COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

HOPE TOWNSHIP WARREN COUNTY

OCTOBER 2021







COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE for Township of Hope County of Warren

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TABLE OF CONTENTS

Exect	utive Summary	1
Chap	ter 1. Agricultural Land Base	
A.	Agricultural Landscape	
B.	Soils	7
C.	Irrigated Land & Water Sources	9
D.	Farmland Trends & Statistics	
Chap	ter 2. Agricultural Industry	
A.	Trends in Market Value of Agricultural Products	
B.	Agricultural Production Trends	17
C.	Agricultural Support Services and Related Industries	
Chap	ter 3: Land Use Planning	
A.	State Development and Redevelopment Plan	
B.	Special Resource Area: Highlands Region	
C.	Municipal Master Plan	
D.	Land Use Trends	
E.	Public Infrastructure – Sewer and Water	
F.	Municipal Zoning	
G.	Density Transfer Opportunities	
Chap	ter 4. Farmland Preservation Program	
A.	Warren County Agricultural Development Areas (ADAs)	
B.	Farmland Preserved to Date by Program	
C.	Term Farmland Preservation Programs	
D.	Coordination with Open Space Preservation Initiatives	
E.	Farmland Preservation Program Funding Expended to Date by Source	
F.	Monitoring of Preserved Farmland	
G.	Coordination with Transfer of Development Rights Programs	
Chap	ter 5. Future Farmland Preservation Program	40
A.	Preservation Goals	40
B.	Description of Project Areas	
C.	Minimum Eligibility Criteria	

D.	County and Municipal Ranking Criteria	
E.	Municipal and County Policies Related to Farmland Preservation Applications	
F.	Funding Plan	
G.	Administrative Resources	49
H.	Factors Limiting Farmland Preservation Implementation	50
Chap	oter 6. Economic Development	51
А.	Economic Development Plans and Initiatives	51
B.	Agricultural Industry Retention, Expansion, & Recruitment Strategies	69
Chap	ter 7: Natural Resource Conservation	
A.	Natural Resource Protection Coordination	80
B.	Natural Resource Protection Programs	
C.	Water Resources	
D.	Waste Management Planning	
E.	Energy Conservation Planning	
F.	Outreach and Incentives	
Chap	ter 8. Agricultural Industry, Sustainability, Retention, & Promotion	
A.	Existing Agricultural Industry Support	
B.	Additional Strategies to Sustain, Retain, and Promote Agriculture	100
Maps	5	M-1
Appe	ndix	A-1
Inver	ntory Tables	T-1
Liter	ature Cited	L-1

Cover Photograph: Goodbody Farm

Section Banners: Executive Summary: Sosnovik Farm Chapter 1. Bob May Farm Chapter 2. Grochowicz Farm Chapter 3. Sosnovik Farm Chapter 4. Goodbody Farm Chapter 5. Bob May Farm Chapter 6. Planer Tree Plantation Chapter 7. Van Kirk Target Farm Chapter 8: Bob May Farm



Executive Summary

Hope Township completed its initial *Farmland Preservation Element* in June 2009 and was subsequently accepted into the State Agriculture Development Committee's Planning Incentive Grant (PIG) program for farmland preservation. This plan was amended in 2012, and since the completion of the 2012 Farmland Plan Amendment, **nine farms** have been preserved, protecting **643 additional acres** of agricultural land. **19 farms**, totaling **1,424 acres** have been preserved in Hope Township since the start of its farmland preservation program.

Based upon the State's Minimum Eligibility Criteria for productive soils and tillable land, of the **7,354 acres of farm assessed land** in Hope Township (**63%** of the municipality), **29 farms, or 3,175 acres**, which are greater than 20 acres in size, are potentially eligible for preservation.

In 2005, Hope Township taxpayers passed a binding referendum question establishing the Municipal Farmland Preservation Trust Fund. The enabling ordinance allows the Hope Township Committee to establish a maximum open space tax of 5 cents per \$100 of a property's assessed valuation; however, the highest open space tax levied to date has been 2.5 cents. The current tax levy is \$0.0125, and the Fund is expected to generate \$27,489 in 2021. The current balance of the Fund is \$179,262 as of June 3, 2021. 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 Hope Township:

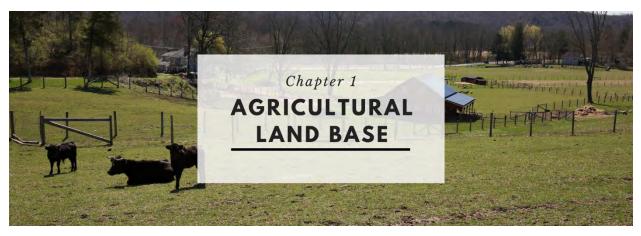
One-year target:	80 acres, 1 farm
Five-year target:	650 acres, 6 farms
Ten-year target:	1,000 acres, 11 farms

The Township hosted two public meetings on the *Comprehensive Farmland Preservation Plan Update* to share the draft *Plan Update* with residents. The first public meeting was held on October 5, 2020, as part of the regularly scheduled meeting of the Planning Board. The second public meeting was hosted by the Planning Board on September 13, 2021, to review the final draft of the *Plan Update* prior to adoption as an Element of the Master Plan. The Agricultural Advisory Committee approved the *Update* on October 6, 2021. The public meetings were

announced on the municipal website and copies of the report were available at the municipal building and on the Township's website. Meeting materials are included in **Appendix A**.

MISSION STATEMENT

The Mission of the Hope Township Agricultural Advisory Board is to preserve the Township's agricultural heritage while protecting prime farmland from future development. The Board's active outreach program maximizes the effectiveness of Hope Township's farmland preservation program by utilizing State and County financial resources in addition to Hope's Planning Incentive Grant (PIG) and the Township's open space tax to acquire development easements on qualified farms.



