017 Census reports that Warren County had \$4.4 million in direct sales, representing 5% of total agricultural sales for the County. This is an increase of 245% over 1997, even while the total number of farms increased by only 4%. (**Table 22**)⁷⁵

Table 22. Direct Sales in Warren County: 1997-2017						
	1997	2002	2007	2012	2017	% Change '97- '17
Farms	162	174	221	161	169	4%
Sales (\$1,000)	\$1,277	\$1,545	\$1,952	\$2,150	\$4,403	245%
Source: Census of Agriculture						

The wine sector has introduced tasting rooms, tours, and music nights. With continued support from the state, as well as county and local municipal efforts, this sector can benefit local agriculture both for farming as an industry and for the individual farmer as additional income. Agritourism helps change the perspective of the non-farming community and increases visibility, understanding, and appreciation of farming by County residents and visitors. Agritourism can be an important contributor toward the long-term sustainability of Warren County's agricultural industry. Visibility is given to agritourism opportunities through the many websites and publications available. (**Table 23**) For every dollar in agritourism sales, \$0.58 of additional sales are generated in other businesses (e.g., restaurants, construction companies, insurance providers, etc.). ⁷⁶

Table 23. Agritourism Websites and Publications				
Source	Description			
State				
77	Roadside markets			
NJDA Jersey Fresh Website ⁷⁷	On-farm activities			
	Wineries			
Rutgers NJAES	Agritourism education ⁷⁸			
NIDA I Eius Wahaita	Equine events ⁷⁹			
NJDA Jersey Equine Website	Equine facilities ⁸⁰			
Visit New Jersey Farms	Farms, farm products, activities, and events			
Website ⁸¹	Ability for website visitor to build itinerary of farms to visit			
Visitnj.org (Office Tourism	Farms & orchards ⁸²			
\$ 6	Wineries & vineyards ⁸³			
Website of New Jersey)	Fairs ⁸⁴			
Regional				
New Jersey Skylands Website ⁸⁵	Calendar of events			
	Farms, Gardens, Wineries section			
	Family Attractions section, where several regional farms			
	and wineries are listed			
Warren County Website ⁸⁶	Tourism page includes links to countrywide and regional			
	attractions			
Explore Warren ⁸⁷	Farm markets, and pick-your-own			

Table 23. Agritourism Websites and Publications				
Source	Description			
Organizations				
NJ Farmers Direct Marketing	Farms and farm markets			
Association, Inc.				
(www.njfarmmarkets.org) ⁸⁸				
New Jersey Christmas Tree	Christmas Tree farms			
Growers' Association ⁸⁹				

Among the series of recommendations included in this report are:

- Marketing and promotion centralized promotion system, agritourism marketing website, better inclusion, and integration of agritourism on the New Jersey Division of Travel and Tourism marketing materials; stronger links between farmers and Women, Infants and Children (WIC), Senior, and school lunch nutritional programs; and assisting counties with funding for agritourism promotion.
- Liability protection and insurance support the development of a New Jersey Agritourism Limited Liability act modeled after laws in Virginia and North Carolina and explore ways to reduce costs of liability insurance; encourage farmers and operations to protect their livelihoods with insurance.
- Regulatory guidance for operators includes proactive communication about relevant regulations, and education about requirements and protections under the Right to Farm Act; address impediments to signage.
- Training and information workshops for farmers include hospitality training, marketing strategies and other issue-specific workshops such as liability, grants, traffic, signage; offer a forum for farmers getting into agritourism to interact with those who already are involved.
- Role of CADB examine preservation policies to identify and address any restraints to agritourism development; provide outreach to operators and municipal officials; develop model long-term leases for farmers renting preserved farmland; host open houses and tours at agritourism operations; encourage municipal adoption of model Right to Farm ordinance.
- Resources "how-to" website; 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.

Frelinghuysen 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 Frelinghuysen 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 Warren County Tourism page.
- Establishing a working farm devoted to public education, similar to The Farm Institute 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.⁹¹
- 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 Frelinghuysen and Warren 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).
- 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: localharvest.org (CSAs), NOFA-NJ (organic and sustainable), visitnjfarms.org, NJDA websites (Jersey Fresh, Jersey Grown, Made with Jersey Fresh), and Warren County's tourism page. 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.

Agritourism resources include information on selecting a venture, writing business, marketing and risk management plans, and information on the Right to Farm Act and Agricultural Management Practices. ⁹² Additionally, the NJAES-RCE has publications available on its website on specific agritourism topics, such as how to budget for a corn maze. ⁹³

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. "Strengthened communication and coordination between agencies and programs can result in multiple benefits for the agricultural community." Two areas of focus were called out: Farmland Assessment and Crop Insurance and Technical Assistance; and Export Development:

- Farmland Assessment 2011 strategy: updating documentation, supporting farmers in filling out applications and supporting tax assessors in determining farmer eligibility.
- Crop Insurance 2011 strategy: 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 2011 strategy: offering assistance concerning the New Jersey Uniform Construction Code as it relates to farm buildings and the Real Property Appraisal Manual, Farm Building Section; in 2014, the NJDA's Marketing and Development Agricultural Economic Development Services page includes a Farm Building Construction; Real Property Appraisal Manual, Farm Building Section;
- Recycling and Food 2011 strategy: increasing participation in agricultural plastics recycling programs and assisting food processing industry in finding markets for soon-to expire and expired foods; in 2014, the NJDA's Marketing and Development Agricultural Economic Development Services page includes a section on Recycling for Agriculture;
- Motor Vehicle Requirements 2011 strategy: providing information about regulations, license plates for farm vehicles and other vehicle related provisions through a userfriendly website in 2014, the NJDA's Marketing and Development Agricultural Economic Development Services page includes a section on Motor Vehicle Regulations for Agriculture; and
- Financing 2011 strategy: providing information on federal, state, and commercial lending institutions financing for agricultural loans; in 2014, the NJDA's Marketing and Development Agricultural Economic Development Services page includes a section on Agriculture Credit and Finance.

Grown In Warren (2019)

Frelinghuysen farmers continue to look for ways to explore new markets, promote their products, and increase the profitability of their agricultural operations. In 2019, Warren County released a report titled, *Grown in Warren*, *A Strategic Growth & Planning Report*, which outlines strategies for both Warren County and local farmers to "promote the sustainable growth of farming and related business." The report includes an analysis of the opportunities, challenges, trends, and recommendations for the agricultural community in Warren County. ⁹⁴ As this report mentions, Warren County is "ideally located within a two-hour drive of over 20 million potential customers

in the New York-New Jersey-Philadelphia region...who are interested in the locally grown, locally sourced agricultural products that Warren County farmers can provide."

Strategies include increasing direct marketing operations and promoting visibility through attendance at farmers markets, Community Supported Agriculture (CSA), on-farm sales and agritourism, promoting organically grown produce, sustainably and humane meat and animal products, value-added products, specialty crops and ethnic products. The report also stresses the importance of internet promotion and direct customer engagement, as well as the promotion of regional initiatives such as Grown in Warren and regional bike tours.

The branding and execution of "Grown in Warren" is essential to the marketing and promotion of high-quality produce grown locally for a market invested in sourcing from and supporting local farmers. The four parts to this integral strategy are: 1.) establish the brand, 2.) increase the market share for Warren County's agricultural producers, 3.) bringing added value to products that are associated with the Grown in Warren brand, and 4.) gaining acceptance and use of the "Grown in Warren" brand among the county's agricultural community, with re-sellers of those products, and with consumers.

Specific recommendations for farmers to take include:

- Bring Warren County's agricultural products to the consumer through direct sales.
- Utilize the brand identity of "Grown in Warren" to market products as fresh and locally grown.
- Bring consumers to Warren County with on-farm activities and other agritourism practices.
- Participate in high volume urban farmers markets.
- Establish a CSA operation.
- Adopt practices that will result in multiple complimentary income opportunities.
- Process crops into high margin value-added products such as soups, jams & jellies, personal care products, and other consumer items.
- Create an internet presence to connect with potential customers, bring visitors to the farm, and to sell products direct to consumers.
- Forge relationships with restaurant owners, chefs, brewers, and other institutional consumers looking to source ingredients locally.
- Grow specialty and ethnic produce that includes fruits, vegetables, meats, and poultry.
- Plan for generational succession and transition to the next generation of Warren County farmers.
- Engage in cooperative regional marketing of Warren County's agricultural products.

The report conducted an in-depth analysis on the strengths, weaknesses, opportunities, and threats (SWOT) to the Warren County agricultural community. (**Table 24**)



Table 24. Grown in Warren – SWOT Analysis				
Strengths include:	Weaknesses include:			
Large productive land base	Aging population of farmers			
Experienced population of farmers	Very high cost of land			
Proximity to markets	Difficult for new farmers to access land			
Access to high-income/high-profit activities	Difficult access to capital			
Excellent soils	No established distribution networks			
Supportive local communities	• Lack of facilities for overnight visitation			
Beautiful natural environment	Limited public transportation			
Opportunities include:	Threats include:			
Growing New types of crops	Volatile commodity prices			
Selling to new markets	High cost of business			
Taking advantage of consumer preferences	Complex & restrictive regulatory			
Developing regional branding	environment			
Demand for ethnic products	Encroaching development			
Demand for organic produce	Uncertain impacts of climate change			
Expanding opportunities for agritourism	Changing labor market			
Source: Grown in Warren Report				

There is a strong link between outdoor recreation activities (hiking trails, roads conductive to bicyclist), farming and farm stand locations, and economic prosperity. "Warren County has a great deal to offer visitors interested in agritourism and ecotourism. The county features a beautiful natural environment with a myriad of opportunities for outdoor activities that include hiking, fishing, kayaking, and bicycling in addition to on-farm visitation."

Planning for both agritourism and outdoor recreation is important because, "while the county is well-situated to take advantage of this consumer market in term of geographic location and suitable attractions, there is a decided lack of facilities to support this potentially lucrative source of business. There are few hotels in the county. Municipalities generally do not permit the creation of Bed & Breakfast facilities in the residential zones that predominate in the county's rural communities. Public transit access is extremely limited. Specific recommendations on increasing agritourism and ecotourism in Warren County include:

- Extend marketing efforts to surrounding areas.
- Create and promote themed driving and biking tours.
- Support visitor transportation and accommodation options.
- Encourage multipurpose extended visitation.
- Actively market Warren County as a destination.



One of the benchmarks for a successful campaign was to have 175 farms registered on the "Grown in Warren" portal.⁹⁵ It is an additional opportunity for farmers to gain visibility and connect the market with the larger community.

B. Agricultural Industry Retention, Expansion, and Recruitment Strategies

There are many techniques to support the economic expansion, development, and solidification of Frelinghuysen's agricultural industry. Diversity of agricultural commodities to broaden the agricultural base now dominated by hay, corn and with an emerging soybeans presence would help to ameliorate any economic downswing in either the general economy or a specific sector of the county's agriculture industry.

Frelinghuysen Township supports the representation of agricultural interests on regional and local industry boards, business organizations, and economic development associations. The Township sees its greatest success in supporting and partnering with local and regional organizations (county, state, and national) and to encourage farmers to enroll and actively participate in programs to stimulate and encourage agricultural economic development.

1. Institutional

Minimum wage impact on farm businesses – The State minimum wage was raised to \$10.30 for agricultural employees effective January 2020, followed by an increase to \$10.44 on January 1, 2021. There are further wage increases every year from 2022 until 2027, when the minimum wage reaches \$15.00 per hour. ⁹⁶ 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 \$12.50 on January 31, 2020. ⁹⁷ 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. Frelinghuysen only had 52 acres devoted to vegetables in 2017. Other products that are prevalent in Frelinghuysen such as hay and corn require little or no hired farm labor (most labor is done by farm families). As such, farm labor costs are not as large a problem for Frelinghuysen farmers as they are for farmers in parts of the County or State that have major produce agriculture industries.

Farmer Support—Farmers at all levels can benefit from support. A variety of resources exist at the state level, published on the SADC website. ⁹⁸ 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 farmer's 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. ⁹⁹ 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."

Resources specific to estate planning and retirement planning are available through the *Farm Link* Program's Farm Transfer, Succession, and Retirement Planning section. ¹⁰¹ Resources include workshops, Farm Succession Guidebook, ¹⁰² 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.

Two resources available to farmers through the SADC are the New Jersey Farmland Leasing Guidebook, ¹⁰³ created as part of a Beginning Farmer grant project, ¹⁰⁴ and a New Jersey Agricultural Mediation Program Handbook, subtitled "A Guide for Farmers, Neighbors and Municipalities." ¹⁰⁵ In addition, the state, NJAES-RCE, and supply companies, such as fertilizer and pesticide merchandisers, provide other often-seasonal workshops for farmers, keeping them up to date on various issues related to the agricultural community.

Another opportunity is the New Jersey Agricultural Society's New Jersey Agricultural Leadership Development Program (NJALDP), administrated by Burlington County College. 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 Warren County is the School Gardens initiative, funded by Team Nutrition Training mini-grants provided by the USDA, 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 Warren 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. ¹⁰⁷

The Grow Healthy Initiative in Warren County is run by Sherri Cirignano, Family & Community Health Sciences Educator II (phone: 908-475-6504; email: cirignano@njaes.rutgers.edu).

Marketing, Advertising, Public Relations Support

Marketing and advertising are critical to profitability. Some farmers do opt to use paid advertising in local newspapers, but many, particularly those with smaller farms, hesitate to consider advertising, believing that the costs outweigh the benefits. They prefer to take advantage of free or less costly opportunities to market their products, such as state, regional and County public and promotional websites that will "advertise" the products. Several embrace the opportunities of direct marketing, from roadside stands and from their own websites.

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 Warren 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*. ¹⁰⁸ Another website for Community Involved in Sustaining Agriculture (CISA), ¹⁰⁹ 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. Farm stands are often seasonal businesses that need to capture potential sales at harvest time. 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* 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.¹¹⁰

Farmers Markets

In 2020, three community farmers markets were operating in Warren County. It is suggested that the County consider establishing a three-season market:

 Blairstown Farmers Market, across from Blairstown Elementary School, 5 Stillwater Road, Saturdays 9:30 am— 1 pm, June 6—October 31.

- Washington Borough Weekly Farmers Market, Washington Borough Main Street (Route 57), near the Downtown Pocket Park (40 East Washington Avenue), Saturdays 10 am 2 pm, June 20 September 26.
- Warren County Farmers Market, 565 County Route 519, Belvidere, (White Township School), Sundays 10 am 2 pm, June 2 September 29.

Community Supported Agriculture (CSA)

Economic support of the Frelinghuysen agricultural community also comes from local grass roots groups. This support is embodied in CSA, 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 "share-holders" 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.¹¹¹

Genesis Farms offers a CSA of single and farm shares of its produce output. It is located on Silver Lake Road just outside the Blairstown Township border, but with a Blairstown mailing address. The Foodshed Alliance is a grassroots group which seeks to "promote a robust farm economy in northwest New Jersey through local efforts and regional collaborations." The Alliance promotes local efforts by assisting individual farmers with sustainable farming methods, making preserved farmland accessible to farmers at affordable long-term leases through the Sustainable Agriculture Enterprise (SAgE) program, protecting rivers through the voluntary River Friendly Farm Program, working towards establishing a food hub in New Jersey, connecting farmers with consumers through farmers markets and buyers' clubs, and gathering information about how much land is being farmed in the Ridge and Valley region. In addition, the Alliance has published the Food Hub Feasibility Study For Northern New Jersey, the Northern New Jersey Regional Foodshed Resiliency Plan, and the Sustainable Agriculture Enterprise Information and Application for Sustainable Farm Businesses. 112

Agricultural Education and Market Research Coordination

Frelinghuysen may want to consider coordinating with Warren County and the Rutgers Cooperative Extension (RCE) of Warren 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 Warren 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. Rutgers School of Environmental and Biological Sciences (SEBS) is "committed to the study of how human and environmental health can intersect to support a healthy and sustainable future." Programs and activities include oncampus living labs, research laboratories, farms, greenhouses, gardens, living-learning communities, a historic herbarium, and an entomology museum.

Strategies Frelinghuysen can use to 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

Very few, if any, large scale agriculture suppliers, which supply medium to large size agriculture operations, exist in Warren County. The several suppliers in the area operate on smaller, more local scales. Many such suppliers are farmers themselves (for instance, selling feed from their corn crops to other local farmers raising animals), without any formal business practices such as advertising. 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. The Township welcomes agriculture-related businesses within the confines of its existing zoning.

With the decline of local suppliers, and the ease of access through the internet, mail orders from supply stores further away might work for small equipment or shipments. It is not ideal for large orders, such as for feed or fertilizer, which would incur a fee for delivery. Equipment and supply stores in Warren County include:

- Tractor Supply in Blairstown and Washington Townships, Warren County.
- Central Jersey Equipment in Columbia, Warren County.
- Frank Rymon and Sons in Washington Township, Warren County.
- Tickner's in Hackettstown, Warren County.
- Smith's Tractor in Washington Township, Warren County.
- Mayberry in Port Murray, Warren County.
- S&L Kubota in Belvidere, Warren County.

Seed and chemical supplies in the area include:

- North Warren Farm and Home Supply in Blairstown, Warren County.
- Penwell Mills Feed in Port Murray, Warren County.
- Ise Feed in Stewartsville, Warren County.

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Product Distributors and Processors

Processing facilities such as creameries, slaughterhouses, and lumber mills have become absent from Warren County, and therefore Frelinghuysen as well, forcing local farmers to ship their products out of town to be processed.¹¹⁵

Field and 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. Small volumes are also sold at the Hackettstown Livestock Cooperative Auction Market. Corn productsⁿ are almost entirely sold wholesale and fluctuate depending on the national market. Small amounts of corn are sold as retail to hunters for bait.

Produce products are sold through a variety of channels. Most 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 products can be quite varied. Some animals are sold in their entirety directly to consumers (whether still alive or previously slaughtered). Other animals are sold at the Hackettstown Livestock Cooperative Auction Market. 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. The Livestock Cooperative Auction is a co-op run by the Auction Market Association of North Jersey composed mostly of farmers and has been operating since 1941. Farmers, as well as wholesalers, butchers, and private individuals sell, buy, and trade livestock, eggs, and crops. Most of the sheep, lambs, goats, hogs, and cattle are sold to slaughterhouses, which use the animals in food products. Dairy cows are bought and sold by farmers. Frelinghuysen farmers use the Livestock Cooperative Auction for the purchase and sale of agricultural livestock and products. The Auction is located on West Stiger Street in Hackettstown and is open every Tuesday throughout the year. It is the only remaining livestock auction in the state and is a staple of the Warren County agriculture industry.