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 Hope has 6,387 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 Hope Township are shown on Map 2^b

Due to the nature of the topography, slightly less than half of Hope's farm-assessed acreage is woodland/wetland (2,921 acres); with 3,447 acres designated active agriculture (cropland and pasture), and 19 acres designated as equine.¹ (**Figure 1**)

^a The 2019 and 2017 Farmland Assessment Tax data were used throughout the report. When appropriate and available, this data was compared to individual crop report.

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

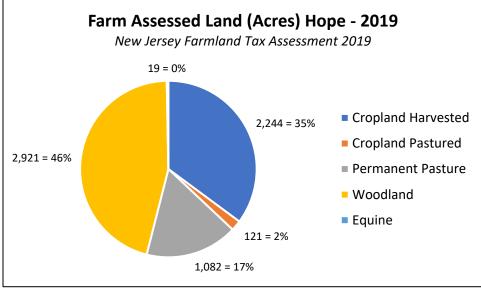


Figure 1. Farm Assessed Land in Hope (2019 Tax Assessment)

Hope Township lies within the Ridge and Valley Province with the southern border of the Township located in the Highlands Province.

Hope Township has a mixed landscape of agricultural land, forests, and wetlands with a relatively flat elevation and a few areas of moderate to severe slopes located along the east-west trending ridge line of Jenny Jump Mountain at the south edge of the Township. This ridgeline has an elevation ranging from 640 feet about sea level with a peak elevation of 1,080 feet. This region contains forestland with a majority being preserved as part of Jenny Jump State Forest.² (**Map 3**)

According to 2015 Land Use/Land (LU/LC) Cover data from the New Jersey Department of Environmental Protection (NJDEP), 26.55% (3,107.91 acres) of the Township is dedicated to land in agricultural use, versus 23% county wide.

While Hope has the same percentage of farm assessed woodland as the rest of the County (47%), it has slightly more wetland area (12%) than the county (9%). (**Figure 2** and **Figure 3**) Overall, Hope has more of its land used for agriculture, when compared to Warren County, due to the rocky soils and steep slopes throughout the County. (**Table 1**)

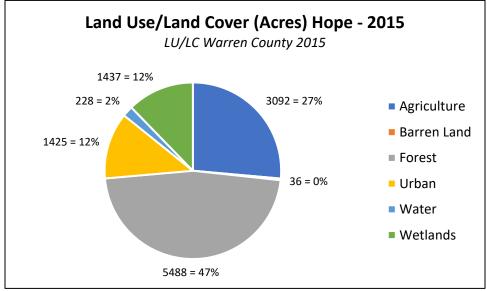
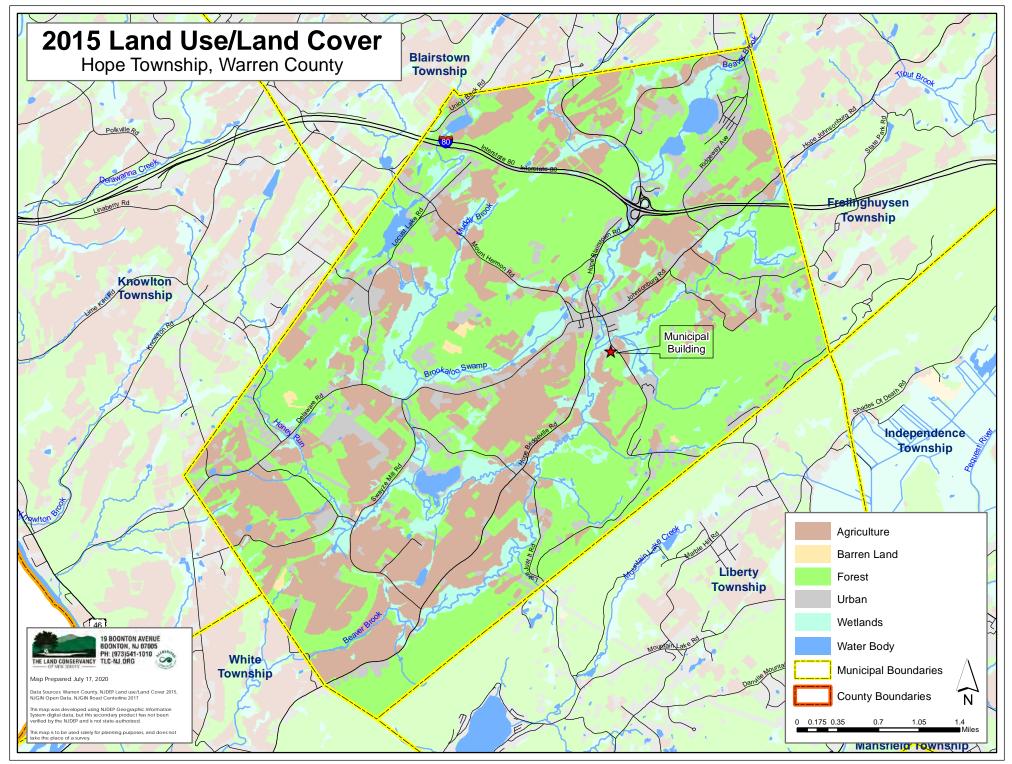


Figure 2. Land Use/Land Cover for Hope (NJDEP)

Table 1. 2015 Land Use/Land Cover for Hope and Warren County							
	Норе Т	ownship	Warren	Warren County			
	Acres	Percent	ercent Acres Percent				
Agriculture	3092	26.41%	53,590.13	23.09%			
Barren	36	0.31%	1,451.88	0.63%			
Forest	5488	46.88%	108,686.87	46.83%			
Urban	1425	12.17%	41,001.00	17.67%			
Water	228	1.95%	5,853.96	2.52%			
Wetland 1437		12.27%	21,481.52	9.26%			
Source: NJDEP 2015 Lar	Source: NJDEP 2015 Land Use/Land Cover						

Figure 3. Land Use/ Land Cover Map for Hope Township (2015)



Hope Township - Comprehensive Farmland Preservation Plan Update

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.³ 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 917 acres of prime farmland soils in Hope Township, of which 552 are in active agricultural use. (**Table 2** and **Table 3**) Accounting for 8% of the total soils in the Township, these soils have been classified as belonging to the *Hazen-Hoosic Complex series* (Hdx), 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 598 acres of soils of statewide importance in Hope Township, of which 242 acres are in agricultural use. Accounting for 5% of Hope's soils, these soils tend to have a slope of 8 to 15 percent and can be very stony.
- *Unique soils* exhibit specific qualities that may be favorable to the production of specialized crops such as cranberries, fruits, and vegetables. There are 458 acres of soils with unique importance in Hope Township, of which 8 acres are in active agricultural use. Catden muck and Timakwa muck fall into this category.