3. Anticipated Agricultural Trends

Product Demand

From a county historical perspective, total agricultural sales have increased sharply from \$39.7 million in 2002, to \$75.5 million in 2007, \$91.2 million in 2012, and \$93.2 million in 2017. Much of this growth has been fueled by increased grain, nursery and greenhouse sales, in part due to the consolidation of several large farms and cost-savings through economies of scale. The nursery, greenhouse, grain, and vegetables sectors of the agricultural industry should continue to be healthy and viable sectors 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.

ⁿ This does not include sweet corn, which falls into the produce section below.

The livestock sector has seen changes to its non-dairy and dairy subsectors, both of which have experienced lengthy declines in cattle stocks but have held constant since the early 2000s. Milk production follows this trend as well, with the commercial dairy industry completely gone now. The cattle industry is believed to be trending towards smaller and smaller farming operations, many of which will raise a small amount of cattle as part-time jobs to qualify for farmland assessment.¹¹⁷

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.

An opportunity is the growing wine industry, and agritourism opportunities from wine tastings and other events. Legislation has been passed permitting beer and wine production on farms to be sold off premises.¹¹⁸

One emerging trend is the 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. ¹¹⁹ In 2021, Frelinghuysen Ordinance No. 2021-09 permits cannabis cultivation and manufacturing in the ROM zone only. ¹²⁰

Other avenues to explore include:

- Changing the farm operation's mix of products.
- Consider using FINPACK, 121 a computer program that allows the operator to enter his/her production and expense data, then try various alternatives to achieve more profitability; many participants are surprised that what previously appeared to be the logical choice is not the most effective; some have saved thousands of dollars by acting on the analysis.
- 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.

Market Location Frelinghuysen is located near the large population centers of New York City, and Philadelphia, with a direct route to New York City via Interstate Route 80. Frelinghuysen 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 Frelinghuysen farmers.

The agriculture community in Frelinghuysen can seek contracts with area schools to supply healthy, fresh farm products for use in their cafeterias. Schools like the Ridge and Valley Charter School which focuses on earth literacy and education "for a hopeful sustainable future," could be great partners for local agriculture. Area hospitals and senior/nursing homes are also possible customers. Since all of these are permanent institutions, once established these markets can be considered as "permanent customers" and revenue sources for the Frelinghuysen agriculture community.

Future of Agriculture

Among the most substantial trends reshaping the Township's agriculture base is the rapid rise of the crops sector. Since the 2002 Census, crop, nursery, and greenhouse products have outpaced livestock and poultry sales. Niche products such as packaged and organic goods that generate "value added" revenue streams are likely to increase.

Challenges facing Frelinghuysen's farmers are land prices and property taxes. Higher land prices threaten to replace many of the County and Township's farmlands and open space areas with residential and commercial developments that are less compatible with agricultural production.

The average age of farmers in Warren County is increasing. Young farmers are attracted by higher paying opportunities in other employment sectors, and fewer are becoming farmers. Consequently, the average age of farmers in Warren County has increased from 50 years old in 1982, to 56 years old in 2002, 59 years old in 2012, and to an interval between 55 and 64 in 2017.

4. Agricultural Support Needs

Agricultural Facilities and Infrastructure

The County lacks permanent suppliers of items such as seeds, feed, and chemicals required to keep farms productive. Many of such services involve local farmers selling these items to one another, hampering the stability of these support services. An increase in permanent agricultural suppliers would work to guarantee the stability of these services, and in turn, the agricultural industry.

Ultimately, it comes down to whether there are enough opportunities to make money in supporting the County and region's agricultural industry. If those outside the farming community see ways to make profits doing so, 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. ¹²³

The Foodshed Alliance released a report in 2018 titled, "*The Foodhub Feasibility Study*," which analyzes the benefit of having a food-hub (an aggregation and distribution facility). The report found that a food hub "could help strengthen the farm industry in New Jersey by giving farmers easy access to institutional buyers to fill the need for locally grown, fresh healthy food." ¹²⁴

Flexible Land Use Regulations

State Level – The state has introduced and is working on several new regulatory tools to help farmers, including the Cluster Development Bill signed into law in August 2013, with enhanced provisions for the use of contiguous and noncontiguous clustering and lot-size averaging for farmland, open space and historic preservation; and Agricultural Management Practices for On-Farm Direct Marketing Facilities, Activities and Events; and Revised Right to Farm Procedural Rules effective April 7, 2014; rules that allow the installation of solar energy systems on commercial farms, effective August 15, 2011, and on preserved farmland effective June 3, 2013, plus, a 44-month pilot program, signed into law in July 2014, to allow wineries on preserved farms to conduct special occasion events (such as weddings) under certain conditions as defined by the governing CADB. In March 2020, S2235 was introduced and referred to the Senate Economic Growth Committee, which would make the pilot program, which allowed special occasion events at wineries on preserved farmland, permanent.

Examples where regulatory flexibility is important are the New Jersey Department of Environmental Protection'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. 125

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. As an example of its support of local agriculture, Frelinghuysen passed a Right to Farm ordinance in 1981 to ensure farmers can practice accepted agricultural operations.

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.

Planning and zoning to maintain and enhance agricultural viability is critical to preserving both farmland and agricultural operations. Towards this end, the SADC website includes a link to a checklist communities can use to rate themselves, called "Is Your Town Farm Friendly?" developed by the New Hampshire Coalition for Sustaining Agriculture and the University of New Hampshire Cooperative Extension. ¹²⁶

Agriculture Representation in Economic Development

The Warren County Economic Development Committee (EDC) was created in January 2016 to serve in an advisory capacity to the Board of Commissioners, to assist the County in promoting economic development, including an increased focus on tourism and agritourism. An established framework will be used in coordinating local, state and federal efforts towards this end, including a major emphasis in laying the basic groundwork necessary for attracting and encouraging sound economic growth within the County. A list of business resources within Warren County is available on the EDC website at http://warrenecdev.com/business-resources.

5. Agricultural Support Implementation

The NJAES-RCE of Warren 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 and 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 RNJAESCE 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 ¹²⁸ 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. ¹²⁹ 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, ¹³⁰ 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 State Agriculture Development Committee webpage, ¹³¹ accessed through the following link: *https://www.nj.gov/agriculture/sadc/farmpreserve/programs/*.

New Jersey Farm Bureau

The 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. ¹³²



Chapter 7: Natural Resource Conservation

A. Natural Resource Protection Coordination

1. Natural Resources Conservation Service

There are numerous public and private entities which administer, fund, and provide technical guidance for Frelinghuysen farmers relative to natural resource conservation. An important partner in support of natural resource conservation for the agricultural community is the USDA NRCS. The NRCS "provides assistance to private landowners [including farmers] in the conservation and management of their soil, water, and other natural resources." The NRCS provides technical assistance suited to the natural resource issues that are specific to a farmer's needs, with ample opportunities for cost-shares and financial incentives. ¹³³

Frelinghuysen farmers may utilize this local NRCS office for assistance. 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. The local NRCS office serving Frelinghuysen Township:

Address: Building 1, 101 Bilby Road, in Hackettstown Commerce Park.

Phone and Website: 908-852-2576, www.nj.nrcs.usda.gov

Staff: Dan Mull, District Conservationist, 908-441-7518, dan.mull@nj.usda.gov¹³⁴

Within one year of selling their development easement, owners of preserved farms are required to develop a Conservation Plan. 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 Frelinghuysen:

- 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 the plans can help make farmers eligible for NRCS and USDA funding. 135

The NRCS "Field Office Technical Guide" contains 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. ¹³⁶ Conservation practices discussed in the Guide that are pertinent for Frelinghuysen 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.

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 will be added, and an additional 18 conservation standards are 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. 137

2. Upper Delaware Soil 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. ¹³⁸

The SSCC coordinates and supports the work of the state's 14 local soil conservation districts (SCDs), including the Upper Delaware SCD. The SSCC are part of the New Jersey Conservation Partnership, which also includes the USDA NRCS and NJAES-RCE. The Upper Delaware SCD 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 SCD 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.

Frelinghuysen farmers may approach this local SCD 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 SCD is involved in review of Conservation Plans and program contracts and must give final approval to both. The Upper Delaware SCD office serving Frelinghuysen farms is:¹³⁹

Address: 51 Main Street, Suite B in Blairstown

Phone: 908-852-2579

District Manager: Sandra Myers, smyers@upperdelawarescd-nj.com

Staff: Tim Matthews, District Forester, Eileen Greason, SESC Inspector Warren County

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

The NJAES-RCE of Warren County provides field and technical research on BMPs for farmers to ensure the long-term viability of the agricultural economy and the natural resources upon which it is based.

The NJAES-RCE of Warren County offers the Agriculture and Natural Resource Management program to provide educational programs and services including soil testing, insect identification, plant disease diagnosis, and pest management recommendations for agricultural operations. ¹⁴⁰ The NJAES-RCE of Warren County is: ¹⁴¹

Address: Warren County Administration Building, Suite 102, 165 County Route 519 South in White Township (mailing address of Belvidere)

County Extension Department Head:

Alayne Torretta, 908-475-6502, torretta@njaes.rutgers.edu

Agricultural and Natural Resources Senior Program Coordinator:

Henry Bignell Jr., hdbignell@njaes.rutgers.edu

New Jersey Department of Environmental Protection

The NJDEP Division of Parks and Forestry oversees the Private Lands Management Program for the stewardship and retention of privately owned productive forest lands. ¹⁴² This includes the private woodlands currently under Farmland Assessment, which totaled 228,000 acres statewide in 2020. ¹⁴³ Many properties in Frelinghuysen that are farmland assessed include woodland tracts, especially in the northern portion of the Township. Such tracts were added as "farm products" in the 1970s. 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. ¹⁴⁴

The Division of Parks and Forestry, Bureau of Forest Management (BFM), reviews farmland assessment applications that include WMPs prepared for farmers by private consultants. The BFM maintains a list of foresters approved for this purpose. ¹⁴⁵ 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.

Non-appurtenant woodlands are woodland acreage on a farm over and above total farmed acreage (tilled and pasture). For example, 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 Frelinghuysen for 2019, there were 2,173 acres of non-appurtenant (or unattached) woodland acres in farmland assessment. The total of non-appurtenant woodland acres in 2019 was down from 2010 when there were 2,415 acres. The 2019 non-appurtenant acres are up from 2000 when there were 2,101 acres, and in 1990, when there were 2,152 acres in farmland assessment in Frelinghuysen. (Table 25)

Table 25. Woodlands in Frelinghuysen Township					
Year	Non-Appurtenant Woodlands (acres)	Appurtenant Woodlands (acres)			
2019	2,173	1,773			
2010	2,415	1,931			
2000	2,101	2,567			
1990	2,152	2,369			
Source: Farm	land Assessment (SADC)				

Appurtenant woodlands are woodland acreage on a farm, less than or equal to, farmed acreage. 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 Frelinghuysen for 2019, there were 1,773 acres of appurtenant (or attached) woodland acres in farmland assessment, down from 2010 when there were 1,931 acres. In 1990, there were 2,369 appurtenant acres in farmland assessment in Frelinghuysen.

The NJDEP's Nongame and Endangered Species Program administers 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. 148

USDA, Forest Service's Forest Stewardship Program

The United States Forest Service (USFS) sponsors the Forest Stewardship Program (FSP), administered locally by the 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. ¹⁴⁹ This program supports landowners whose property has a FSP that recognizes and manages the wetlands, wildlife, aesthetics, soil, and water in addition to the woodlands on the property. 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. ¹⁵⁰

As of 2020, 184 properties covering 9,891 acres in Warren County are enrolled in FSP¹⁵¹ and Frelinghuysen contained 461 acres of farmland on nine different properties. The New Jersey Forest Service Northern Region office is: 153

Address: 204 Main Street (Route 206 N), Andover, NJ 07821

Phone: 973-786-5035

Website: https://www.state.nj.us/dep/parksandforests/forest/stw_inc_prog.html

North Jersey Resource Conservation and Development Council (NJRC&D)

The Resource Conservation and Development Program (RC&D) began in 1962 to "help people care for and protect their natural resources to improve an area's economy, environment, and living standards." 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 natural resources through responsible management. In more recent years, the program has expanded into Warren County with the certification of two farms in the past five years. ¹⁵⁴ 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 BMPs 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. The Frelinghuysen agriculture community has the support of a variety of committees and organizations, including the Frelinghuysen Township Farmland Preservation Advisory Committee (FPC). Other local committees and organizations include the Warren County Board of Agriculture, New Jersey Farm Bureau, 4-H, Future Farmers of America, and the Warren County Farmers Fair. Regional non-profit organizations include the Ridge and Valley Conservancy, 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 agrichemical 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.¹⁵⁵

These grants fund soil and water conservation projects approved by the Upper Delaware Soil Conservation District (UDSCD), with the program administered by both the UDSCD and the local NRCS office in Hackettstown. Once the District deems the conservation project necessary and feasible, applications are forwarded to the 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 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. Program contact: 156

SADC: David Clapp or David Kimmel

Phone, Email: 609-984-2504, 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 Warren 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). 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). These programs are administered by the local NRCS office in Hackettstown, and the 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. 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." Since a significant acreage of field crops such as corn and soybeans are grown in Frelinghuysen, 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:

- Increases 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.
- Increases funding for EQIP, the Agricultural Conservation Easement Program (ACEP), and direct funding for the Regional Conservation Partnership Program (RCPP). 161

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. ¹⁶²

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 steams, 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. ¹⁶³

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. ¹⁶⁴ 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. 165

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.

EQIP is the most popular and widely used conservation program in Warren County. There were 1,285 contracted acres, with 16 contracts in 2019. These contracts totaled \$141,205 (amount available, not paid out). While some farms in Frelinghuysen may be assisted through EQIP, the number of farms enrolled is not tracked on a municipal level. 166

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; NJRC&D was the most recent Warren County recipient of such a grant in 2019 worth \$74,995 to assess the use of short season variety corn and soybeans to facilitate adoption of multi-species cover crop. ¹⁶⁷

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. ¹⁶⁸

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. Frelinghuysen is situated in focal areas for two out of three target species in New Jersey, the Golden Winged Warbler, and the American Black Duck. 169

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). 170

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.¹⁷¹

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. 172

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), and 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. In April 2020, the NRCS announced investment in 48 projects totaling \$206 million; none of these projects reside in New Jersey. The most recent New Jersey projects that were awarded funding were in 2018:

- Columbia Dam Removal and Restoration on Paulins Kill (\$567,000) Plan to remove the Columbia Dam and a downstream remnant dam to restore and reconnect habitat for diadromous fish species.
- Black River Gateway Soil and Water Protection (\$922,000) Plan to preserve farms in the Black River. 173

C. Water Resources

1. Supply Characteristics

Most of the Township falls within the Valley and Ridge Physiographic Province. The Valley and Ridge Province contains a series of northeast-to-southwest running sandstone ridgelines with limestone valleys in-between. A small portion of the southern and eastern sections of

Frelinghuysen Township lies within the Highlands Province. Jenny Jump Mountain and High Rock constitute most of this section in Frelinghuysen. The physiographic and geologic layout of Frelinghuysen dictates water supply, availability, and recharge, as well as location of agriculture. As discussed in the 2012 *Frelinghuysen Environmental Resource Inventory:*

"The Paulins Kill watershed has the most developed centers but is also known for its agriculture and forested areas. Water quality ranges from fair to good. Land use in the Pequest watershed is heavily forested and agricultural. Pollution from crop lands and animal holdings has been on the decline but is often offset by the effects of suburban runoff, resulting in increased stream temperatures and elevated levels of sediment, bacteria and phosphorus." 174

The necessity of clean and plentiful water, and its precariousness, is clearly stated in the 2005 *Warren County Strategic Growth Plan*. The Plan indicates that "groundwater and surface water quality in Warren County is generally good. Groundwater accounts for all drinking water in the county. While groundwater quality is good, there are some areas identified for actual or potential well contamination." Some potential contamination sources are pesticides, which are used in agriculture and at private residences, and underground storage tanks for various substances such as gasoline and diesel fuel. Underground storage tanks are sometimes used on farms as fuel sources for equipment.

The 2018 Warren County Open Space Plan indicates the importance of agriculture to the water resource by stating,

"Sixty percent of Warren County is deep, non-stony soil, well suited for farming and community development etc. These areas also provide scenic vistas and watershed protection. Agricultural landowners should be encouraged to participate in the Farmland Preservation Program, to help ensure the viability of agriculture as a land use and economic activity while preserving them as open or undeveloped land areas. The remaining 40 percent is soil so stony, steep, shallow or wet that it is not suited for development." The Plan also states that "Areas designated for open space can protect many natural resources, such as the quality and quantity of surface and groundwater, cultural and historic areas, and view sheds associated with ridge tops." ¹⁷⁶

2. Agricultural Demand & Supply Limitations

Agricultural lands are identified as cropland harvested, cropland pastured, woodland, equine, and permanent pasture. The most recent farmland assessment data in 2019 listed Frelinghuysen's total agricultural acreage at 8,495. About 26% of this total is harvested cropland, land that requires the most amount of water for production.

Frelinghuysen's water demand for agricultural use stems primarily from the production of water-intensive crops such as alfalfa, corn, and soybeans, which comprise 99% of the field crops grown in the Township. However, because of the region's climate, none of the township's field crops are labeled as irrigated.

Both population increases and agricultural irrigation can affect Frelinghuysen's water supply. From 2015 to 2017, Frelinghuysen experienced a decline of 60% in total irrigated acres. ¹⁷⁷ This suggests that climate conditions or shifts in production contributed to the decline in irrigation, reducing the pressures on water sources caused by this activity. In terms of population pressures, data indicates that the rate of permits, while slowing, are still increasing in Frelinghuysen. Increased pressure from development and the concomitant demands on water supplies are being felt by Frelinghuysen 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, adversely impacting the region due to the fluctuations in natural water distribution.

3. Water Conservation and Allocation Strategies

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. ¹⁷⁸ The dominant crops in Frelinghuysen are hay, corn, and soybeans. These crops rely on rain and some groundwater for water needs, making water conservation strategies difficult to implement. For the more water intensive nursery, greenhouse, and produce farming, it is possible to implement conservation strategies such as drip irrigation, water reuse, or watering crops in the cooler parts of the day. At least one farm in the Township employs drip irrigation. However, since vegetable, fruit, and nursery agriculture are minor to hay, corn, and soybeans, the positive effects and opportunities of water conservation efforts for the Township are minimal. Total irrigated acres in Frelinghuysen increased from zero acres in 2005, to 8 acres in 2017, with 7 of these acres being used for vegetables. Water conservation strategies may become more important as irrigation in Frelinghuysen grows.

Frelinghuysen falls in the scope of the Highlands Act and so has access to water resource studies. Frelinghuysen can benefit from analyses done for neighboring communities within the Highlands, and the use of stream base flow monitoring 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.¹⁷⁹

The NJDA encourages farmers to implement water-management practices as a routine part of their conservationist approach to agriculture. The faculty of NJAES-RCE publishes annual crop production recommendation guides for multiple crop groups that include irrigation guidelines and 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. ¹⁸⁰ Farmers can use floats and timers to eliminate the needs for constantly running water to keep troughs full for livestock.

The Office of the New Jersey Climatologist at Rutgers University operates the 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. ¹⁸¹

D. Waste Management Planning

Livestock farmers in Frelinghuysen may opt to participate in SCD/NRCS conservation programs that cost share the creation of animal waste facilities on their farms. By building these temporary holding tanks, usually concrete, the farmer accomplishes two purposes: preventing 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. ¹⁸²

Animal Waste

Waste production from horses and cows is a continuous focal point of conservation practice in the Township. 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. For dairy farms, however, manure concentration and distribution are less of a concern because of the relatively large land area dedicated to those operations assuming that manure is managed and applied in an appropriate manner and in accordance with New Jersey state regulations. 184

Many farmers have "Nutrient Management Plans" to manage the manure generated on their farms. ¹⁸⁵ For 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 (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. ¹⁸⁶ 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. ¹⁸⁷

In general, self-certified waste management plans will be coordinated through the Rutgers New Jersey Agricultural Experiment Station Cooperative Extension (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 Inventive 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). 188

Recycling

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

- Warren County Recycling Center 500 Mt. Pisgah Avenue, Oxford, 908-453-2174. This facility is open to all Warren County residents and accepts #1-#7 plastics in addition to glass bottles and jars and aluminum, tin, steel, and bimetal cans. 189
- The Recycling Center of North Jersey 48 Hope Road, Blairstown, 908-362-1255. This facility accepts comingled glass and plastics, all types of metal and aluminum. ¹⁹⁰
- Warren County District Landfill 500 Mt. Pisgah Avenue, Oxford. 908-453-2174. This facility accepts tires on a "daily basis" between 8:00 am 3:30 pm. Proof of Warren County residency is required. Charges range from \$2.50 for each automobile tire up to 22" to \$10.00 for each farm equipment tire up to 50". ¹⁹¹

In the past, Warren County has organized "Tire Amnesty Day," which provided opportunities for farmers to dispose of their used tractor tires for free. ¹⁹² 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 farmer. ¹⁹³

E. Energy Conservation Planning

In January 2010 (P.L. 2009, c.213) allows 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, amount of farm acreage that can be devoted to such facilities, local and State approvals. ¹⁹⁴

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. ¹⁹⁵ Frelinghuysen farmers can take advantage of this initiative by applying for the financial incentives to implement energy efficient improvements to their farms and operations. The Rural Energy for America Program (REAP) funds grant and loan guarantees to agricultural producers for assistance in purchasing renewable energy systems. Renewable energy systems include generation from: biomass, geothermal, hydropower, hydrogen, wind, and solar. ¹⁹⁶

The NRCS also 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. ¹⁹⁷

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. The New Jersey Board of Public Utilities 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. Solar generating facilities are also allowed on unpreserved farms and the SADC has provided AMP (agricultural management practices) for these facilities. 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.
- Facilities 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.²⁰¹

Wind Energy

According to the NJDA, the northwest part of New Jersey, which includes Warren County, has ample and consistent enough wind power to make turbine energy feasible. New Jersey and Frelinghuysen 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 2011.²⁰²

In Frelinghuysen, a wind turbine would be deemed an accessory use under current land development regulations and thus would require a height variance. ²⁰³ This, along with Warren County's embrace of alternative energies through the New Jersey's Clean Energy Program, indicates Frelinghuysen's willingness to consider alternative energy source.

Incentives and Assistance for Terrestrial and Small Wind Systems include the Renewal Energy Incentive Program (REIP) and the Anemometer Loan Program, administered by Rutgers and four other state universities. The program is funded by the United States Department of Energy Wind Powering America Program and funds provided by the NJ Board of Public Utilities Office of Clean Energy Program. By measuring wind power at the target location, the anemometers help determine the economic feasibility for wind turbine installation. Target market includes municipalities, farms, residential and small commercial customers. Both Rutgers and Rowan University have waiting lists for anemometer loans. Currently, anemometers are installed on farms as close to Frelinghuysen as Hackettstown and Long Valley.

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. Frelinghuysen farmers can find the program eligibility requirements and the program's financial incentives in the CHP-FC Program Guide.²⁰⁵

Ethanol and Pelletized Switchgrass

Corn, the second most dominant field crop in Frelinghuysen, 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 Frelinghuysen farmers, and another source of clean energy.²⁰⁶

Biodiesel

Biodiesel, made from the oils of soybeans, is an alternative to petroleum diesel. The Environmental Protection Agency reported a record 2.1 billion gallons of biofuel were consumed in 2015. Countywide, soybean production has nearly doubled since 2011, from 221,000 bushels to 430,000 bushels in 2015. Warren County leads northern New Jersey in soybean production. Frelinghuysen can utilize its soybean production to maximize the benefits of its third largest field crop. While no bio-diesel producers are available nearby, several retailers operate within the region, including:

- Dixon Energy 99 Cobb St. Rockaway, NJ, 973-334-1000
- Wooley Fuel Co. 12 Burnett Ave. Maplewood, NJ, 973-762-7400
- Quarles 1046 N Godfrey St. Allentown, PA, 877-444-3835²⁰⁷

Biogas

In 2020, New Jersey ranked 30th 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. ²⁰⁸

Renewable Energy Grant Programs

New Jersey's Clean Energy Program: Administered by the New Jersey Board of Public Utilities, 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.

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. Solar projects are no longer eligible for REIP incentives. Those who sought assistance for solar projects used to register for Solar Renewable Energy Certificates (SREC) through the SREC Registration program (SRP).²⁰⁹ Since the Spring of 2020, those who seek to register solar projects do so through the Transition Incentive Program (TI).²¹⁰

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.²¹¹

New Jersey Smart Start Buildings: Operated by the New Jersey Board of Public Utilities, 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.²¹²

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.²¹³ 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 Frelinghuysen farmers are those derived from waste material such as crop and animal wastes.²¹⁴

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.²¹⁵

F. Outreach and Incentives

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

As competing uses impact farmers in Warren County and in Frelinghuysen, education, outreach, and regional coordination will become more integral to the success of farming operations.



Chapter 8. Agricultural Industry, Sustainability, Retention, & 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 CADBs. ²¹⁶

The SADC works to maximize protection for commercial farmers under the RFA by developing AMPs, 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 Warren County CADB at the request of a commercial farmer.²¹⁷

As of 2020, the SADC had 12 AMPs in place, the latest being an AMP for On-Farm Direct Marketing Facilities, Activities, and Events, adopted April 7, 2014. The SADC lists 15 site-specific AMPs for Warren County, all of which the Warren CADB resolved.²¹⁸

All right to farm complaints or issues that are brought before the Warren 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 Warren 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 Warren CADB may be appealed to the SADC, and final SADC determinations may be appealed to the New Jersey Superior Court, Appellate Division.²¹⁹

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 Right to Farm 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.
- Requiring notification to homeowners purchasing a home in a new subdivision where active agriculture occurs on adjacent property.

Right to Farm ordinances are a necessary item for municipalities that wish to enter the Farmland Preservation Program. Frelinghuysen adopted its Right-to-Farm Ordinance (Ord. No. 2007-14) 2007. (**Appendix C**)

The Ordinance states that "this section shall not be construed as a zoning ordinance and does not supersede any zoning ordinance and the rights and privileges arising from said ordinance. It is the intent of this section to prohibit farming from being found to be a nuisance when practiced according to customary farming practices."²²⁰

To protect its farmers, the Frelinghuysen Township Right to Farm Ordinance requires for all zoning districts where agriculture is a permitted use that each deed of conveyance of land will include the following: "The Township of Frelinghuysen acknowledges that a substantial quantity of land is devoted to active agricultural uses and further acknowledges the right of that landowner to continue to farm. Therefore, the grantee, his heirs and assigns are hereby on notice that the adjoining land or lands in the vicinity are actively being farmed and the other farmland owner has the continued right to farm." Furthermore, these activities can take place on holidays, weekdays, and weekends at any time of the day or night²²¹

The Ordinance declares the right to farm to be a "permitted use in all zones of this township." Here the protected farming activities under Frelinghuysen Township's Right to Farm Ordinance are:

- Production of agricultural and horticultural crops, trees, apiary and forest products, livestock, poultry, and other commodities as described in the Standard Industrial Classification for agriculture, forestry, fishing, and trapping.
- Housing and employment of necessary farm laborers
- Erection of essential agricultural buildings, including those dedicated to the processing and packaging of the output of the commercial farm and ancillary to agricultural and horticultural production.
- The grazing of animals and use of range for fowl.
- Construction of fences.

- The operation and transportation of large, slow-moving equipment over roads within the Township.
- Control of pests, including but not limited to insects and weeds, predators and diseases of plants and animals.
- Conduction of agriculture-related educational and farm-based recreational activities provided that the activities are related to marketing the agricultural or horticultural output of the commercial farm and permission of the farm owner and lessee is obtained.
- Use of all equipment, including but not limited to irrigation pumps and equipment, aerial and ground seeding and spraying, tractors, harvest aides, and bird control devices.
- Processing and packaging of the agricultural output of the commercial farm.
- The operation of a farm market with attendant signage, including the construction of building and parking areas in conformance with Township standards.
- The operation of a pick-your-own operation with attendant signage.
- Replenishment of soil nutrients and improvement of soil tilth.
- Clearing of woodlands using open burning and other techniques, installation, and maintenance of vegetative and terrain alterations and other physical facilities for water and soil conservation and surface water control in wetlands areas.
- On-site disposal of organic agricultural wastes.
- The application of manure and chemical fertilizers, insecticides, and herbicides.
- Installation of wells, ponds, and other water resources for agricultural purposes such as irrigation, sanitation, and marketing preparation.

An additional purpose of the Ordinance is to "promote a good neighbor policy by advising purchasers and users of property of adjacent to or near commercial farms of accepted activities or practices associated with those neighboring farms. It is intended that, through mandatory disclosure, purchasers and users will better understand the impacts of living near agricultural operations and be prepared to accept attendant conditions as the natural result of living in or near land actively devoted to commercial agriculture or in an agricultural development area."

Frelinghuysen's Right to Farm Ordinance does not specifically list some of the suggested activity rights in the SADC Model Right to Farm Ordinance. These include:

- Housing of farm laborers
- Erection of essential agricultural buildings
- Conduction of agriculture-related education and farm-based recreation activities
- Farm-market and pick-your-own signage
- Installation of wells, ponds, and other water resources
- Engage in renewable energy (biomass, solar, wind) ²²²

The RTF Ordinance includes the Agricultural Mediation Program, which is a process where an impartial mediator can help disputing parties solve issues. This program was established by the State Agricultural Development Committee as a voluntary process to examine mutual problems, identify and consider options, and come to a solution.

Frelinghuysen's Township's FPC 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 FPC or Township officials to try to resolve issues before engaging the formal processes of appeals to the Warren CADB or the SADC.

2. Farmland Assessment

The Farmland Assessment program is a tax incentive that reduces property taxes on active commercial farmed land. 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 recently 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, and effective as of tax year 2015, must submit proof of sales or clear evidence of anticipated gross sales along with the FA-1 application form.
- 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 \$0.50 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.
- The property owner must represent that the land will continue in agricultural or horticultural use to the end of the tax year. ²²³

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

There are 8,495 acres in Frelinghuysen devoted to agricultural and horticultural usage. Within these 8,495 acres, 4,490 are in agricultural use as either cropland or pasture. The remaining 4,005 acres are woodland/wetland areas or equine boarding/rehabilitation or training operations.²²⁴ According to New Jersey Farmland Assessment data from 2009 to 2019, general trends indicate:

- From 2009 to 2019 total assessed acreage decreased 12% from 9,680 acres to 8,495 acres.
- Harvested cropland decreased 9% from 2009 (3,076 acres) to 2019 (2,805 acres).
- Pastured cropland decreased 32% from 2009 (619 acres) to 2019 (420 acres).
- Permanent pasture decreased 12% from 2009 (1,442 acres) to 2019 (1,265 acres).

- Total acreage in active agricultural use (cropland harvested, cropland pastured, and permanent pasture) decreased 12.6% in 2009 (5,137 acres) to 2019 (4,490 acres).
- Woodland/wetland acreage decreased 12% from 2009 (4,480 acres) to 2019 (3,947 acres).
- Equine acreage decreased 6% from 2009 (63 acres) to 2019 (59 acres).

By making agriculture more profitable and viable, tax incentives will help to ensure a steady, permanent source of agricultural lands for the Township's farmland preservation efforts. The Township considers the assessment procedure as essential to continued agricultural success and supports the law in its current form.

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. 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 Frelinghuysen's strong agricultural base requires support on many fronts, one of which is flexibility in government regulation. ²²⁵

- 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).
- 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 Warren County and Frelinghuysen Township farmers.
- Agriculture-Friendly Zoning: This refers to a comprehensive land use practice that
 coordinates zoning and land use policy in a proactive way which encourages
 agribusiness, while at the same time reducing the incidence of farmer-homeowner
 nuisance issues.

2. Agriculture Vehicle Movement

Frelinghuysen farmers need to move heavy, slow-moving agricultural equipment over local, county, and sometimes state roads to access unconnected fields and barns. The township's residents also need to commute to workplaces, or drive to area destinations for shopping, town sports, and social activities, at a pace much faster than the slow-moving agricultural equipment.

These different transportation paces can, and do, cause conflict between Frelinghuysen's farmers and suburban dwellers, while creating unsafe road conditions as residents and farmers "compete" for road space.

Since many farm vehicles travel over local municipal roads, municipalities should continue to support local agricultural business' right to do so. The SADC model Right to Farm ordinance recognizes, as a specific right, the operation and transportation of large, slow-moving farm equipment over roads. Frelinghuysen Township does include slow-moving equipment as a protected farming activity in their Right-to-Farm ordinance.

Signage alerting fast-moving cars to possible movement, and road crossing, of slow-moving farm vehicles is an additional, effective tool to protect farmer (and automobile passenger) safety. Signage also informs the public at large that agriculture is an important, equal, and permanent fixture of Frelinghuysen life. Where absent or inadequate, appropriate signage can be posted. Township officials may consult with farmers as to what adequate signage is and where it should be posted.

3. Agricultural Labor Housing/Training

An adequate labor supply is integral to harvesting vegetables, fruits, and berries. Measured in farmed acreage, Frelinghuysen has a relatively small industry for these products compared with field crops such as hay, corn, and soybean. Harvesting of the latter farm products is more mechanized, and/or not as labor intensive as produce, with most work being done by farm family members. ²²⁶ As of 2017, only 65 acres in Frelinghuysen Township were devoted to fruits, berries, and vegetables, while 2,699 acres were devoted to field crops and nursery products. Since the overall acreage devoted to labor intensive farming is small in Frelinghuysen, 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.

In recent years, problems that face New Jersey Employers persist as the wage (\$10.30/hour) for agricultural employers as of January 1, 2020. It is expected to increase to \$15.00/hour by 2027.²²⁷ The cost of labor in New Jersey is a significant issue for some farming sectors such as produce, and one that needs further consideration for its effect on agriculture in New Jersey, Warren County, and Frelinghuysen.

Agricultural Labor Housing

Since the overall acreage in Frelinghuysen dedicated to the intensive labor is few, likewise, the demand for agricultural labor housing is scarce. There are no seasonal labor housing structures in the Township.

Farmer Education and Training

To sustain a modern, diverse, and stable food and agricultural industry, education and progressive ongoing training for farmers promotes a more efficient and productive business environment.

The **NJAES-RCE** of Warren County provides one-on-one, on-site consultations with farmers to assist with control of insect infestations and plant diseases for fruits. NJAES of Warren County also provides practical assistance to farmers, such as assistance with obtaining pesticide application licenses and water certification and registration permits from the NJDEP.

The **Warren County Community College** teaches crop monitoring for precision agriculture techniques in their photogrammetry class. The College would be willing to explore the possibility of setting up college-level or continuing education courses if requested to so by the Warren CADB, or the wider agriculture community.²²⁸

NOFA-NJ offers educational programs for farmers of all ages and skill sets, including a Beginning Farmer Program. Other educational programming includes organic gardening, permaculture design certification, business courses, technical assistance, and farm-to-table workshops.²²⁹

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.²³⁰

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. ²³¹ The NJDA hosts a web page with links and information on Agricultural Education, geared mostly toward teachers but also listing conferences and other information of potential education interest to farmers. ²³²

The NJFB also hosts educational meetings and provides educational information for farmers on its website about legislative issues, farmland preservation, and labor resources.²³³

Youth Farmer Education Programs

According to the *Census of Agriculture*, the farmer population in Warren County is getting older, with an increase of 2.2 years of an average age of 59.4 in 2017 versus 57.2 in 2007.²³⁴ The nationwide average age of operators in 2017 was 58.6, less than a one-year difference compared to Warren County.²³⁵ In 2017, there were 83 farmers (5.5%) out of 1,516 farmers in Warren County who were under the age of 35.²³⁶

Due to the aging farmer population, the next generation of the county's farmers needs to become interested in, and exposed to the business of agriculture, and prepared to enter the industry. At the post-secondary level, neither Centenary University nor Warren County Community College offer agriculture education courses, but Centenary University does offer programs in Equine Sciences and Equine Studies. Typically, students who enter programs in natural sciences (biology, chemistry, etc.) at these schools can also adapt their degree plan to include elements of business, economics, and resource management to receive a well-rounded education that can translate to practical use on Frelinghuysen farms. ²³⁸

The closest post-secondary institutions to Frelinghuysen Township that offer programs relating to agriculture and horticulture are:

- 11 miles Sussex County Community College, One College Hill Road, Newton.
- 22 miles County College of Morris, 214 Center Grove Road, Randolph.
- 53 miles Bergen County Community College, 400 Paramus Road, Paramus.
- 69 miles Mercer County Community College, 1200 Old Trenton Road, West Windsor Township.

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.²³⁹

Future Farmers of America (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. ²⁴⁰ The National FFA has 8,612 chapters and 700,170 members aged 12-21 in all 50 states. ²⁴¹ In 2020, there were 36 chapters in New Jersey with more than 2,400 members. ²⁴² North Warren Regional High School in Blairstown offers Applied Horticulture/Horticultural Operations ²⁴³ and has a local FFA Chapter. North Warren Regional High School in Blairstown also offers courses in animal science/wildlife management. Based on student interest, the school could consider offering other related courses such as environmental science or agriculture business management. ²⁴⁴

4-H is an informal, practical educational program for youth, which assists young people interested in farm animals through livestock projects. The 4-H Youth Development Program is overseen by the Warren County NJAES-RCE. ²⁴⁵ The 4-H program is led by volunteers that teach about different areas of interest varying from animals, plants, agriculture, and leadership. Within Warren County, all 4-H club members are active in County events such as the Warren County Farmers Fair. ²⁴⁶

There are two local non-profit groups that focus on agricultural issues, the **Foodshed Alliance** in Blairstown and **Genesis Farm** in Frelinghuysen. These organizations are concerned with supporting and promoting sustainable agricultural practices and connecting farming with the community at-large. They also work to foster and train the next generation of farmers in the county.