The following major soil series (non-farmland) are also found in Hope Township (excluding water and urban land):

- Fredon-Halsey complex (FrdAb) 1,161 acres, or 10%
- Nassau-Manlius (Nau) 2,642 acres, or 23%
- Rock outcrop-Farmington- 2,987 acres, or 25%

Table 2 identifies the major soils in Hope Township, grouped by the NRCS classifications for agricultural soils and **Map 3** illustrates their location. Of the total land in Hope, 1,973 acres, or 17% of the town, is identified as agricultural soil by the NRCS.

	Table 2. Soil Categories - Hope Township			
Abbr.	Name			
	Prime Farmland Total	916.82		
HdxpAb	Hazen-Paulins Kill complex, 0 to 3 percent slopes, very stony	162.41		
HdxpBb	Hazen-Paulins Kill complex, 3 to 8 percent slopes, very stony	688.40		
NetBb	Netcong loam, 0 to 8 percent slopes, very stony	66.00		
	Farmland of Statewide Importance Total	598.07		
NetCb	Netcong loam, 8 to 15 percent slopes, very stony	227.60		
PduaCb	Paulins Kill-Hazen complex, 8 to 15 percent slopes, very stony	370.47		
	Farmland of Unique Importance Total	458.00		
CatbA	Catden muck, 0 to 2 percent slopes	418.15		
TheaAt	Timakwa muck, 0 to 2 percent slopes, frequently flooded	39.84		
	Not prime farmland Total	9733.39		
AhbBc	Alden silt loam, 0 to 8 percent slopes, extremely stony	177.48		
ChkC	Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes	71.32		
ChkE	Chatfield-Hollis-Rock outcrop complex, New Jersey Highlands, 35 to 60	554.54		
	percent slopes			
ChwBc	Chippewa silt loam, 0 to 8 percent slopes, extremely stony	134.12		
FaxC	Farmington-Rock outcrop complex, 0 to 15 percent slopes	93.81		
FdwB	Farmington-Wassaic Rock outcrop complex, 0 to 8 percent slopes	69.46		
FrdAb	Fredon-Halsey complex, 0 to 3 percent slopes, very stony	1161.61		
GkanBc	Gladstone loam, 3 to 8 percent slopes, extremely stony	6.17		
GkanCc	Gladstone loam, 8 to 15 percent slopes, extremely stony	6.06		
HhmBc	Hibernia loam, 0 to 8 percent slopes, extremely stony	49.72		
HncD	Hollis-Rock outcrop-Chatfield complex, New Jersey Highlands, 15 to 35	248.76		
	percent slopes			
NauB	Nassau-Manlius very channery silt loams, 0 to 8 percent slopes, rocky	55.99		
NauC	Nassau-Manlius very channery silt loams, 8 to 15 percent slopes, rocky	1114.67		
NauD	Nassau-Manlius very channery silt loams, 15 to30 percent slopes, rocky	1472.78		
NauEg	Nassau-Manlius very channery silt loams, 35 to 60 percent slopes, very rocky	400.22		
PaoD	Parker gravelly sandy loam, 15 to 25 percent slopes	14.84		
PduoEb	Paulins Kill-Otisville complex, 25 to 60 percent slopes, very stony	12.22		
QY	Quarries	63.72		
RnfC	Rock outcrop-Farmington-Galway complex, 8 to 15 percent slopes	947.62		
RnfD	Rock outcrop-Farmington-Galway complex, 15 to 35 percent slopes	2039.39		
RoefDc	Rockaway loam, thin fragipan, 15 to 35 percent slopes, extremely stony	146.98		
RokB	Rockaway-Chatfield-Rock outcrop complex, 0 to 8 percent slopes	24.55		

	Table 2. Soil Categories - Hope Township	
Abbr.	Name	Acres
RokC	Rockaway-Chatfield-Rock outcrop complex, 8 to 15 percent slopes	57.61
RokD	Rockaway-Chatfield-Rock outcrop complex, 15 to 35 percent slopes	148.17
UdaB	Udorthents, 0 to 8 percent slopes, smoothed	13.69
UdauB	Udorthents-Urban land complex, 0 to 8 percent slopes	186.39
VepBc	Venango silt loam, 0 to 8 percent slopes, extremely stony	38.33
VepCc	Venango silt loam, 8 to 15 percent slopes, extremely stony	72.85
WATER	Water	116.93
WusBc	Wurtsboro-Swartswood complex, 0 to 8 percent slopes, extremely stony	97.52
WusCc	Wurtsboro-Swartswood complex, 8 to 15 percent slopes, extremely stony	174.20
	Grand Total	11,706.27
Source: N	RCS Soil Data Access 2020	

The total land in active agricultural use (3,294 acres) represents 28% of Hope. Notably, most of these active agricultural acres in Hope 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.