NJ Farm Link is a program for farmers, new and established, and assists:

- 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.²⁴⁷

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. In 2020 there are 14 farmland listings in Warren County. ²⁴⁸

4. Wildlife Management Strategies

Crop damage from wildlife leads to economic loss for the farmer and is a serious problem throughout Warren County. At present, hunting is about the only effective 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. Encroaching 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. In many instances, this is the only short-term solution to control crop damage. Special hunting options include:

- License exemptions for farm families.
- Special farmer black bear permit.
- Farmer Depredation Permit.
- Deer Management Assistance Program.

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.²⁴⁹

Warren County has also been placed on quarantine by the NJDA, due to an outbreak of the spotted lanternfly. This insect has the potential to damage crop output and has been a concern since at least 2018.²⁵⁰

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. ²⁵¹ 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 was reported as a "severe problem" in Frelinghuysen Township in 2008 and dropped to a "heavy problem" in 2009 aerial defoliation surveys.

Frelinghuysen Township was not included in the surveys from 2010-2014 but returned in 2015 when was reported as only a "heavy" problem in aerial surveys. Frelinghuysen Township was not included in any aerial defoliation surveys since 2015, showing that the invasion has improved through the years, though it is still present in Warren County. ²⁵²

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.²⁵³

Grants and loans are available in three key areas: Business-Cooperative, Housing and Community Facilities (including farm labor housing), and Utilities (including Broadband). ²⁵⁴ 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 2,344 as of July 2019, ²⁵⁵ Frelinghuysen 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.²⁵⁶

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, Warren County Commissioners, and Warren County CADB can work with, and encourage, the New Jersey Legislature to continue to introduce bills that would assist Warren County and Frelinghuysen farmers to remain economically viable.

The New Jersey FSA has both **Direct and Guaranteed Farm Ownership** loans available for farmers, including those in Warren 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. 257 The Hackettstown Service Center handles loans for Warren County. 258

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. ²⁵⁹

Maps

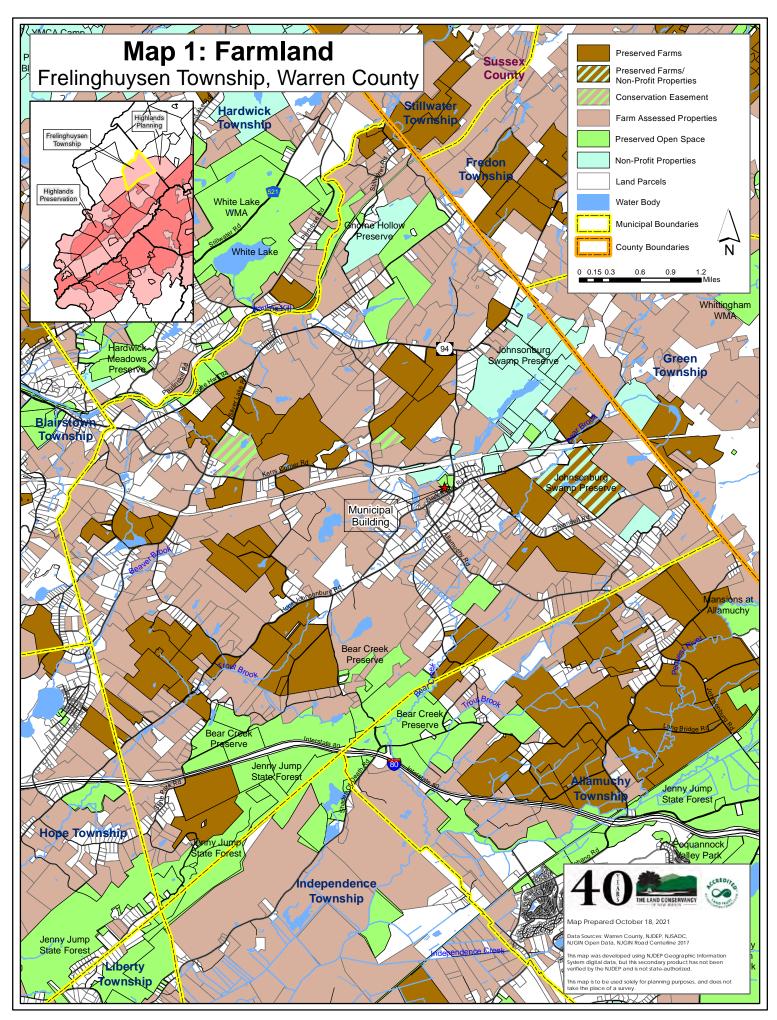
- Map 1. Farmland
- Map 2. Preserved and Public Lands
- Map 3. Agricultural Soil Categories
- Map 4. Agricultural Development Area
- Map 5. Project Area Map

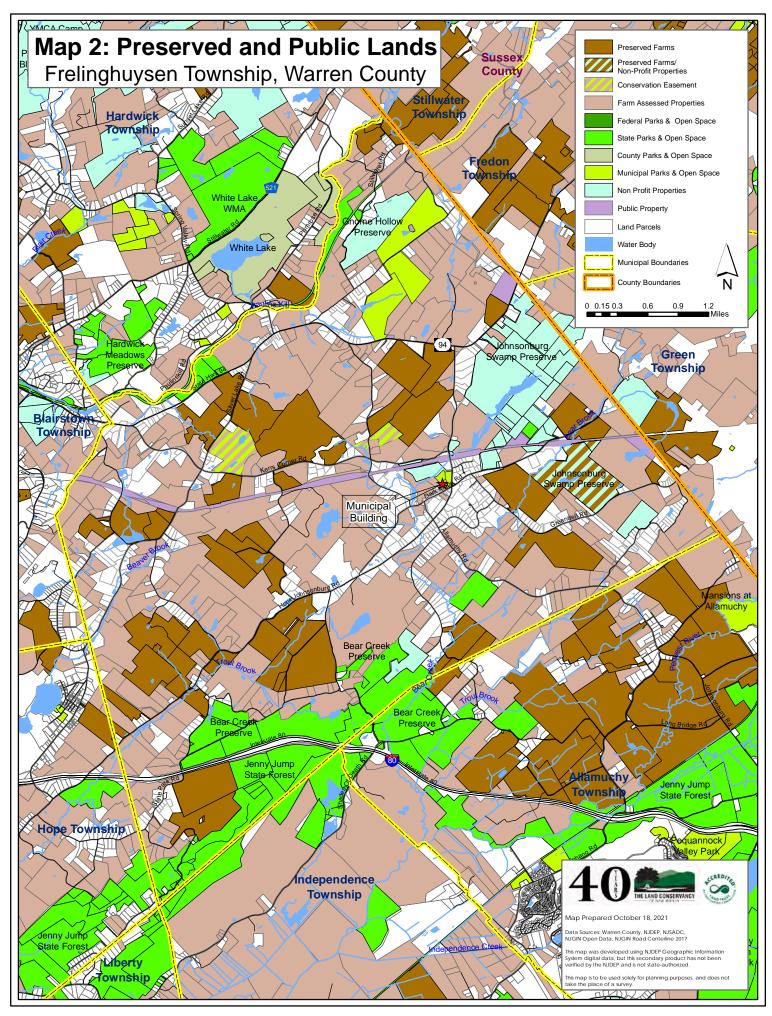
Target Farm Analysis Maps:

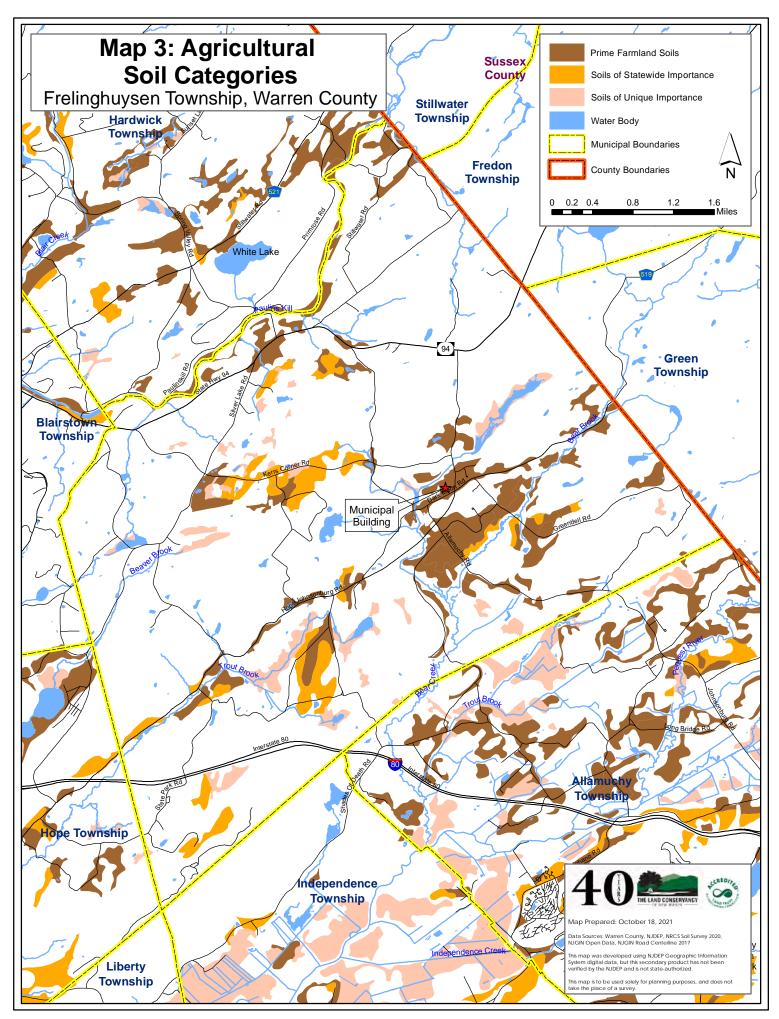
Map A. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Tillable Land

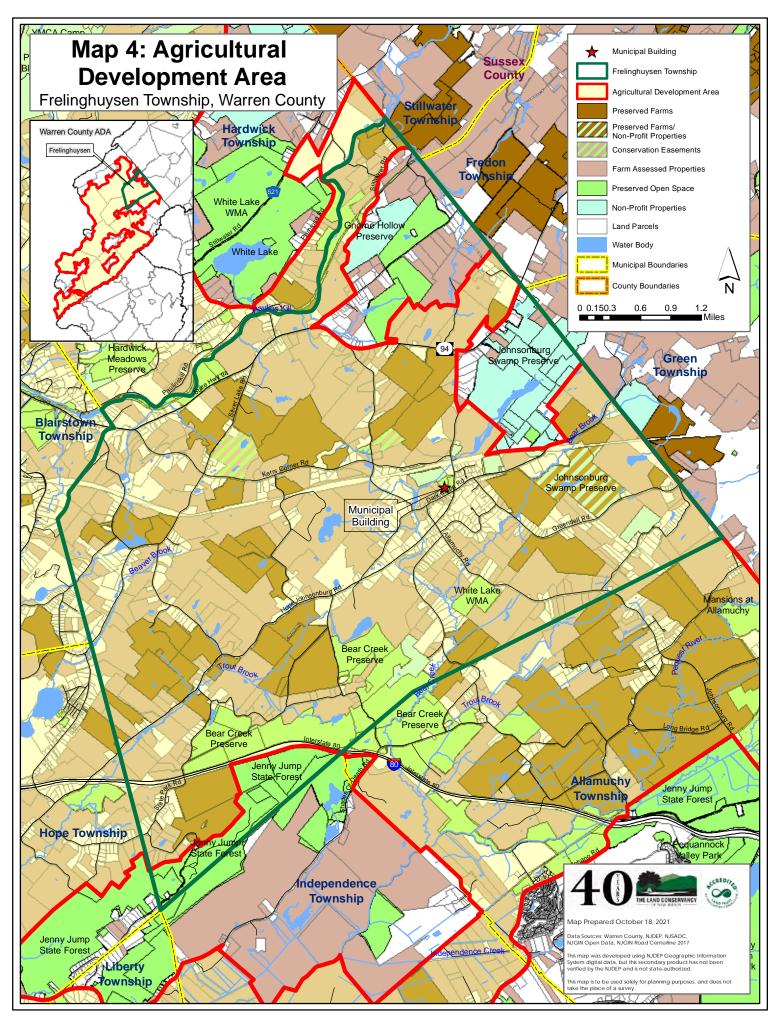
Map B. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Agricultural Soils

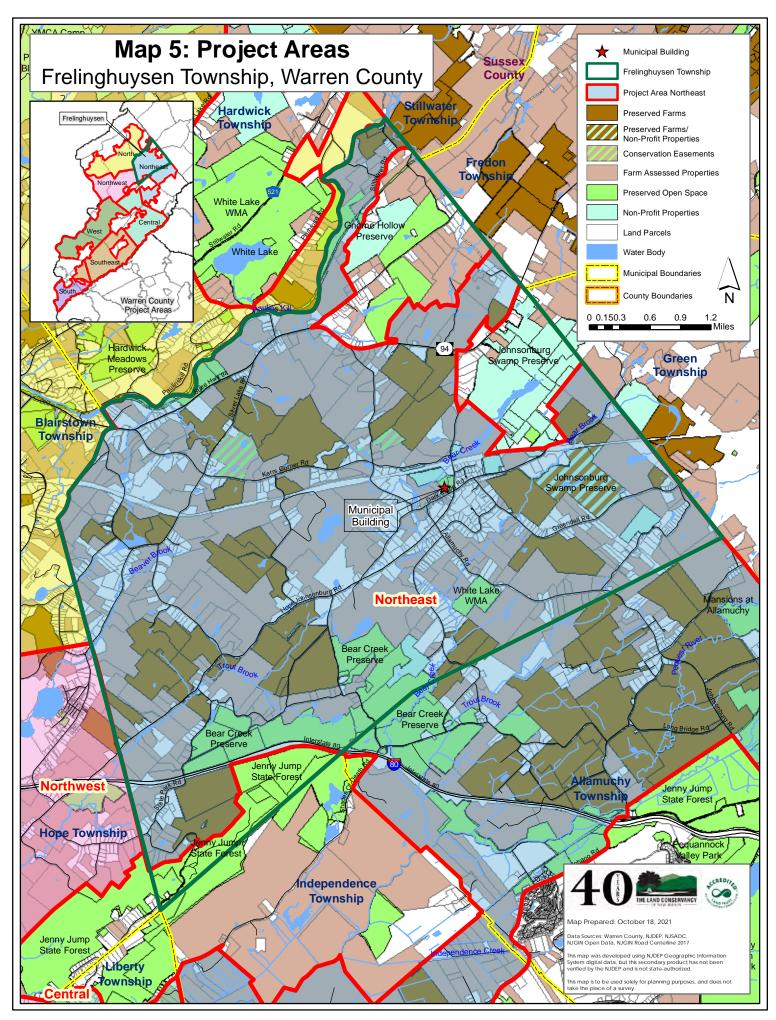
Map C. Target Farms: Potentially Eligible Farm Parcels & Units that meet SADC criteria for Agricultural Soils and Tillable Land

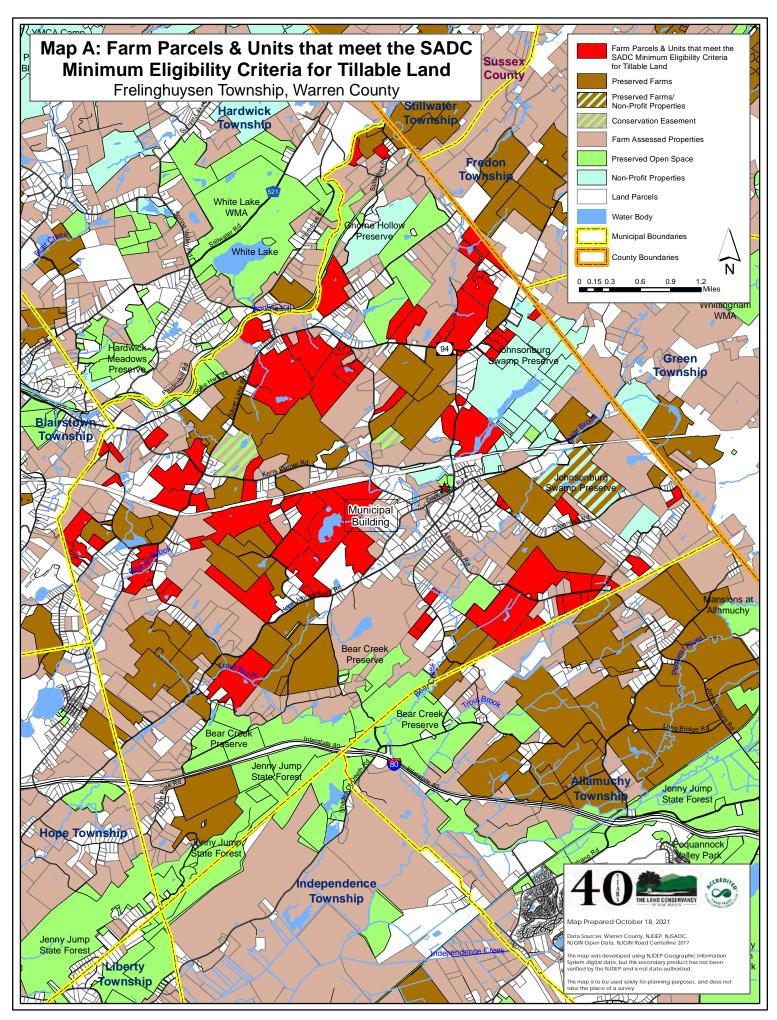


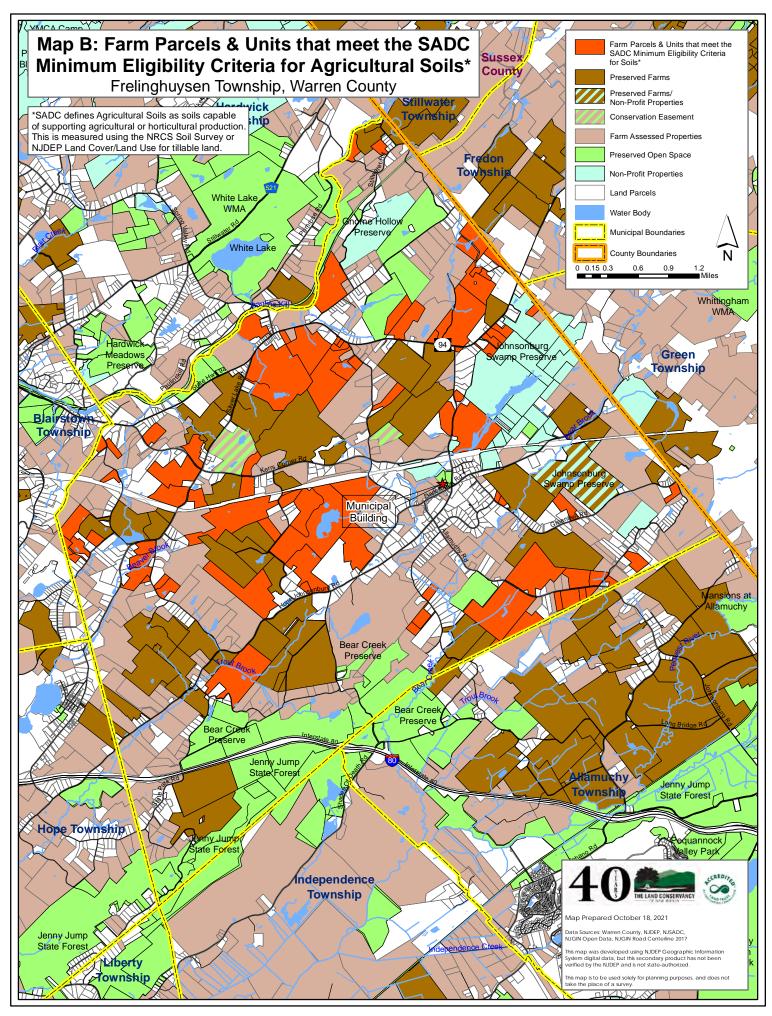


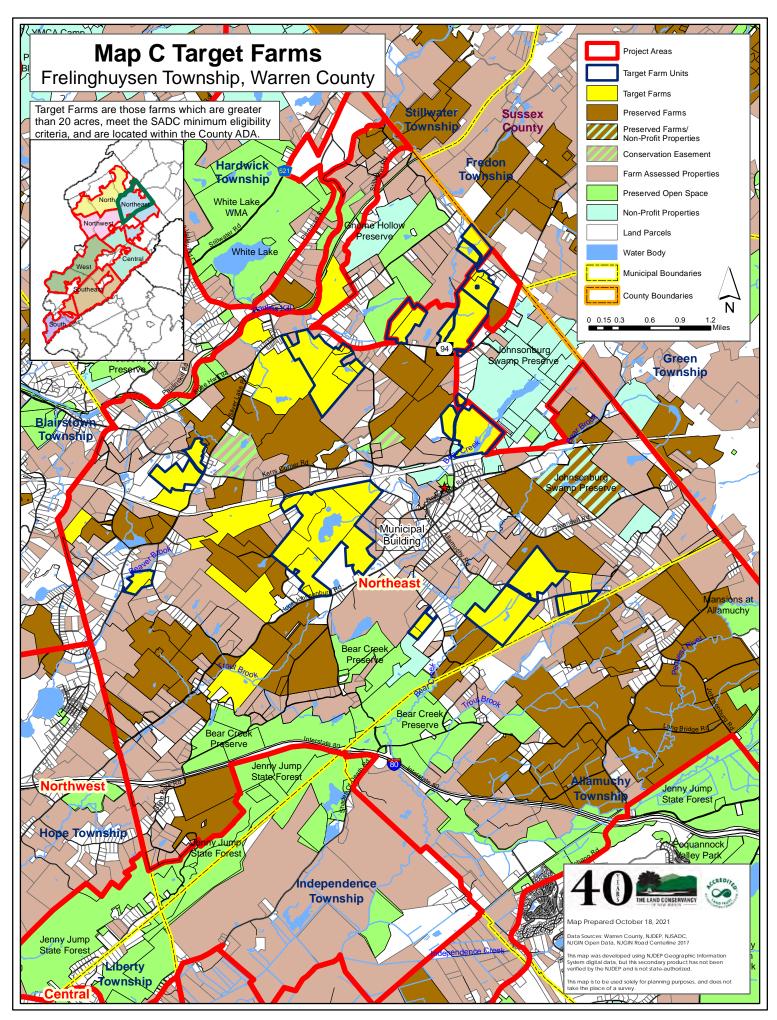












Appendix

Appendix A. Public Meeting Materials

Appendix B. Agricultural Support Services

Appendix C. Frelinghuysen Right to Farm Ordinance (2007)



SADC Guidelines For Developing and Updating Municipal Comprehensive Farmland Preservation Plans

SADC Rules Adopted May 24, 2007 Amended July 25, 2019:

- Provides uniform standards for municipal farmland preservation plans
- Requires the latest data: agricultural statistics, economic development, land use and resource conservation

SADC providing 50% grant to Frelinghuysen Township to complete Plan Update



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2

FARMLAND PRESERVATION PLAN
for the
Time inching of Profite discourse.
County of Warrier

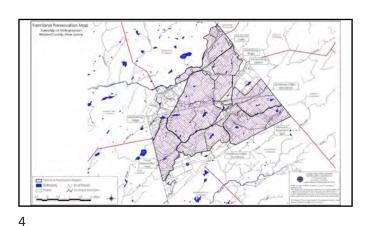
"Command Prison
have the Language Prince to us the "Time"

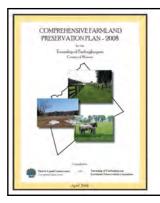
3

2005 Farmland Plan

2005 Farmland Plan:

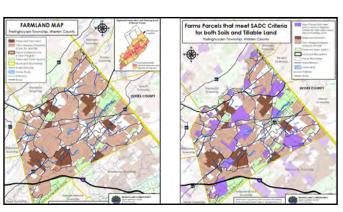
- To "preserve the agricultural economy, environment and landscape"
- Identified seven farming regions:
- Allamuchy Farmland Belt
- Limestone Valley Bear Brook
 Limestone Valley Trout Brook
- Martinsburg Ridge
- Paulins Kill Valley
- Johnsonburg District
- Hope Preservation Area





2008 Farmland Plan Update

- Compliant with 2007 SADC guidelines
- As of 2008, Frelinghuysen had 1,433 acres of preserved farmland
 (14% of total farmland)
- 10-year goal to protect an additional 1,000 acres of farmland











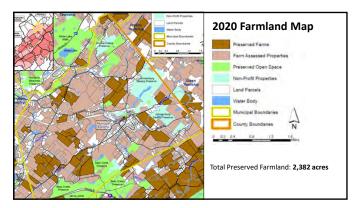
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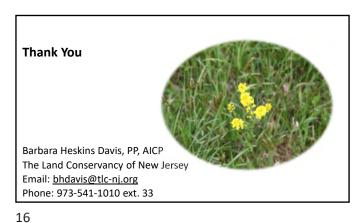




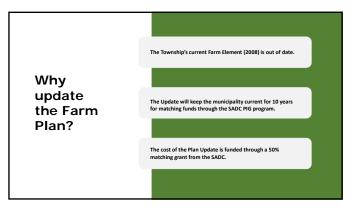












4

MARCH 5	JUNE 17 2020	OCTOBER 4 2021
2020	First Public	Second Public
Kickoff Meeting	Meeting	Meeting
with SADC	(Township Committee)	(Land Use Board)
MAY 202		LY 9 & SEPT 28 21
Site \		aft Farm Plan to linghuysen Twp.

Plan Update
Overview

I Agricultural Land Base V Future Farmland Preservation Program

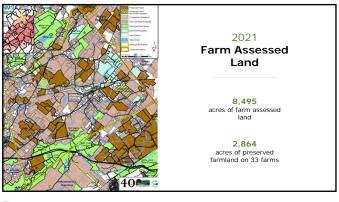
II Agricultural Industry VI Economic Development

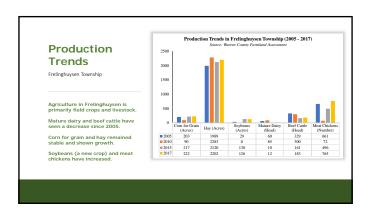
III Land Use Planning VII Natural Resource Conservation

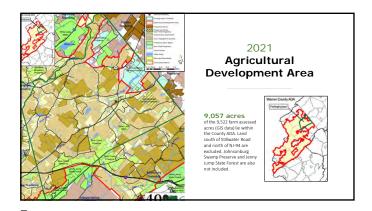
IV Farmland Preservation Program

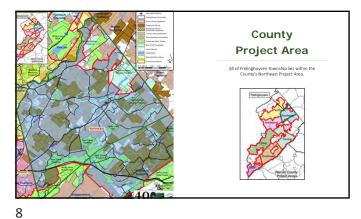
VIII Sustainability, Retention, and Promotion

3









Funding

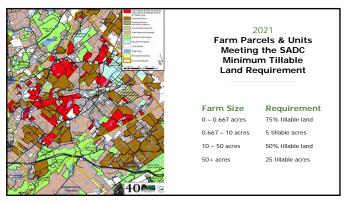
Average price per acre is \$3,882 to purchase a development easement and the estimated municipal cost share is 15%.

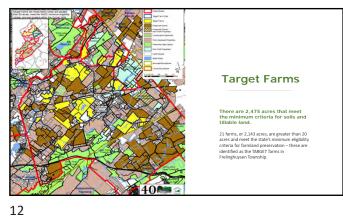
The Warren County OST currently collects a 2 cent tax per \$100 of assessed property value.

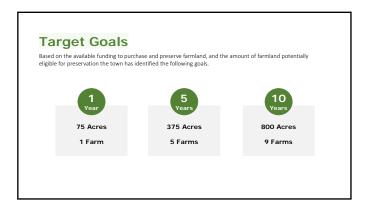
Frelinghuysen Township Open Space and Farmland Preservation Trust Fund
This trust currently collects a 2 cent tax per \$100 of assessed property value and generates an annual revenue of \$58,000. As of June 2021, the Fund had a balance of \$52,482

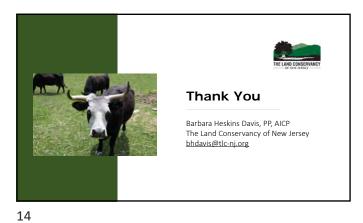


9 10









Agricultural Businesses Servicing Warren County and Frelinghuysen 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 Wrobleski, LLC 5 Whitehall Rd Andover, NJ 07821 Sussex County (973) 347-3888

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

A.A. Matulay PO Box, 539 70 Rt 202 Ringoes, 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/ Colaluce Well & Pump Service 2293 Rt 57 Washington, NJ 07882 Warren County (908) 454-8008 https://www.colalucewell.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 Pelltown 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

Upper Delaware Soil Conservation District 51 Main Street, Suite B Blairstown, NJ 07825 Warren County (908) 852-2579 https://upperdelawarescd-nj.com

NJ County Agricultural Development Boards

Warren County Agricultural Development Board 500 Mt. Pisgah Ave, PO Box 179 Oxford, NJ 07863 (908) 453-3252 https://www.co.warren.nj.us/Land%20Preservati on%20Dept/CADB.html

Rutgers

Cooperative Extension of Warren County 165 County Rd 519 South, Suite 102 Belvidere, NJ 07823 (908) 475-6505 https://warren.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/n j/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.cropgrowers.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 Bloomingdale, NJ 07403 Passaic County (201) 819-6454

Thomas Koeppel PO Box 54 Pequannock, 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.mountainpointeequine.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 07/16/2002 13:58 FAX 9088527621

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CHAPTER XV

FARMING

15-1 THE RIGHT TO FARM.

15-1.1 Findings

- a. The Township Committee finds that farming has existed and been carried on in the Township for hundreds of years and long before the residential development that has since been prevalent in the Township.
- b. The Township Committee further finds that residences have been located in close proximity to existing "working" farms that engage in spraying, the spreading of animal wastes, fertilizing and irrigation as well as other activities which are indigenous to farming.
- c. The Township Committee finds and determines that farmers must be secure in their ability to earn a livelihood and utilize customary farming procedures and techniques.
- d. The Township further finds that whatever burden may be caused to contiguous property owners is offset by the benefits of farming to the Township, County and State, as well as preservation of open space areas within the Township. (Ord. 2/16/81 §1)
- 15-1.2 Intent. This section shall not be construed as a zoning ordinance and does not supersede any zoning ordinance and the rights and privileges arising from said ordinance. It is the intent of this section to prohibit farming from being found to be a nuisance when practiced according to customary farming practices. (Ord. 2/16/81 §2)
- 15-1.3 Recognition of the Right to Farm. The right to farm those lands and properties zoned for that use and properties currently being farmed within the Township is hereby recognized to exist as a right to the farmer, his agents or assigns, to utilize his land and properties in such a manner as to pursue his livelihood, subject only to the restrictions and regulations set forth in the Township, County and State Health Code and Regulations. This right to farm recognizes the use of large irrigation pumps and equipment, aerial and ground seeding and spraying, large tractors, the application of chemical fertilizers, insecticides and herbicides, as well as other customary farm equipment utilized by the farmer for the purpose of

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producing from the land agricultural products such as vegetables, grains, hay, fruits, fibers, wood, trees, plants, shrubs, flowers and seeds. The right to farm shall also include the right to utilize the land for grazing of animals subject to the restrictions for intensive fowl or livestock farms or such restrictions as may be required by County, State and Federal Laws. (Ord. 2/16/81 §3)

15-1.4 Time, Noise and Odors. The activities set forth herein incidental to the right to farm and when reasonable and necessary for that particular farming activity and livestock or fowl production, and when conducted in accordance with generally accepted agricultural practices, may occur on holidays, Sundays and weekdays, and at night and during the day. The noise, odors, dust and fumes that are caused by these activities are recognized as ancillary to the permitted activities set forth in this chapter and the right to farm. (Ord. 2/16/81 §4)