Soil Classification	Total Acres	Ag Acres	Ag % of Total
Prime Farmland Soil	917	552	60%
Soils with Statewide Importance	598	242	40%
Soils with Unique Importance	458	8	2%
Not Prime Farmland	9,733	2,493	26%
Total:	11,706	3,294	28%

Almost half of Township land (5,040 acres) is located on slopes steeper than 15%.⁴ 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 Hope Township. Groundwater sources are generally preferred to surface waters 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, corn, and soybeans, do not require irrigation or are not cost effective to irrigate, even during drought periods, due to the large amounts of land they occupy. Irrigation is more suited to crops such as vegetables, since they occupy relatively small land areas. The Township had only 7 acres of vegetables in 2017, with none of these acres in irrigation. Only 4 acres in Hope were used for irrigation, all of which were used for fruit crops.⁵

Despite the abundance of local groundwater reserves, water rights for agricultural use in Hope Township are difficult to obtain. The *Net Water Availability Map* below shows that the Delaware Valley in Hope Township runs a water deficiency of nearly 90,000 gallons per day⁶. (**Figure 4**) Prime groundwater recharge areas are located throughout the Township, with the largest concentration located in the center of Hope, south of Intertate-80. Water quality ranges from not impaired in the central and eastern portion of the Township, to impaired in the western portions of Hope.

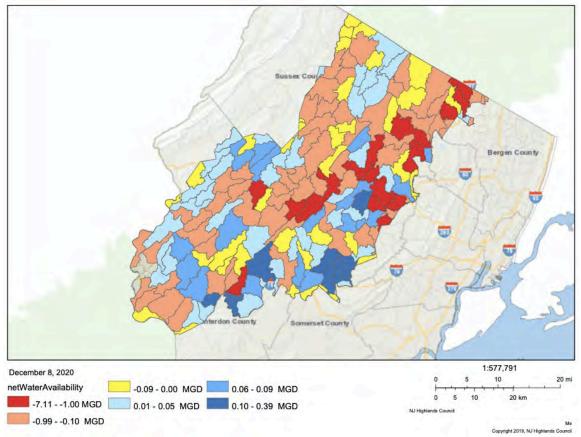


Figure 4. New Jersey Highlands Council Net Water Availability Map

D. Farmland Trends & Statistics

The amount of farm assessed land in Hope Township dropped 10% from 2010 (7,092 acres) to 2019 (6,387 acres). (**Figure 5**) Warren County farm assessed land base decreased 5.4% in the same period, from 110,003 to 104,014 acres. The composition of the Township's farm assessed land has also changed during this time:

- Harvested cropland dropped 12.1% (7.5% for the County).
- Pastured cropland decreased 54.5% (21% decline for the County).
- Permanent pasture declined 15% (18% for the County).
- Woodland rose by 2% (1.9% for the County).

Harvested cropland, the largest category of active agricultural land in Hope, has declined 2% between 1983 and 2019, from 2,292 to 2,224 acres.^c Among the dominant crops in this category — hay, corn, and soybeans — the biggest losses occurred in corn for silage, which declined 94% in the period 1983-2017 (the latest year for which data on individual crops is available), from 349 to 22 acres. This can most likely be explained by the loss of dairy farms in Hope, with dairy cattle showing a steady drop in numbers from 1,334 head in 1983 to 197 head in 2017. Hay production decreased slightly in the same period, from 1,298 acres to 1,151. Soybean acres jumped from 11.8 to 357 acres. Other crops such as barley, grass for silage and sorghum, have virtually disappeared from production in Hope. Fruit, vegetable, and nursery crops have dropped steadily between 1983 and 2017, and together represent 88 acres, or 4% of total harvested cropland.

Pastured cropland decreased by 70% and permanent pasture by 36% in the same period. This loss tracks with the decline in beef and dairy cattle operations, with beef cattle down 19% from 528 head in 1983 to 430 head in 2017. Offsetting this is the growth in sheep and goat operations, with sheep and goats increasing from 74 to 228, or a growth of 208%. Inventory of equine and other livestock (including llamas) remains relatively steady.

The acreage of farm assessed woodlands in Hope has increased (2,739 acres in 1983 to 2,921 acres in 2019). There are two primary reasons for this. The first is that cropland left abandoned or fallow for extended periods of time undergoes ecological succession into forested land. The increasing costs of farming and farmland in the state and the Township may compel local farmers to produce less land-intensive products and leave parts of their farms fallow. Secondly, continuously rising property taxes and the USDA forest stewardship incentives have encouraged more landowners of forested properties to obtain farmland tax assessment, thereby increasing the amount of forested farmland in the Township.

Though the overall acreage of harvested cropland and pastureland has decreased in the Township, this has been partially offset by the increase in farm assessed woodland acres. However, the farmland assessed agricultural land base in Hope has decreased by 15%, from 7,499 acres in 1983 to 6,387 acres in 2019. The overland farmland assessed base reached 7,663 acres in 1990 but declined by about 17% by 2019, reflecting losses in all categories except woodland, which held steady.

In all categories except cropland harvested, Hope has lost active agricultural land at a faster rate than the county. Between 1983 and 2019, active agricultural land has decreased 27% both in Hope and in Warren County. (**Table 4**)