Inventory Tables

Inventory Table 1. Farm Assessed Property in Frelinghuysen Township

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

10.01 38						Farm Parce	el*	Farm Un	ıit**
10.01 38	Block	Lot	Class	Location	Owner's Name				
1401 18.09 3B 142 SOUTH STREET	801	9.02	3B	79 ACKERSON ROAD	ACKERSON, GREGORY R & KAREN A	19.59	21.54		
1801 3 38 106 STATE PARK ROAD	801	10.01	3B	111 ACKERSON ROAD	ALBANESE, ANDREW J & JENNIFER	12.60	13.35		
1602 1 3B 275 ROUTE 661 BANTA, JAMES & LINDA 23.50 24.67	1401	18.09	3B	142 SOUTH STREET	ALPAUGH, GLENN R	5.65	7.60		
901 15 3B 272 MAIN STREET BANTA, JAMES & LINDA 23.50 24.67 7.13 1.00 1 14 3B 214 MAIN STREET BARBOUR, BRUCE 6.63 7.13 7.13 1.70 1 7.01 3B 622 ROUTE 519 BASSETT, TIMOTHY S 4.88 3.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 5.54 2 1.701 7.01 7.01 7.01 7.01 7.01 7.01 7.0	1801	3	3B	106 STATE PARK ROAD	ATTERBURY, ROBERT & LEAH	12.75	15.04		
901 15 3B 272 MAIN STREET BANTA, JAMES & LINDA 23.50 24.67 1010 14 3B 214 MAIN STREET BARSOUR, BRUCE 6.63 7.13 1701 7 3B 622 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 1701 7.01 3B 618 ROUTE 519 BASSETT, TIMOTHY S 0.65 1.77 1701 3B 146 GREENDELL ROAD BAUM, JOHN T JR & ERIKA 15.11 17.21 1302 3.10 3A 139 SOUTH STREET BELL, ANTHONY J 1.10 2.66 101 9 3B 59 ACKERSON ROAD BELLA VITA FARM LLC 14.28 15.20 101 10 3B 87 ACKERSON ROAD BELLA VITA FARM LLC 14.28 15.20 101 10 3B 87 ACKERSON ROAD BELLA VITA FARM LLC 14.28 15.20 101 10 3B 87 ACKERSON ROAD BELLA VITA FARM LLC 14.28 15.20 101 10 3B 230 STATE PARK ROAD BERRY, JAMES W & MARBERN L 7.16 7.42 101 18.12 3B 230 STATE PARK ROAD BERRY, JAMES W & MARBERN L 7.16 7.42 101 18.12 3B 27 DUTCH HILL ROAD BEVACQUA, CHRISTOPHER & DORENE 5.92 9.05 101 18.12 3B 27 DUTCH HILL ROAD BEVACQUA, CHRISTOPHER & DORENE 5.92 9.05 101 18.08 3B 42 ACKERSON ROAD BONZULAK, WILLIAM & HELEN 2.21 2.38 27.77 4 101 18.08 3B 42 ACKERSON ROAD BONZULAK, WILLIAM & HELEN 2.21 2.38 27.77 4 101 18.08 3B 197 STATE PARK ROAD BONZULAK, WILLIAM & HELEN 2.21 2.38 27.77 4 101 18.08 3B 197 STATE PARK ROAD BOYNTON, DAVID C 9.55 9.25 1803 9.07 3B 177 STATE PARK ROAD BOYNTON, DAVID C 9.55 9.25 1803 9.07 3B 173 STATE PARK ROAD BOYNTON, DAVID C 8 PATRICIA D 4.26 4.23 39.38 5 1803 9.09 3B 175 STATE PARK ROAD BOYNTON, DAVID C 8 PATRICIA D 4.26 4.23 39.38 5 1803 9.09 3B 175 STATE PARK ROAD BOYNTON, DAVID C 8 PATRICIA D 4.26 4.23 39.38 5 1803 9.09 3B 175 STATE PARK ROAD BOYNTON, DAVID C 8 PATRICIA D 4.26 4.23 39.38 5 1803 9.09 3B 175 STATE PARK ROAD BOYNTON, DAVID C 8 PATRICIA D 4.50 6.72 1804 9 3B 28 KERRS CORNER ROAD BOYNTON, DAVID C 8 PATRICIA D 4.50 6.72 1805 9 3B 3B 3D	1602	1	3B	275 ROUTE 661	BANTA, JAMES & LINDA	6.06	6.41	21.09	1
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1805 2.07 3B 166 STATE PARK ROAD CHARLES, THOMAS K & RAVO JEAN 5.20 6.01 36.28 9 1805 6 3B 136 STATE PARK ROAD CHARLES, THOMAS K & RAVO JEAN 0.60 0.52 104 9.02 3B 37 HENFOOT ROAD CHIRIP, ANDREW 10.43 11.81 1401 21.02 3B 64 GREENDELL ROAD CHRZAN, WALTER G 7.03 7.02 15.41 10 1401 21.03 3B 58 GREENDELL ROAD CHRZAN, WALTER G 7.31 8.39 15.41 10 602 8 3B 30 CAMP WASIGAN ROAD COLMAN, JEROME I & GLENDA B 22.32 25.46 10 10 10.52 15.41 10 10 10.52 15.41 10 10 10.52 15.41 10 10 10.52 15.41 10 10 10.52 15.41 10 10 10.52 10 10.52 10 10.52 10 10.52 10 10.52 10 10	1805	2	3B	140 STATE PARK ROAD	CHARLES, THOMAS K & RAVO JEAN	30.61	29.75		
1805 6 3B 136 STATE PARK ROAD CHARLES, THOMAS K & RAVO JEAN 0.60 0.52 104 9.02 3B 37 HENFOOT ROAD CHIRIP, ANDREW 10.43 11.81 1401 21.02 3B 64 GREENDELL ROAD CHRZAN, WALTER G 7.03 7.02 15.41 10 1401 21.03 3B 58 GREENDELL ROAD CHRZAN, WALTER G 7.31 8.39 15.41 10 602 8 3B 30 CAMP WASIGAN ROAD COLMAN, JEROME I & GLENDA B 22.32 25.46 902 9.02 3B 340 MAIN STREET CONSENTINO, JUDITH 8.00 10.52 1801 12 3B 510 ROUTE 519 COOKE, SCOTT & DIANE 49.40 50.43 10.52 1801 12 3B 510 ROUTE 519 COOKE, SCOTT & DIANE 49.40 50.43 16.17 16.17 17 10.1 30.02 3B 69 MOTT ROAD CORNELLA, ALEX & RENA A 15.00 16.17 16.17 16.17 16.17 17 10.1 3B 135 SILVER LAKE ROAD CORVINO, RALPH JR & PATRICIA A 9.76 9.55 9.55 10.1 10.1		2.07	3B	166 STATE PARK ROAD		5.20		36.28	9
104 9.02 3B 37 HENFOOT ROAD CHIRIP, ANDREW 10.43 11.81 1401 21.02 3B 64 GREENDELL ROAD CHRZAN, WALTER G 7.03 7.02 15.41 10 1401 21.03 3B 58 GREENDELL ROAD CHRZAN, WALTER G 7.31 8.39 15.41 10 602 8 3B 30 CAMP WASIGAN ROAD COLMAN, JEROME I & GLENDA B 22.32 25.46 902 9.02 3B 340 MAIN STREET CONSENTINO, JUDITH 8.00 10.52 10.5					•				
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602 8 3B 30 CAMP WASIGAN ROAD COLMAN, JEROME I & GLENDA B 22.32 25.46 902 9.02 3B 340 MAIN STREET CONSENTINO, JUDITH 8.00 10.52 1801 12 3B 510 ROUTE 519 COOKE, SCOTT & DIANE 49.40 50.43 1101 3.02 3B 69 MOTT ROAD CORNELLA, ALEX & RENA A 15.00 16.17 801 1.01 3B 135 SILVER LAKE ROAD CORVINO, RALPH JR & PATRICIA A 9.76 9.55 801 9.04 3B 51 ACKERSON ROAD COWBOY REALTY LLC - 6.70 103 11.03 3B 2139 STILLWATER ROAD CRAMER, JARED & OLGA LIBMAN - 6.10 502 13 3B ROUTE 94 DARLING SR, ROBERT L 6.69 6.16 502 26 3B 53 KERRS CORNER ROAD DARLING SR, ROBERT L 14.72 13.47 602 4 3B 112 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 24.70 25.80 602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03					· · · · · · · · · · · · · · · · · · ·			15.41	10
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801 9.04 3B 51 ACKERSON ROAD COWBOY REALTY LLC - 6.70 103 11.03 3B 2139 STILLWATER ROAD CRAMER, JARED & OLGA LIBMAN - 6.10 502 13 3B ROUTE 94 DARLING SR, ROBERT L 6.69 6.16 502 26 3B 53 KERRS CORNER ROAD DARLING SR, ROBERT L 14.72 13.47 602 4 3B 112 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 24.70 25.80 602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12	1101	3.02	3B	69 MOTT ROAD	CORNELLA, ALEX & RENA A	15.00	16.17		
103 11.03 3B 2139 STILLWATER ROAD CRAMER, JARED & OLGA LIBMAN - 6.10 502 13 3B ROUTE 94 DARLING SR, ROBERT L 6.69 6.16 502 26 3B 53 KERRS CORNER ROAD DARLING SR, ROBERT L 14.72 13.47 602 4 3B 112 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 24.70 25.80 602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12	801	1.01	3B	135 SILVER LAKE ROAD	CORVINO, RALPH JR & PATRICIA A	9.76	9.55		
502 13 3B ROUTE 94 DARLING SR, ROBERT L 6.69 6.16 19.63 11 502 26 3B 53 KERRS CORNER ROAD DARLING SR, ROBERT L 14.72 13.47 13.47 11 602 4 3B 112 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 24.70 25.80 37.80 12 602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12	801	9.04	3B	51 ACKERSON ROAD	COWBOY REALTY LLC	-	6.70		
502 26 3B 53 KERRS CORNER ROAD DARLING SR, ROBERT L 14.72 13.47 602 4 3B 112 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 24.70 25.80 602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12	103	11.03	3B	2139 STILLWATER ROAD	CRAMER, JARED & OLGA LIBMAN	-	6.10		
502 26 3B 53 KERRS CORNER ROAD DARLING SR, ROBERT L 14.72 13.47 602 4 3B 112 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 24.70 25.80 602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12	502	13	3B	ROUTE 94	DARLING SR. ROBERT L	6.69	6.16	40.00	44
602 4 3B 112 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 24.70 25.80 602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12								19.63	11
602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12						2			
602 4.05 3B 116 CAMP WASIGAN ROAD DARLING, RONALD W & JAMIE ANN 6.03 6.04 37.80 12	602	4	3B	112 CAMP WASIGAN ROAD	DARLING RONALD W & JAMIF ANN	24.70	25.80		1
		-			· · · · · · · · · · · · · · · · · · ·			37.80	12
				114 CAMP WASIGAN ROAD	DARLING, RONALD W & JAMIE ANN	6.00	5.97	000	_

					Farm Parce	I *	Farm Un	it**
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)	Farm Unit
902	23	3B	190 KERRS CORNER ROAD	DAUGHERTY, CRAIG & DEBORAH	25.37	23.78		
1003	15	3A	223 MAIN STREET	DE CAROLIS, ALAN	1.25	2.30		
1701	13	3B	101 HELLER ROAD	DE CAROLIS, ALAN	5.44	5.69		
1702	1	3B	115 HELLER ROAD	DE CAROLIS, ALAN	13.77	14.00		
1702	1.01	3B	165 HELLER ROAD	DE CAROLIS, ALAN	3.00	3.08		
1702	1.02	3B	171 HELLER ROAD	DE CAROLIS, ALAN	3.00	2.93		
1702	1.03	3B	141 HELLER ROAD	DE CAROLIS, ALAN	7.93	7.90		
1702	1.04	3B	129 HELLER ROAD	DE CAROLIS, ALAN	3.26	4.23		
	3	3B	134 SOUTH TOWN ROAD	DE CAROLIS, ALAN	2.12	2.76	137.19	13
	3.01	3B	128 SOUTH TOWN ROAD	DE CAROLIS, ALAN	3.00	2.19		
	3.02	3B	120 SOUTH TOWN ROAD	DE CAROLIS, ALAN	3.06	2.32		
	4	3B	130 HELLER ROAD	DE CAROLIS, ALAN	69.25	70.08		
	12.01		95 HELLER ROAD	DE CAROLIS, MICHAEL JR & DIANE	16.03	15.20		
1701	12.03	3A	75 HELLER ROAD	DE CAROLIS, MICHAEL JR & DIANE	2.03	2.48		
1701	12.04	3B	69 HELLER ROAD	DE CAROLIS, MICHAEL JR & DIANE	4.00	4.33		
1801	13	3B	ROUTE 519	DE CAROLIS, ALAN	9.20	8.70		
1802	5	3B	70 HELLER ROAD	DE CAROLIS, ALAN	2.02	5.83	8.73	14
1802	5.01	3B	64 HELLER ROAD	DE CAROLIS, ALAN	3.02	2.89	0.73	14
1801	4	3B	74 STATE PARK ROAD	DE CAROLIS, GABRIEL JR & CAROLINE	13.66	12.34		
	4.02		92 STATE PARK ROAD	DE CAROLIS, GABRIEL JR & CAROLINE	2.32	3.94	00.00	4.5
1801	4.03		96 STATE PARK ROAD	DE CAROLIS, GABRIEL JR & CAROLINE	3.27	4.11	22.66	15
		3B	80 STATE PARK ROAD	DE CAROLIS, GABRIEL JR & CAROLINE	2.14	2.27		
201	17.02	3B	866 ROUTE 94	DECAMP, SUE A	34.71	35.05		
201	17.02		ROUTE 94	DECAMP, SUE A	21.20	24.62	59.67	16
	3		65 ALLAMUCHY ROAD	DECIE, KEVIN & ANNE MARIE	50.30	52.93		
	8	3B	574 ROUTE 519	DERICKS, RICHARD A & CAROLYN A	26.72	31.08		
	9	3B	562 ROUTE 519	DERICKS, RICHARD A & CAROLYN A	29.20	33.49	71.07	17
701	6.01	3B	549 ROUTE 519	DERICKS, RICHARD A & CAROLYN A	5.09	6.50		
701	0.01	30			3.09	0.50		
1302	6	3B	149 SOUTH STREET	DICAMBIO, BRENT J & JENNIFER	0.27	0.52		
1401	10	3B	144 SOUTH STREET	DICAMBIO, BRENT J & JENNIFER DICAMBIO, BRENT J & JENNIFER	0.27 0.52	0.52 0.76	11.43	18
1401	19.01		150 SOUTH STREET	DICAMBIO, BRENT J & JENNIFER DICAMBIO, BRENT J & JENNIFER	10.19	10.15	11.43	10
1401	19.01	SD	SOUTH STREET	DICANIDIO, DREINT J & JENNIFER	10.19	10.15		

					Farm Parce	l*	Farm Un	it**
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)	Farm Unit
801	13	3B	659 ROUTE 519	DICARLO, JAMES & MARY	-	14.04	21.74	19
801	13.01	3A	661 ROUTE 519	DICARLO, JAMES & MARY	-	7.70	21.74	19
	6	3B	2025 STILLWATER ROAD	DICRISTINA VALERIE C & VITO G CO-TR	73.92	72.96		
1601	15	3B	17 CAMP WEAHQUA ROAD	DIOMEDES ASSOCIATES LLC	49.43	53.61		
1801	11	3B	524 ROUTE 519	DOWD, DAVID J & JOHANNA HUSS	3.30	2.36	29.34	20
701	2	3B	523 ROUTE 519	DOWD, DAVID J & JOHANNA HUSS	23.55	26.98	25.34	20
1501	6.03	3B	84 ALLAMUCHY ROAD	DURLING, DALE A & GAIL J	9.00	10.16		
1501	6.04	3B	43 BEAR CREEK ROAD	DURLING, DALE A & GAIL J	10.46	11.24	60.59	21
1501	6.10	3B	78 ALLAMUCHY ROAD	DURLING, DALE A & GAIL J	25.60	39.19		
1601	22.01	3B	38 BEAR CREEK ROAD	ERD, CHARLES & ALICE	19.85	20.71		
1301	19.05	3B	131 GREENDELL ROAD	EVERSWICK, PATRICIA	17.20	18.19		
1804	2.01	3B	226 STATE PARK ROAD	FEHER, WILLIAM J	5.50	7.75	42.02	22
	2.02	3B	220 STATE PARK ROAD	FEHER, WILLIAM J	4.61	6.08	13.82	22
801	19	3B	38 LANNING ROAD	FINN, THOMAS J	111.86	112.49		
201	7.01	3B	78 LINCOLN LAUREL ROAD	FIORE, DAVID & DAYNA	9.53	11.55		
502	9.01	3B	1129 ROUTE 94	FORTUNATO, DIANE L	20.41	20.15		
602	2	3B	36 GOLDEN CHAIN ROAD	FOUNTAIN, BRETT A & JANET M	13.71	13.17		
1201	5.03	3B	755 ROUTE 94	FRELINGHUYSEN, RODNEY P	9.53	9.24		
1201	5.08	3B	ROUTE 94	FRELINGHUYSEN, RODNEY P	8.40	7.95		
1401	5	3B	163 ALLAMUCHY ROAD	FRIDMAN, SIGMUNDO M & HANNA T	95.40	94.60	224.04	23
1501	11	3B	164 ALLAMUCHY ROAD	FRIDMAN, SIGMUNDO M & HANNA T	133.40	129.41	224.01	23
1801	10	3B	540 ROUTE 519	FRIES DANIEL / DAMICO MELINDA	32.58	11.25	00.45	0.4
	10.02		530 ROUTE 519	FRIES DANIEL / DAMICO MELINDA	-	11.20	22.45	24
1101	7	3B	319 KERRS CORNER ROAD	GALWAY, DENNIS M & DONNA	27.43	23.62		
701	21.04	3B	10 ACKERSON ROAD	GANG, ERIC & HEIDI	-	14.42		
201	24.01	3B	70 KERR ROAD	GARY KAPITKO LIVING TRUST	6.03	6.00		
603	11	3B	49 GOLDEN CHAIN ROAD	GAUGLER, ROBERT J & LYNN M	5.00	4.97	47.04	0.5
603	11.02	_	39 GOLDEN CHAIN ROAD	GAUGLER, ROBERT J & LYNN M	8.80	12.07	17.04	25
1101	4	3B	111 MOTT ROAD	GERSON, BENJAMIN	25.00	33.15		
	-	3A	113 MOTT ROAD	GERSON, BENJAMIN	1.00	4.80	37.95	26
602	10	3B	70 CAMP WASIGAN ROAD	GIORDANO THOMAS A & MATTA MELISSA S	5.25	7.54		
301	12.04		98 MOTT ROAD	GLASSON, KENNETH A & GAYLE	5.09	5.85		
	22	3B	1061 ROUTE 519	GOTTFRIED, NOAH	22.76	21.90		

					Farm Parcel*		Farm Un	it**
					Acres	Acres	Acres	Farm
Block		Class	Location	Owner's Name	(Tax Data)	(GIS)	(GIS)	Unit
1401	18.10		140 SOUTH STREET	GRA ASSOCIATES	6.32	7.29		
1501	16		190 ALLAMUCHY ROAD	GRABOVETZ, GREGORY	32.60	32.92		
502	23.01		19 KERRS CORNER ROAD	GURDAK, JOHN A & MARYANN HUGHES	16.29	17.53		
1401	15.16		16 SOUTH STREET	HAGGERTY, STEVEN & BONNIE S	5.10	5.12		
1101	11.01		24 ROUTE 661	HAMMAREN, CURTIS & JEANETTE M	1.00	10.04		
103	11.01		2125 STILLWATER ROAD	HANULA EST C/O S VAN HASSEL	-	13.83		
102	4		12 HESS ROAD	HANULA EST OF J C/O S VAN HASSEL	-	9.44		
1101	11.02		48 ROUTE 661	HARTLEY, JAN	7.68	8.96		
701	18		60 ACKERSON ROAD	HENDRICKS, SCOTT & LYNNELL	24.80	28.01		
701	9.01	3B	587 ROUTE 519	HILDEBRANDT MARTHA / SMOLHA JEFFREY	9.36	10.24		
1601	13	3A	115 SOUTH TOWN ROAD	HOFMEISTER, RAYMOND G ETALS	1.00	13.17		
1601	14.01	3B	115 SOUTH TOWN ROAD	HOFMEISTER, RAYMOND G ETALS	-	9.25	24.40	27
1601	14.02	3B	115 SOUTH TOWN ROAD	HOFMEISTER, RAYMOND G ETALS	-	1.98		
1701	10	3B	47 HELLER ROAD	HOFMEISTER, RAYMOND G ETALS	-	16.79		
101	5	3B	36 HENFOOT ROAD	HOUGHTON, WILLIAM I III & GAIL F	14.06	13.50		
1201	6	3B	799 ROUTE 94	IHM REALTY ASSOCIATES LLC	2.75	1.86		
201	22		29 KERR ROAD	IHM REALTY ASSOCIATES LLC	18.19	16.22	108.06	28
201	23		40 KERR ROAD	IHM REALTY ASSOCIATES LLC	88.28	89.98		
1301	19.03	3B	147 GREENDELL ROAD	IOZZI, LOUIS JR & MARY	14.67	13.83		
603	12		57 GOLDEN CHAIN ROAD	JACOBSSEN KAREN / AMICUCCI KIM	11.35	9.17		
701	6	3B	559 ROUTE 519	JENSEN, CHRISTIAN J & RENAE	40.49	40.86		
701	6.02		555 ROUTE 519	JENSEN, CHRISTIAN J & RENAE	14.49	24.30	75.81	29
701		_	569 ROUTE 519	JENSEN, CHRISTIAN J & RENAE	11.77	10.65		
701			000 1100 12 010		11.77	10.00		
1301	1	3B	1174 ROUTE 519	JOHNSON DONALD / ROWE AMY	35.70	35.65		
1301	2		ROUTE 519	JOHNSON FAMILY ASSOCIATES LLC	5.34	5.03		
1301	21		209 GREENDELL ROAD	JOHNSON FAMILY ASSOCIATES LLC	122.76	125.40	198.21	30
1401	16		210 GREENDELL ROAD	JOHNSON FAMILY ASSOCIATES LLC	31.77	32.13		
	_		38 YELLOW FRAME ROAD	JONES, ROBERT J JR & GENEVIEVE	6.20	7.00		
1804	3.03	_	196 STATE PARK ROAD	JUNGKIND, HOWARD & LEAH	9.10	8.32		
104	11.03		93 LINCOLN LAUREL ROAD	KATTERMANN JR, ARNOLD J	4.34	4.39		
104	11.06		2020 STILLWATER ROAD	KATTERMANN, ARNOLD J	4.77	4.71	24.66	31
104	11.07		2010 STILLWATER ROAD	KATTERMANN, ARNOLD J	7.97	9.91		
104	11.08		107 LINCOLN LAUREL ROAD	KATTERMANN, ARNOLD J	5.58	5.66		
301	18.01	3B	17-A SILVER LAKE ROAD	KAUFMAN D / DALVA / CATE TRACY	142.32	177.94		