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

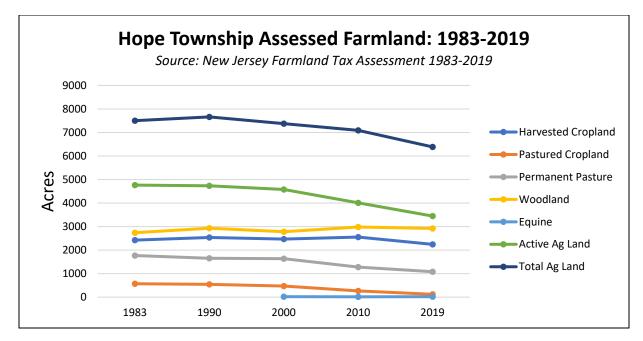


Figure 5. Assessed Farmland in Hope Township

Table 4. Farmland Assessment in Hope and Warren County (1983-2019) (acres)								
	Cropland Harvested		Cropland Pastured		Permanent Pasture		Total Active Agriculture	
	Hope Warren		Норе	Warren	Норе	Warren	Норе	Warren
	Township	County	Township	County	Township	County	Township	County
1983	2,292	49,033	570	5,865	1,769	13,513	4,764	68,411
1990	2,536	53,057	543	6,588	1,654	15,172	4,733	74,817
2000	2,468	51,147	472	5,240	1,637	12,891	4,577	69,278
2010	2,616	44,362	253	3,900	1,142	11,133	4,011	59,395
2019	2,244	43,487	121	3,493	1,082	9,752	3,447	56,732
% Change	-2.1%	-11.3%	-78.8%	-40.4%	-38.8%	-27.8%	-27.6%	-17.1%
Source: Tax	Source: Tax 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 a county-wide 17% decrease in acreage since 1983, there has been a 51% increase in the number of farms, up from 608 to 918 in 2017. Following a continuing trend, the average farm size dropped from 144 to 80 acres.^{7 8} The 2017 Census of Agriculture indicates that for ZIP code 07844, which encompasses Hope Township, 32 of 40 farm operations were under 50 acres and eight were 50 acres or greater. The ZIP code tabulations also indicated that of these 40 operations, 35 farmers operated only land they owned, one farmer worked both land they owned and land they rented from others, and four farmers were tenant farmers, operating only land rented from others or worked for shares.⁹

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**)

Hope has the ninth highest number of farm parcels in farmland assessment in Warren County. Its 138 approved farmland assessment forms represent 5% of the County total of 2,516 in 2019. However, average farm size, at 33 acres, is smaller than the County average of 40 acres. Median farm parcel size is 19 acres, with as many parcels below that number of acres as above. The largest farm parcel in Hope is 239 acres. Despite the high number of farm parcels, because of the comparatively smaller size of these parcels, Hope ranks ninth in the County in total acres devoted to agricultural or horticultural use, at 6,387 acres, or 6%, versus number one ranked Franklin Township's 10,998 acres, or 10%. **Table 5** shows the breakdown of farm parcel sizes in Hope based on the 2019 tax assessment data.

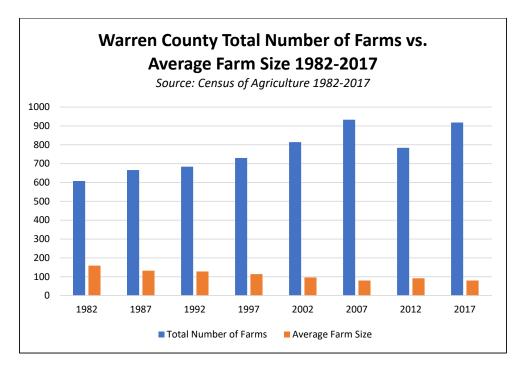
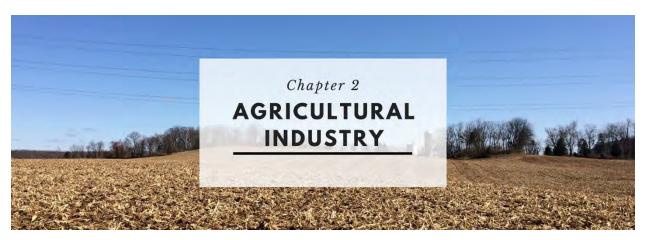


Figure 6. Average Farm Size in Warren County (1982-2017)

Table 5. Size of Individual Farm Parcels in Hope					
Size # of Farms					
Under 1 acre	10				
1-9 acres	66				
10-49 acres	96				
50-179 acres	47				
179+ acres	3				
Source: Hope Township Tax D	Database (2019)				



Chapter 2. Agricultural Industry

A. Trends in Market Value of Agricultural Products

Agricultural land in Hope 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 2017.¹⁰ (Figure 7)

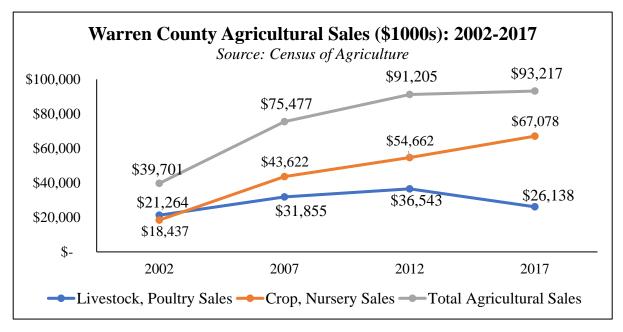


Figure 7. Agricultural Sales in Warren County

As of 2017, Warren County ranked sixth in the state in total agricultural sales. (**Table 6**) Additionally, Warren County lost 12.71% in average farm sales from 2012 to 2017, the sixth-fastest rate of decline in New Jersey, but at a slower rate than its neighboring counties. (**Table 7**)

Table 6. Total Agricultural Market Value (\$1000s) by County					
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				
Source: U.S. Census of Agricul	ture, 2017				

Tab	Table 7. 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.	S. Census of Agricultur	e, 2012, 2017					

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

Dairy sales have declined by 64% from over \$9.0 million in 1997 to \$3.2 million in 2017. This is accompanied by a 74% decline of dairy farms in Warren County, 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, and 271% from 2002. (**Figure 8** and **Table 8**)

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.¹¹

Annual sales comprised about 41% of total agricultural revenue in 2007 (\$22.0 million) but increased to 61% of revenue by 2017. (\$40.7 million).

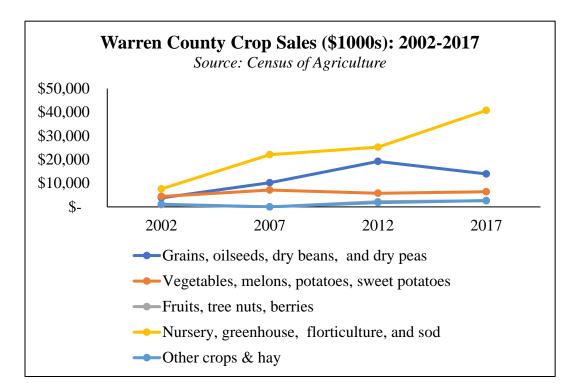


Figure 8. Crop Sales in Warren County (2002-2017)

Table 8. 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 million in sales. Since 2002, vegetables sales rose by 44%, and fell 18% from 2007 to 2012.

Grains, which include corn and soybeans, have grown revenue by 36% since 2007. Grains will most likely remain one of the top-grossing field crops, ranking second to vegetables in 2017.

A small but significant portion of Warren County's agricultural sales come from other crops, such as hay. Sales revenues decreased by 62% in 2012, and there has been a 138% increase in gross sales from 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. Despite acreage falling by 49%, peach farms increased by over 29%.

B. Agricultural Production Trends

From 2005 to 2017, agricultural production in Hope increased for beef cattle (91%) and declined for mature dairy (87%).¹² (**Figure 9**) Overall, the number of beef cattle has grown with a low of 224 head in 2005 and 430 in 2017. The number of meat chickens fell 54% from 2005 to 2010 and declined further by 2017 to 30 head.

Acres in soybean have risen steadily since 2005, along with corn for grain up until 2015, with a 70% average rate of increase every five years. Acres in hay have steadily decreased since 2005, falling from 1,653 to 1,151 acres in 2017. Hay saw its largest losses of 13% from 2005 to 2010. (**Table 9**)

Considering the historically low outputs of corn and hay in 2002, long-term trends have stabilized and steadily increased since 2002. (**Figure 10**) Hay has made a resurgence, increasing by 34% since 2012, despite being down 13% since 2002. (**Figure 11**) Soybean production maintained its upward trajectory through 2002, growing 140% from 2002 to 2017. (**Figure 12**)

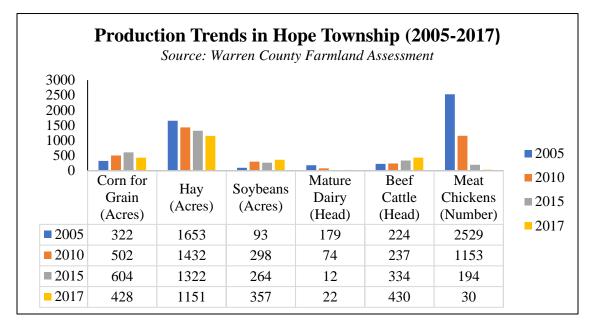


Figure 9. Production Trends in Hope Township

Table 9. Dominant Crops in Hope Township		
Top 10 Dominant Crops (in acres)	2017	% Change
Other Hay	885	-
Corn for Grain	428	-51.64%
Soybeans	357	-16.59%
Alfalfa Hay	266	-25.49%
Christmas Trees	64	-75.94%
Corn for Silage	22	-65.63%
Wheat	16	-27.27%
Rye	10	-37.50%
Apples	6	-40.00%
Trees & Shrubs	6	0.00%
Total	2060	
		% of Total
Field Crops	1984	96.31%
Nursery Crops	70	3.40%
Fruits & Berries	6	0.29%
Vegetables	0	0.00%

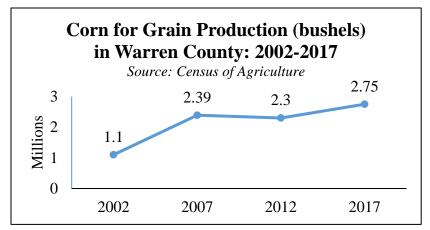


Figure 10. Corn Production in Warren County

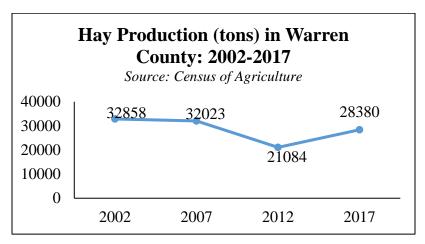
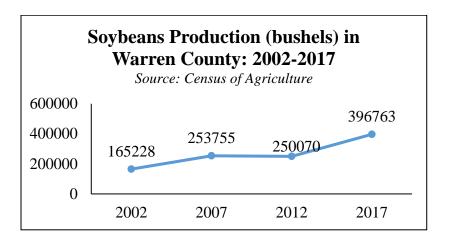
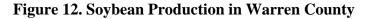


Figure 11. Hay Production in Warren County





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%.

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**)

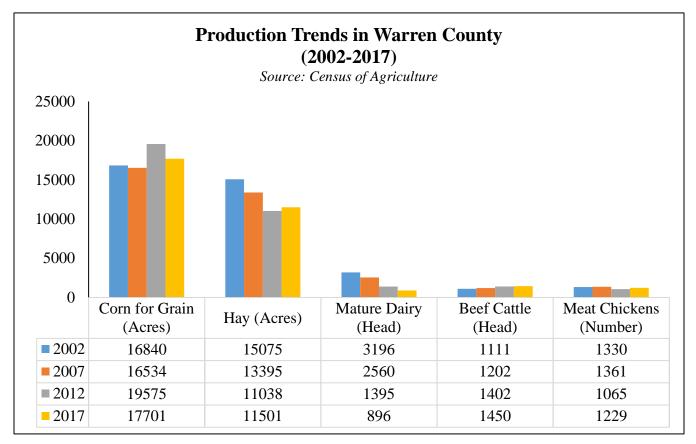


Figure 13. Production Trends in Warren County

C. Agricultural Support Services and Related Industries

Agricultural support services in Warren County and Hope Township include businesses such as tractor sales and supply stores, feed vendors, and hardware/equipment retailers, mostly in and around Washington Borough. Retailers include Frank Rymon and Sons, Tractor Supply Co, and Growmark in Bloomsbury. Major feed vendors in and around Hope include Agway and North Warren Farm & Home Supply, supporting the nearby cattle farmers. In Hackettstown, the Livestock Auction operates as an independently funded co-operative.¹³ As the last remaining auction in New Jersey, the Livestock Auction gives County farmers and farm suppliers have a unique marketplace in which to trade and sell products.