					Farm Parce	! *	Farm Un	it**
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)	Farm Unit
	19	3B	90 BEAR CREEK ROAD	KLEBER, RICHARD & BRENDA	12.84	13.04	20.19	32
	19.04	_	102 BEAR CREEK ROAD	KLEBER, RICHARD & BRENDA	8.06	7.14	20.13	02
		3B	110 ALLAMUCHY ROAD	KLECKA, THOMAS	21.15	22.80		
	26	3A	1090 ROUTE 94	KLOBOCISTA, E % TIM	1.00	62.85		
104	9.01	3B	49 HENFOOT ROAD	KRAUSE, LISA & ERIK	8.00	10.73		
902	9.10	3B	322 MAIN STREET	KRUEGER, DAVID C	6.69	8.07	16.40	33
902	9.13	3B	324 MAIN STREET	KRUEGER, DAVID C	7.69	8.32	10.40	33
201	8.01	ЗА	46 LINCOLN LAUREL ROAD	KUHN CHRISTOPHER GEORGE JR & LISA	1.00	20.32		
1701	11	3B	65 HELLER ROAD	KUHN, GEORGE & LISA	17.90	16.32	19.40	34
1701	11.01	3B	59 HELLER ROAD	KUHN, LISA	3.07	3.09	15.40	34
701	28	3B	341 SILVER LAKE ROAD	KUMETZ, DIVINA	70.49	84.25		
801	8.01	3B	19 ACKERSON ROAD	LAFRIEDA, PATRICK & JENNIFER	66.49	72.75		
1101	2.02	3A	41 MOTT ROAD	LANDGRAF, CARL F III	1.00	6.14		
104	6	3B	2176 STILLWATER ROAD	LEANZO, LAUREN & CHRIS	6.86	6.15		
1801	3.02	3B	100 STATE PARK ROAD	LINZ, STEVEN	9.99	10.42		
1805	4	3B	124 STATE PARK ROAD	LINZ, STEVEN	5.54	4.75	6.55	35
1805	5	3B	STATE PARK ROAD	LINZ, STEVEN	0.94	1.80	6.55	33
1601	18	3B	10 CAMP WEAHQUA ROAD	LUCIANI, MARIO & MARIA C	3.68	5.31	10.22	36
1601	18.01	3B	134 BEAR CREEK ROAD	LUCIANI, MARIO & MARIA C	5.18	4.92	10.22	30
1301	24	3B	ROUTE 519	LUCKEY JR, JAMES T	0.95	1.20		
1401	3.05	3B	129 ALLAMUCHY ROAD	LYNCH, ERIC & ADRIENNE	5.60	6.75		
1201	3.03	3B	ROUTE 94	MAGRETTO, RICHARD & NICOLE	5.69	6.31		
502	24	3B	33 KERRS CORNER ROAD	MANGIARACINA, GEORGE & MICHELE	5.05	6.23		
103	6.03	3B	53 LINCOLN LAUREL ROAD	MARRA, JOSEPH G JR & JENNIFER A	2.00	3.10	6.30	37
103	6.04	3B	2009 STILLWATER ROAD	MARRA, JOSEPH G JR & JENNIFER A	3.00	3.20	6.30	31
		3B	102 STATE PARK ROAD	MATHEWS, JOHN	7.76	10.93		
701	5	3B	120 RIDGEWAY AVENUE	MAY, SARA D	20.00	19.34		
1401	4.01	3B	135 ALLAMUCHY ROAD	MAZANEK, GREGORY J	14.88	15.32		
		3B	143 KERRS CORNER ROAD	MAZZA JAMES M / PECK STEFANIE	5.28	6.28		
1101	8	3B	112 ROUTE 661	MCCREA, RYAN LYNN	0.71	0.93	24.40	20
	9	3B	102 ROUTE 661	MCCREA, RYAN LYNN	25.29	30.26	31.19	38
	6.02	3B	2163 STILLWATER ROAD	MENZ, VALERIE	8.57	9.63		
	11	3B	44 CAMP WASIGAN ROAD	MICCIO, BARBARA	16.10	19.80		
	10	3A	76 HENFOOT ROAD	MICKELSEN, WILHELM H & ELLEN B	1.50	2.59		

					Farm Parcel	*	Farm Un	it**
					Acres	Acres	Acres	Farm
Block	Lot	Class	Location	Owner's Name	(Tax Data)	(GIS)	(GIS)	Unit
101	8	3B	60 HENFOOT ROAD	MICKELSEN, WILHELM H & ELLEN B	16.53	15.45	74.34	39
104		3B	75 HENFOOT ROAD	MICKELSEN, WILHELM H & ELLEN B	17.63	14.94	7 4.04	00
104		3B	17 HENFOOT ROAD	MICKELSEN, WILHELM H & ELLEN B	42.00	41.36		
		3B	120 CAMP WASIGAN ROAD	MIDKIFF, ALAN H	29.80	31.25		
103		3B	2039 STILLWATER ROAD	MIKULIN, DANIEL	7.10	8.15		
1501	12.01	3B	192 ALLAMUCHY ROAD	MLECZ, RICHARD	7.51	8.95		
1302	1	3B	29 SOUTH STREET	MORGAN, JANENE	77.65	78.62		
201	17	3B	842 ROUTE 94	MOUNT, IAN	63.68	65.65		
201	32	3B	49 MULLER ROAD	MULLER, CHARLES JR & FRANCES	42.02	42.32		
201	32.06	3B	45 MULLER ROAD	MULLER, CHARLES JR & FRANCES	3.09	4.07		
201	32.07	3B	41 MULLER ROAD	MULLER, CHARLES JR & FRANCES	4.23	4.08	95.46	40
201	34	3B	71 MULLER ROAD	MULLER, CHARLES JR & FRANCES	20.13	16.99		
201	35	3B	72 MULLER ROAD	MULLER, CHARLES JR & FRANCES	26.95	28.00		
301	6	3B	175 KERRS CORNER ROAD	MURPHY, RICHARD	29.10	25.38		
801	18.02	3B	70 LANNING ROAD	MURPHY, RICHARD & GLORIA	15.00	15.54		
1101	10	3B	80 ROUTE 661	NATYZAK, HELEN	22.33	22.61		
1201	12.01	3B	53 ROUTE 661	NATYZAK, HELEN	4.70	4.99	129.75	41
1201	13	3B	75 ROUTE 661	NATYZAK, HELEN	107.35	102.15		
602	7	3B	CAMP WASIGAN ROAD	NELSON, JOHN A	20.60	23.11		
103	6.02	3B	2055 STILLWATER ROAD	NORMAN, VIVIAN D & RONNIE	5.50	6.33		
601	11.06	3B	8 KERRS CORNER ROAD	NORTHWEST INVESTORS LLC	8.90	9.53		
1501	3.04	3B	85 BEAR CREEK ROAD	O'DOWD SEAN / LAPP MEGAN	8.25	9.47		
1101	16	3B	875 ROUTE 94	O'KEEFFE, MARTIN	11.43	11.04		
801	20.03	3B	140 KERRS CORNER ROAD	ORLANDI, GEOFFREY & BARBARA A	17.76	16.66		
301	13.01	3B	48 MOTT ROAD	PARKER BARBARA B / PARKER TYSON	6.85	8.66	121.48	42
301	13	3B	50 MOTT ROAD	PARKER, NEWTON TYSON & BARBARA B	112.68	112.82	121.40	42
1302	3.01	3B	145 SOUTH STREET	PARTIKA, CHRISTOPHER & KRISTINA	8.97	11.86		
1401	9	3B	211 ALLAMUCHY ROAD	PEACEFUL VALLEY FARMS LLC	35.40	25.85		
		3B	209 ALLAMUCHY ROAD	PEACEFUL VALLEY FARMS LLC	6.00	6.00		·
1302	3.06	3B	65 SOUTH STREET	PENDER, TIMOTHY B & JUDITH B	16.17	17.67	32.45	43
1302	5	3B	SOUTH STREET	PENDER, TIMOTHY B & JUDITH B	12.72	14.78	32.43	43
1804	2	3B	210 STATE PARK ROAD	PEREZ, KIRK J & NICHOLE M	5.38	6.24	40.20	44
1804			214 STATE PARK ROAD	PEREZ, KIRK J & NICHOLE M	4.53	6.12	12.36	44
501			218 SPRING VALLEY ROAD	PERRETTI, RUTH MARY	36.86	34.77		
	18.03		128 GREENDELL ROAD	POLOWY, EDWARD G	17.69	18.41		

					Farm Parce	el*	Farm Un	it**
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)	Farm Unit
1401	17	3B	170 GREENDELL ROAD	POLYCHRONIS, CARY	-	56.66		
902	9.03	3B	330 MAIN STREET	PONCZEK, JOHN A & M CYNTHIA	20.76	20.89		
	5.01 5.02		SOUTH STREET SOUTH STREET	POTTEN, KEITH POTTEN, KEITH J	5.46 3.04	5.13 2.14	7.27	45
1601	20.01 21.01 6 7	3B 3B	88 BEAR CREEK ROAD 64 BEAR CREEK ROAD 822 ROUTE 519 29 SOUTH TOWN ROAD	PRESBYTERIAN CAMP & CONF INC	23.31 12.35 35.68 3.65	21.38 12.41 339.47 4.45	377.71	46
301	4.01 11	3B	119 MOTT ROAD 120 MOTT ROAD	RADABAUGH, BERNITA GERSON RADABAUGH, BERNITA GERSON	3.22 5.53	4.14 10.96	15.10	47
			49 MOTT ROAD	REDUZZI, CHRISTOPHER J & GINA	1.00	6.30		
	3		969 ROUTE 94	REISBERG, DAVID & PHILIP	33.56	36.55		
801	18	ļ.	76 LANNING ROAD	REUTER, ERICH & LISA	17.23	15.93		
801	11		121 ACKERSON ROAD	ROCCA MICHAEL / QUARTAROLO-ROCCA N	22.16	29.85	47.26	48
801	12	3B	129 ACKERSON ROAD	ROCCA, MICHAEL E & NICOLE M	21.07	17.41	0	
602	11.01		54 CAMP WASIGAN ROAD	ROCHETTE MICHAEL / LAUTZ KATRINA	13.17	12.53	32.96	49
601	9.01		53 CAMP WASIGAN ROAD	ROCHETTE MICHAEL J / LAUTZ KATRINA	20.50	20.43		
	20.01		16 LANNING ROAD	RODGERS IRIS P / VANHETEREN WILLIAM	6.16	6.84		
	1.01		21 MOTT ROAD	ROGERS JR, RICHARD D	2.16	1.98		
	1.04		9 MOTT ROAD	ROGERS JR, RICHARD D	3.99	3.66		
	9.02		201 ALLAMUCHY ROAD	ROGERS JR, RICHARD D	5.38	5.74		
			219 ALLAMUCHY ROAD	ROGERS SR, RICHARD D	11.48	13.04		
			205 ALLAMUCHY ROAD	ROGERS SR, RICHARD D	6.00	6.00		
1501	13.02		224 ALLAMUCHY ROAD	ROGERS SR, RICHARD D	5.00	5.38		
1101	1	ļ.	895 ROUTE 94	ROGERS, PAMELA SUZANNE	3.88	4.10		
301	14.02		923 ROUTE 94	ROGERS, PAMELA SUZANNE	1.84	1.83		
301	14.04		10 MOTT ROAD	ROGERS, PAMELA SUZANNE	8.15	19.63		
301	17.01		995 ROUTE 94	ROGERS, PAMELA SUZANNE	5.00	4.91	405.40	
301	14.03		14 MOTT ROAD	ROGERS, RICHARD D JR & PAMELA S	6.89	7.08	195.10	51
	14.05		919 ROUTE 94	ROGERS, RICHARD D JR & PAMELA S	8.62	5.96		
301	14		6 MOTT ROAD	ROGERS JR RICHARD D / PAMELA S	83.65	84.20		
301	17	3B	985 ROUTE 94	ROGERS JR, RICHARD D	71.56	71.48		

					Farm Parce	! *	Farm Un	it**
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)	Farm Unit
601	12	3B	27 CAMP WASIGAN ROAD	ROSSI, JOHN & LOUISE & JOHN D	6.59	8.16	15.74	52
602	13	3B	26 CAMP WASIGAN ROAD	ROSSI, JOHN & LOUISE & JOHN D	6.98	7.57	15.74	32
1201	7	3B	7 ROUTE 661	ROUTE 94 FARM ASSOCIATES LLC	0.94	0.69		
1302	3.03	3B	125 SOUTH STREET	RUTZLER, JAMES & PATRICIA	14.72	16.67		
1302	3.19	3B	265 ALLAMUCHY ROAD	SANTOS, FLORIANO & CELINA	6.53	5.70		
603	1.04	3B	SILVER LAKE ROAD	SARTORI, JOHN J	7.51	8.34		
201	24	3B	170 LINCOLN LAUREL ROAD	SCHAFFER, CHARLES & DOREEN A	92.10	99.94		
1302	3.05	3B	67 SOUTH STREET	SCHIMMEL, STEVEN H & KATHLEEN	16.74	15.01		
1701	9	3B	23 HELLER ROAD	SCHWARTZ, DAVID A	116.05	116.46		
201	33	3B	22 MULLER ROAD	SENATORE, BRUCE & BARBARA	13.41	15.18		
103	11	3B	19 HESS ROAD	SHAEFFER, CHARLES	-	29.93		
301	5	3B	137 KERRS CORNER ROAD	SHATTO DONALD B & HARROD PATRICIA M	12.50	13.93		
801	13.02	ЗА	663 ROUTE 519	SHEA DOUGLAS / STASCHE SHAUNA L	1.00	4.41		
601	4	3B	170 SILVER LAKE ROAD	GIORDANO, THOMAS & MELISSA S	33.98	36.36		
801	6	3B	189 SILVER LAKE ROAD	FINN, THOMAS J	47.38	48.10		
1101	3	3B	75 MOTT ROAD	SIMS, OLIVER J & BONNIE	15.57	16.60		
1201	5.01	3B	763 ROUTE 94	SINHA, DINESHWAR P & MARY L	8.01	9.06		
1401	21	3B	76 GREENDELL ROAD	SMITH, DAVID C & MONICA	33.35	34.38	07.47	F.4
	21.06	_	76 GREENDELL ROAD	SMITH, DAVID C & MONICA	3.00	3.09	37.47	54
		-						
701	14.01	3B	619 ROUTE 519	SMITH, EMILY H	5.71	5.67		
701	15	3B	631 ROUTE 519	SMITH, EMILY H & LYLE	5.58	6.36	17.66	55
701	15.01	3B	627 ROUTE 519	SMITH, EMILY H & LYLE	5.41	5.63		
201	6.03	3B	122 LINCOLN LAUREL ROAD	SOLOMON JR, HOWARD R	12.70	14.37		
801	14	3B	699 ROUTE 519	STAUFENBERGER MICHAEL / FITZELL WIL	59.64	60.66		
902	9.09	3B	186 MILL ROAD	STAUFENBERGER, JOANNE	11.96	13.62		
1301	15.04	3B	21 GREENDELL ROAD	STAUFENBERGER, MICHAEL & ALEXANDER	3.02	3.01		
1301	15.05	3B	35 GREENDELL ROAD	STAUFENBERGER, MICHAEL & ALEXANDER	3.00	2.84	5.76	56
1301	15.06	3B	43 GREENDELL ROAD	STAUFENBERGER, MICHAEL & ALEXANDER	3.00	2.92	3.70	30
1201	20	2D	DOUTE 510	STITES DUILID A S CAIL A	17.24	10.00		
		3B	ROUTE 519	STITES, PHILIP A & GAIL A	17.31	18.83	101.05	57
_			1187 ROUTE 519	STITES, PHILIP A & GAIL A	88.90	82.23		
		3B	715 ROUTE 519	THE EMILY PANTALEONI FAMILY 2018 TR	88.40	93.70		-
1401	3.06	3B	91 ALLAMUCHY ROAD	THE RONALD M & ROBERT J SIMS REV TR	20.00	23.24		

					Farm Parce	el*	Farm Un	it**
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)	Farm Unit
601 601	18 18.01	3B 3B	93 CAMP WASIGAN ROAD 95 CAMP WASIGAN ROAD	TOLEDO ALBERTO / ROMERO ANGELICA TOLEDO ALBERTO / ROMERO ANGELICA	17.34 4.01	18.50 4.01	22.51	58
201 201	6.02 6.01	3B 3B	138 LINCOLN LAUREL ROAD 150 LINCOLN LAUREL ROAD	TOMASINO, J M K M & J TOMASINO, J M K M J	18.00 26.38	19.60 26.09	45.69	59
1401 1401 1401		3B 3B	109 ALLAMUCHY ROAD 101 ALLAMUCHY ROAD 12 SOUTH STREET	TOPPING, ROGER J TOPPING, ROGER J TRACEY, GREGORY & LISA	1.14 12.92 9.00	2.68 11.89 8.94	14.57	60
602 602	2.04 2.05	3B 3B	46 GOLDEN CHAIN ROAD 44 GOLDEN CHAIN ROAD	TUDOR, MICHAEL JOHN & HELEN A TUDOR, MICHAEL JOHN & HELEN A	3.32 4.94	4.83 7.60	12.43	61
201 1201	6.05 5.07	3B 3B	160 LINCOLN LAUREL ROAD 783 ROUTE 94	TYNAN, ANDREW C & PATRICIA A UNIFIED FINANCIAL LLC	11.99 7.84	12.91 7.96		
701	21.03		16 ACKERSON ROAD	VAN GROUW, RONALD J & JACQUELINE	16.59	17.13		
701	18.11	3B	22 DUTCH HILL ROAD	VAN GROUW, WILLIAM P & DENA	4.97	5.52		
102	1	3B	36 HESS ROAD	VAN HASSEL, CIRA	-	13.33		
102 103	5 13	3B 3B	6 HESS ROAD 35 HESS ROAD	VAN HASSEL, CIRA VAN HASSEL, CIRA	1.00	0.86 29.65	43.63	62
102 102	2 6.03 18.10	3B 3B	26 HESS ROAD 16 HESS ROAD 50 ACKERSON ROAD	VAN HASSEL, SALLY VAN HASSEL, SALLY	2.30 9.09 8.20	3.40 9.72 10.78		
701 603	3	3B	324 SILVER LAKE ROAD	VUZ, JOHN JEFFREY & BARBARA ANN WEAVER, WALTER W & DIANE K	13.51	13.49		
601	11.07		12 KERRS CORNER ROAD	WEBSTER, ANTHONY C & ANN K	1.00	4.10		
801			5 ACKERSON ROAD	WILBURN, RICHARD G & MARLENE H	7.65	8.23		
502 601	27 6	3B 3B	126 SILVER LAKE ROAD 80 KERRS CORNER ROAD	WILLIAMS, ANDREW H WILLIAMS, ANDREW H	24.25 59.30	22.91 58.29	81.20	63
502	24.01		27 KERRS CORNER ROAD	WILSON, RAYMOND N	25.26	26.49		
1805	1	3B	174 STATE PARK ROAD	WINAY, SCOTT M & VICTORIA A	9.59	10.72		
701 701		3B 3B	311 SILVER LAKE ROAD 321 SILVER LAKE ROAD	WINDY RIDGE LLC WINDY RIDGE LLC	25.80 16.87	26.11 16.56	42.67	64
602	1	3B	20 GOLDEN CHAIN ROAD	WOLFE JOAN / FREEBORN LISA & ANDREW	8.95	9.90		
902 902 902	15 16 17	3B 3B 3B	MILL ROAD 144 MILL ROAD MILL ROAD	WROE-STREET, RAYMOND A & KIMBERLEY WROE-STREET, RAYMOND A & KIMBERLEY WROE-STREET, RAYMOND A & KIMBERLEY	10.99 1.55 0.50	8.71 0.57 0.70	34.77	65
902 902	18 19	3B 3B	140 MILL ROAD 236 KERRS CORNER ROAD	WROE-STREET, RAYMOND A & KIMBERLEY WROE-STREET, RAYMOND A & KIMBERLEY	14.40 11.00	14.12 10.68		