Local support businesses are often insufficient to meet all the needs of the Township's agricultural community. Consequently, local farmers have become adept at minimizing the need for many repair services by fixing a variety of mechanical problems themselves. Farmers tend to specialize in agricultural repair and supplement their incomes by offering their services to other farmers. 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 have become absent from the area, which forces farmers to ship their products out-of-town to be processed. Some farmers have found that reliance upon out-of-state suppliers and non-local professing 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 Hope 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): 6,859 acres (~58% of the municipality), located in the central, south-eastern, and north-western sections of the Township.
- Rural-Environmentally Sensitive Planning Area (PA4B): 1,011 acres (~8%) spread throughout south-western and north-eastern sections of the Township.
- Environmentally Sensitive Planning Areas (PA5): There are also pockets of environmentally sensitive land surrounding the Rural and Rural-Environmentally Sensitive Planning Areas. This Planning Area occupies approximately 1,579 acres (~13%) of the Township.
- Parks and Natural Areas: 2,251 acres (~19%) located along the eastern boundaries of the Township.

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."

Two areas in Hope that are Designated Centers are Hope Village and Mt. Hermon Hamlet, and the Township does not plan to pursue any future designations.¹⁶

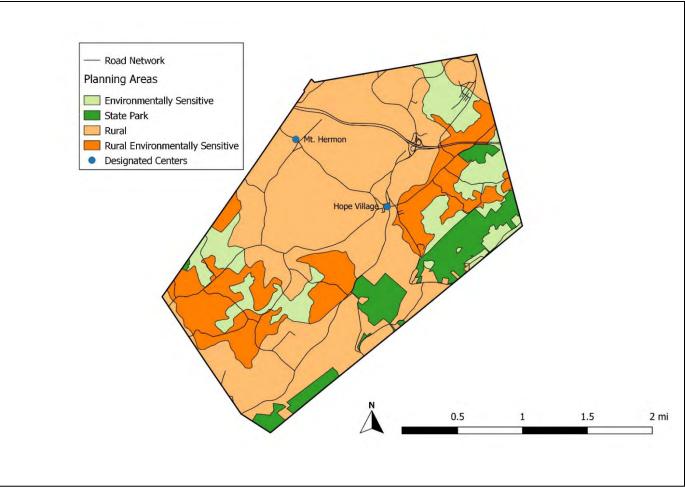


Figure 14. State Development and Redevelopment Plan: Hope Township

B. Special Resource Area: Highlands Region

The New Jersey State Legislature enacted the Highlands Water Protection and Planning Act (HWPPA) on August 10, 2004. The Highlands region covers 13% of New Jersey's land area. Situated in northwestern New Jersey, its western boundary stops at Hope's border with neighboring Knowlton and Blairstown Townships. The impact for Hope lies in the advantage of being near areas defined as high priority for agriculture.

C. Municipal Master Plan

In the introduction to the 2006 *Periodic Reexamination Report* it states, "Hope has historically been the subject of limited development pressure and as such has seen very modest construction over the last 10 years". The Township's Master Plan (1964, 1996, 2004, 2006¹⁷, 2016¹⁸) includes

the following, "the original intent was to come up with a low-density flexible approach to subdivision designs to protect the Township's rural character". There have been no changes to the land use zoning since 2002.¹⁹ Hope updated its *Environmental Resource Inventory* in 2018 highlighting natural and agricultural features.²⁰

D. Land Use Trends

According to the 2015 NJDEP LU/LC data, forested areas make up the largest percent of Hope's lands (46%), with agricultural and urban uses, second and third at 26% and 12% respectively. (**Figure 3** and **Figure 15**)

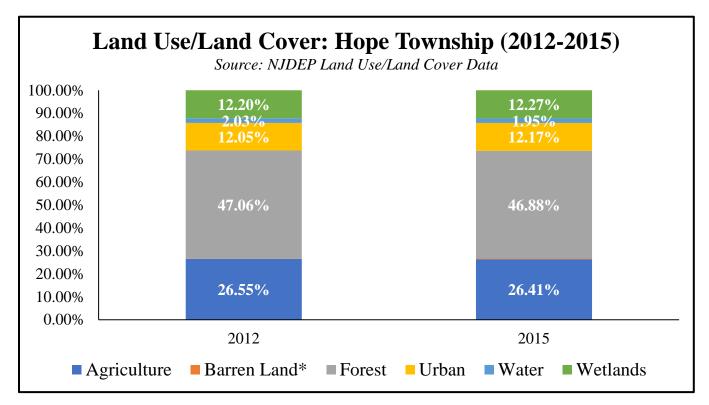


Figure 15. Hope Township Land Use/Land Cover Change 2012-2015

Note: *Barren land represents less than 1% of the total land coverage in Hope Township.

E. Public Infrastructure – Sewer and Water

No sewer services have been adopted by Hope Township, leaving septic systems to service the residents.²¹ As noted in the *Master Plan*, no future wastewater facilities are to be designed to induce growth for large-scale residential development. Areas not served by the 20,000 gpd discharge facilities will be limited to discharges of no more than 2,000 gpd.

Table 10. Hope Township Zoning Densities by Lot Size, Acres, Percent of Land			
Zone	Acres	% of Land	Min. Lot Size
HMH - Hope Moravian Historic Center	82.57	0.71%	0.92 acres
MHH- Mount Hermon Hamlet	15.11	0.13%	0.5 acres
NC - Neighborhood Commercial	33.54	0.29%	4 acres
POP - Planned Office Park	390.38	3.34%	4 acres
LDAR - Low-Density Agricultural Residential	10665.4	91.14%	2 acres
LDAR-H - Low-Density Agricultural Residential-Historic	435.43	3.72%	2 acres
Pre-Teen and Family Amusement Park	79.73	0.68%	-
Total	11,702.16	100%	
Source: Hope Municipal Code		•	•

F. Municipal Zoning

1. Types, Lot Size and Distribution in the Municipality

The LDAR (Low-Density Agricultural Residential) and LDAR-H (Low-Density Agricultural Residential-Historic) Zones comprises the top two largest land percentages of all zones, reflecting the agricultural priorities of the Township. As of 2020, the Township is 1.52% zoned at <1 acre/unit, with the remaining 98.49% as medium lots (1-5 acres/unit). (Table 10 and Figure 16) All zones, other than the HMH, NC, and Pre-Teen and Family Amusement Park Zones, allow agriculture as principal permitted uses. As commercial and residential uses grow, the Township will monitor its proximity to farmlands.