					Farm Parc	el*	Farm Unit**	
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)	Farm Unit
				Total (Unpreserved Farmland):	5,765.40	6,754.15	Acres	
				Total Preserved Farmland (Class 3A, 3B):	2,650.87	2,652.79	Acres	
				Farm Assessed with CE	111.26	115.55	Acres	
				Total Farm Assessed Land:	8,527.53	9,522.49	Acres	
				Total (Unpreserved Farm Units):	3,603.54	Acres		
			·	Number of Farm Units:	65			

Inventory Table 1B. Preserved Farmland In Frelinghuysen Township

					Acres	Acres
Block			Location	Owner's Name	(Tax Data)	(GIS)
101			96 HENFOOT ROAD	WESTBROOK, JACOB & KAREN	9.73	8.53
101		3B	24 STONE BRIDGE ROAD	KLEINDIENST, ARTHUR & KATHERINE M	10.39	9.92
101	14	1	34 STONE BRIDGE ROAD	KLEINDIENST, ARTHUR & KATHERINE M	0.08	0.11
102	8.01		27 STONE BRIDGE ROAD	KLEINDIENST JAMES / HOYER KATHERINE	7.01	6.47
102	8		23 STONE BRIDGE ROAD	KLEINDIENST JAMES / HOYER KATHERINE	28.43	30.59
1101	11	3B	52 ROUTE 661	SIMONETTI JAMES J / CORLESS KELLY	115.04	113.02
1101		3B	821 ROUTE 94	ROUTE 94 FARM ASSOCIATES LLC	62.52	66.68
1101	15	3B	861 ROUTE 94	GURBA, STEPHEN MICHAEL & ABBI H	88.50	88.86
1101	3.01	3B	95 MOTT ROAD	POST, BONNIE W	40.71	42.86
1201	34	3B	1149 ROUTE 519	PITTENGER, RONALD E & SHARON H	67.79	63.64
1301	15	3B	55 GREENDELL ROAD	STAUFENBERGER, MICHAEL J	130.33	126.75
1301	23.01	3B	227 GREENDELL ROAD	GANG, WALTER A & LINDA	14.36	15.73
1301	3	3B	1154 ROUTE 519	PITTENGER, RONALD E & SHARON H	31.15	32.08
1401	19	3B	100 GREENDELL ROAD	KATZENSTEIN FAMILY NJ LLC	137.36	141.42
1501	1.01	3B	173 BEAR CREEK ROAD	KATZENSTEIN FAMILY NJ LLC	25.45	23.43
1501	1	3B	161 BEAR CREEK ROAD	KATZENSTEIN FAMILY NJ LLC	40.89	42.97
1501	3.02	3B	121 BEAR CREEK ROAD	KATZENSTEIN FAMILY NJ LLC	21.20	21.48
1601	16.01	3B	162 BEAR CREEK ROAD	KATZENSTEIN FAMILY NJ LLC	10.28	7.10
1601	16	3B	154 BEAR CREEK ROAD	KATZENSTEIN FAMILY NJ LLC	10.06	11.23
1701	12.02	3B	HELLER ROAD	GURBA, STEPHEN MICHAEL & ABBI H	7.90	7.46
1701	14	3B	HELLER ROAD	GURBA, STEPHEN M & ABBI H	4.17	3.88
1701	15	3B	HELLER ROAD	GURBA, STEPHEN MICHAEL & ABBI H	40.77	40.82
1701	16.01	3B	34 SOUTH TOWN ROAD	SILVERSIDES, MARGARET & WILLIAM	49.03	46.44
1701	2	3B	760 ROUTE 519	GURBA, STEPHEN TRSTEE THE STEPHEN L	48.88	51.54
1701	4	3B	700 ROUTE 519	GURBA, STEPHEN MICHAEL & ABBI H	54.28	55.72
1701	5	3B	660 ROUTE 519	SMITH, EMILY H & LYLE	14.88	14.67
1701	6	3B	634 ROUTE 519	SMITH, EMILY H	6.90	9.26
1702	2	3B	60 SOUTH TOWN ROAD	GURBA, STEPHEN MICHAEL & ABBI H	128.03	128.07
1801	7.02	3B	592 ROUTE 519	SMOLHA, JEAN	30.25	27.26
1803	12	3B	121 STATE PARK ROAD	LINZ, STEVEN	120.59	127.85
1803	8.01	3B	251 STATE PARK ROAD	BERRY, JOYCE LYNETTE & PATRICIA ANN	100.04	99.34
1804	5	3B	252 STATE PARK ROAD	BERRY, JOYCE LYNETTE & PATRICIA ANN	3.67	3.45
201	31	15C	730 ROUTE 94	TOWNSHIP OF FRELINGHUYSEN	28.80	28.69
301	6	3B	175 KERRS CORNER ROAD	MURPHY, RICHARD	226.40	224.27
301			41:A-B SILVER LAKE ROAD	COMM OF THE SISTERS OF ST DOMINIC	88.36	88.33
502	27.01		KERRS CORNER ROAD	COM SUPPRTD GARDEN GENESIS FARM INC	9.46	10.38
502			90 SILVER LAKE ROAD	COM SUPPRTD GARDEN GENESIS FARM INC	61.09	62.97
502		3B	42 SILVER LAKE ROAD	COMM OF THE SISTERS OF ST DOMINIC	49.77	48.21

Inventory Table 1B. Preserved Farmland In Frelinghuysen Township

Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)
601	1	3B	230 SILVER LAKE ROAD	ROGERS DANIEL / FLAHERTY SIOBAN	67.02	69.01
601	1.01	3B	228 SILVER LAKE ROAD	ROGERS DANIEL / FLAHERTY SIOBAN	28.78	28.23
601	2	3B	190 SILVER LAKE ROAD	ROGERS DANIEL / FLAHERTY SIOBAN	9.73	8.44
602	3		2 GOLDEN CHAIN ROAD	WOODCOCK PIETER / KAREN/ROMAN C & J	27.86	30.51
701	1.03	3B	449 ROUTE 519	COOKE, PATRICIA	0.20	0.15
701	1	3B	515 ROUTE 519	COOKE, PATRICIA	6.20	8.68
701	10	3B	581 ROUTE 519	SMOLHA, JEAN	104.24	87.93
701	11	3B	593 ROUTE 519	SMOLHA, JEAN	49.50	50.27
701	16	3B	649:A-B ROUTE 519	SMOLHA, JEAN	49.69	52.71
701	18.01	3B	29 DUTCH HILL ROAD	VAN GROUW, WILLIAM P & DENA	38.42	34.93
701	19	3B	30 DUTCH HILL ROAD	VAN GROUW, WILLIAM P & DENA	71.82	74.68
701	20	3B	30 DUTCH HILL ROAD	VAN GROUW, WILLIAM P & DENA	2.94	2.69
701	3.02	3B	541 ROUTE 519	BROWN, SCOTT & TRACEY	33.90	30.73
801	16	3B	130 LANNING ROAD	MURPHY, RICHARD & GLORIA	29.52	30.26
801	17.01	3B	102 LANNING ROAD	MURPHY, RICHARD & GLORIA	72.24	75.86
801	17.02	3B	100 LANNING ROAD	MURPHY, RICHARD & GLORIA	35.42	31.00
801	17	3B	104 LANNING ROAD	MURPHY, RICHARD & GLORIA	29.13	30.90
801	18.03	3B	94 LANNING ROAD	MURPHY, RICHARD & GLORIA	38.13	37.87
801	20.04	3B	126 KERRS CORNER ROAD	PECK, HARRY B	43.92	46.24
902	1	3B	11 LANNING ROAD	STOCK, ROBERT H & ANN E	16.54	19.03
1301	20	15F	169 GREENDELL ROAD	THE NATURE CONSERVANCY	197.54	196.66
1301	4	15F	ROUTE 519	THE NATURE CONSERVANCY	5.39	6.27
				Total (Preserved Farmland):	2,882.68	2,884.53
				Total Preserved Farmland (Class 1, 15C, 15F):		231.73
				Total Preserved Farmland (Class 3A, 3B):	2,650.87	2,652.79
1101	4	3B	111 MOTT ROAD	GERSON, BENJAMIN	25.00	24.40
301	4	3B	89 SILVER LAKE ROAD	GENESIS FARM INC	86.26	91.14
			_	Total (Farmland with a Conservation Easement):	111.26	115.55

Inventory Table 2. Target Farm Units and Parcels within the ADA

Farcel Par	arcels that are part of a Farm Unit			Farm P	Farm Parcel		Farm Unit	
Block	Lot	Location	Farm Unit	Acres (Tax Data)	Acres (GIS Data)	Farm Unit	Acres (GIS Data)	
701	18.08	42 ACKERSON ROAD	BONZULAK, WILLIAM & HELEN	2.21	2.38	Bonzulak	27.77	
701	21	34 ACKERSON ROAD	BONZULAK, WILLIAM & HELEN	26.85	25.39	Bonzulak		
902	12	156 MILL ROAD	CARSON, DANIEL & WHITNEY	-	56.71	- Carson		
902	7	779 ROUTE 519	CARSON, DANIEL & WHITNEY	60.64	59.84			
902	9.06	360 MAIN STREET	CARSON, DANIEL & WHITNEY	60.14	61.72		430.43	
902	4	67 LANNING ROAD	CARSON, DANIEL & WHITNEY	230.15	232.57	Carson	430.43	
902	7.03	771 ROUTE 519	CARSON, DANIEL & WHITNEY	5.00	5.39			
902	2	31 LANNING ROAD	CARSON, DANIEL & WHITNEY	-	14.20			
1501	13.01	240 ALLAMUCHY ROAD	CEDAR VIEW LLC	3.00	5.25			
1501	13	230 ALLAMUCHY ROAD	CEDAR VIEW LLC	18.30	18.48	Cedar View LLC	26.62	
1501	13.03	238 ALLAMUCHY ROAD	CEDAR VIEW L L C	5.08	5.43	Cedal view LLC	36.62	
1501	13.04	228 ALLAMUCHY ROAD	CEDAR VIEW L L C	7.61	7.46			
201	17.02	866 ROUTE 94	DECAMP, SUE A	34.71	35.05	DeCamp	59.67	
201	17.03	ROUTE 94	DECAMP, SUE A	21.20	24.62	Decamp	59.67	
1401	5	163 ALLAMUCHY ROAD	FRIDMAN, SIGMUNDO M & HANNA T	95.40	94.60	Fridman	224.01	
1501	11	164 ALLAMUCHY ROAD	FRIDMAN, SIGMUNDO M & HANNA T	133.40	129.41	Filuman		
1201	6	799 ROUTE 94	IHM REALTY ASSOCIATES LLC	2.75	1.86		108.06	
201	23	40 KERR ROAD	IHM REALTY ASSOCIATES LLC	88.28	89.98	IHM		
201	22	29 KERR ROAD	IHM REALTY ASSOCIATES LLC	18.19	16.22			
1601	19.04	102 BEAR CREEK ROAD	KLEBER, RICHARD & BRENDA	8.06	7.14	Kleber	20.19	
1601	19	90 BEAR CREEK ROAD	KLEBER, RICHARD & BRENDA	12.84	13.04	Klebei	20.19	
201	32.07	41 MULLER ROAD	MULLER, CHARLES JR & FRANCES	4.23	4.08		95.46	
201	32	49 MULLER ROAD	MULLER, CHARLES JR & FRANCES	42.02	42.32			
201	32.06	45 MULLER ROAD	MULLER, CHARLES JR & FRANCES	3.09	4.07	Muller		
201	34	71 MULLER ROAD	MULLER, CHARLES JR & FRANCES	20.13	16.99			
201	35	72 MULLER ROAD	MULLER, CHARLES JR & FRANCES	26.95	28.00			
1201	13	75 ROUTE 661	NATYZAK, HELEN	107.35	102.15			
1201	12.01	53 ROUTE 661	NATYZAK, HELEN	4.70	4.99	Natyzak	124.76	
1101	10	80 ROUTE 661	NATYZAK, HELEN	22.33	22.61			
301	14.04	10 MOTT ROAD	ROGERS, PAMELA SUZANNE	8.15	19.63			
301	14.02	923 ROUTE 94	ROGERS, PAMELA SUZANNE	1.84	1.83			

Inventory Table 2. Target Farm Units and Parcels within the ADA

Block	Lot	Location	Farm Unit	Acres (Tax Data)	Acres (GIS Data)	Farm Unit	Acres (GIS Data)
301	14	6 MOTT ROAD	ROGERS JR RICHARD D / PAMELA S	83.65	84.20		
301	17.01	995 ROUTE 94	ROGERS, PAMELA SUZANNE	5.00	4.91	Rogers 2	195.10
301	14.03	14 MOTT ROAD	ROGERS, RICHARD D JR & PAMELA S	6.89	7.08		
301	14.05	919 ROUTE 94	ROGERS, RICHARD D JR & PAMELA S	8.62	5.96		
301	17	985 ROUTE 94	ROGERS JR, RICHARD D	71.56	71.48		
602	13	26 CAMP WASIGAN RD	ROSSI, JOHN & LOUISE & JOHN D	6.98	7.57	Rossi	15.74
601	12	27 CAMP WASIGAN RD	ROSSI, JOHN & LOUISE & JOHN D	6.59	8.16	RUSSI	15.74
1301	15.06	43 GREENDELL ROAD	STAUFENBERGER,MICHAEL&ALEXANDER	3.00	2.92	Ctaufanhargar	5.76
1301	15.05	35 GREENDELL ROAD	STAUFENBERGER,MICHAEL&ALEXANDER	3.00	2.84	Staufenberger	5.76
602	2.05	44 GOLDEN CHAIN RD	TUDOR, MICHAEL JOHN & HELEN A	4.94	7.60	Tudor	12.43
602	2.04	46 GOLDEN CHAIN RD	TUDOR, MICHAEL JOHN & HELEN A	3.32	4.83	rudor	12.43
502	27	126 SILVER LAKE RD	WILLIAMS, ANDREW H	24.25	22.91	\\/:II: a ma a	04.00
601	6	80 KERRS CORNER RD	WILLIAMS, ANDREW H	59.30	58.29	Williams	81.20
			Total Eligible Fa	arm Units (ADA):	1,442.18		
Farm Pard	cels that ha	ve not been identified as part of	a Farm Unit				
				Acres	Acres		
Block	Lot	Location	Owner	(Tax Data)	(GIS Data)	Ti and the state of the state o	
801	9	59 ACKERSON ROAD	BELLA VITA FARM LLC	14.28	15.20		
801	3	161 SILVER LAKE ROAD	CALCAGNE, CHRISTOPHER R	14.59	15.78		
201	21	836 ROUTE 94	CANACE, ROBERT J & CINDY S	8.74	5.82		
301	14.01	927 ROUTE 94	CEDAR VIEW LLC	1.89	1.93		
801	9.04	51 ACKERSON ROAD	COWBOY REALTY LLC	0.00	6.70		
103	6	2025 STILLWATER ROAD	DICRISTINA VALERIE C & VITO G CO-TR	73.92	72.96		
1301	19.05	131 GREENDELL ROAD	EVERSWICK, PATRICIA	17.20	18.19		
801	19	38 LANNING ROAD	FINN, THOMAS J	111.86	112.49		
602	2	36 GOLDEN CHAIN ROAD	FOUNTAIN, BRETT A & JANET M	13.71	13.17		
701	21.04	10 ACKERSON ROAD	GANG, ERIC & HEIDI	0.00	14.42		
601	4	170 SILVER LAKE ROAD	GIORDANO THOMAS A& MELISSA S	33.98	36.36		
602	10	70 CAMP WASIGAN RD	GIORDANO THOMAS A&MATTA MELISSA S	5.25	7.54		
1501	16	190 ALLAMUCHY ROAD	GRABOVETZ, GREGORY	32.60	32.92		
			GURDAK, JOHN A & MARYANN HUGHES	16.29			

Inventory Table 2. Target Farm Units and Parcels within the ADA

Block	Lot	Location	Farm Unit	Acres (Tax Data)	Acres (GIS Data)	
301	18.01	17-A SILVER LAKE ROAD	KAUFMAN D / DALVA / CATE TRACY	142.32	177.94	
102	6.02	2163 STILLWATER ROAD	MENZ, VALERIE	8.57	9.63	
602	3.03	120 CAMP WASIGAN RO	MIDKIFF, ALAN H	29.80	31.25	
1501	3.04	85 BEAR CREEK ROAD	O'DOWD SEAN / LAPP MEGAN	8.25	9.47	
801	20.03	140 KERRS CORNER RD	ORLANDI, GEOFFREY & BARBARA A	17.76	16.66	
1401	9	211 ALLAMUCHY ROAD	PEACEFUL VALLEY FARMS LLC	35.40	25.85	
501	27	218 SPRING VALLEY RD	PERRETTI, RUTH MARY	36.86	34.77	
801	18	76 LANNING ROAD	REUTER, ERICH & LISA	17.23	15.93	
1401	9.01	219 ALLAMUCHY ROAD	ROGERS SR, RICHARD D	11.48	13.04	
1302	3.03	125 SOUTH STREET	RUTZLER, JAMES & PATRICIA	14.72	16.67	
1302	3.19	265 ALLAMUCHY ROAD	SANTOS, FLORIANO & CELINA	6.53	5.70	
1701	9	23 HELLER ROAD	SCHWARTZ, DAVID A	116.05	116.46	
201	33	22 MULLER ROAD	SENATORE, BRUCE & BARBARA	13.41	15.18	
301	5	137 KERRS CORNER RD	SHATTO DONALD B&HARROD PATRICIA M	12.50	13.93	
1101	3	75 MOTT ROAD	SIMS, OLIVER J & BONNIE	15.57	16.60	
801	15	715 ROUTE 519	THE EMILY PANTALEONI FAMILY 2018 TR	88.40	93.70	
1401	15.17	12 SOUTH STREET	TRACEY, GREGORY & LISA	9.00	8.94	
701	21.03	16 ACKERSON ROAD	VAN GROUW, RONALD J & JACQUELINE	16.59	17.13	
102	1	36 HESS ROAD	VAN HASSEL, CIRA	0.00	13.33	
602	3.01	20 GOLDEN CHAIN ROAD	WOLFE JOAN/FREEBORN LISA&ANDREW	8.95	9.90	
			Total Eligible Farm	n Parcels (ADA):	1,033.08	
			Total Eligible Fa	rms in the ADA:	2,475.25	
					_,	

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