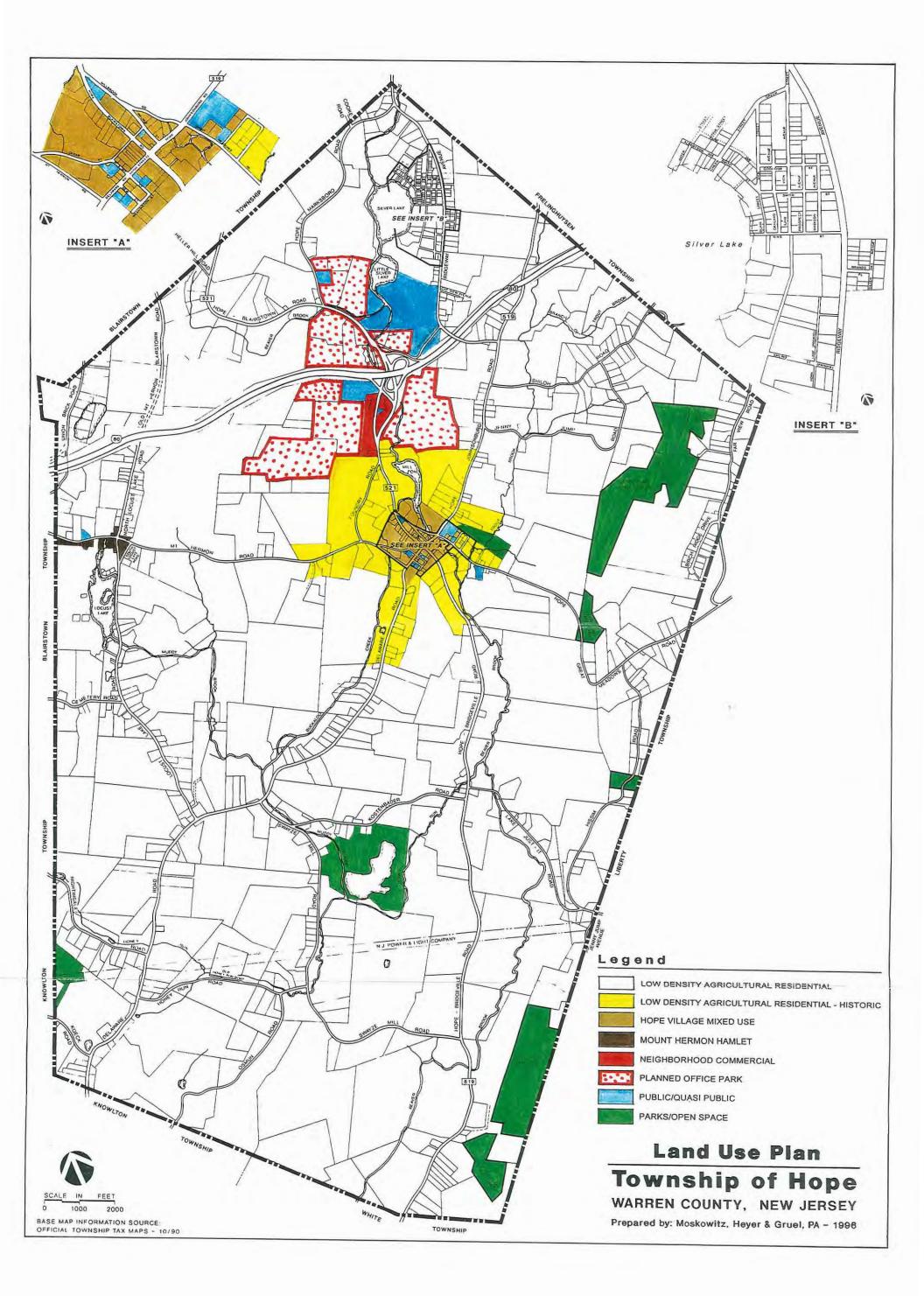
2. Adopted Redevelopment Areas

There are no adopted redevelopment areas in Hope Township.

3. Innovative Planning Techniques

There are mandatory and volunteer options 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, the Agricultural Advisory Board (AAB) will work with the Planning Board to ensure agricultural land is set aside in a manner to ensure viability of the farmland in the future. To date, these tools have not been utilized by Hope Township to preserve farmland

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.²² 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 of clustered developments are permanently deed restricted, which helps to ensure the permanence of local farming.

Lot size averaging maintains the net allowable zoning density on a site but does not enforce uniform lot size requirements or setbacks. This allows for some development lots to be small to accommodate affordable housing units, neighborhood commercial stores, or "village" development densities, while other lots can be 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. 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 man-made 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 Pressure and Land Value

Despite its limited access to regional highways and mass transit, Hope Township's current population, based on the U.S. Census, was 1,737 individuals in 2019.²³ This is a 10% 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 17** and **Table 11**) In the period between 2009 and 2019, growth slowed, due to the 2008 economic recession. Both historically and up to 2019, building permits in Hope were exclusively for single family homes, and represent about 0.60% of total county permits.²⁴ (**Figure 18**) The residential permits approved in 2019 was only 7% of the amount issued in 2001 (one permit versus 13 in 2001), when permit numbers peaked. Warren County has experienced a similar trend only issuing 12% of permits in 2018 compared to its numbers in 2000.

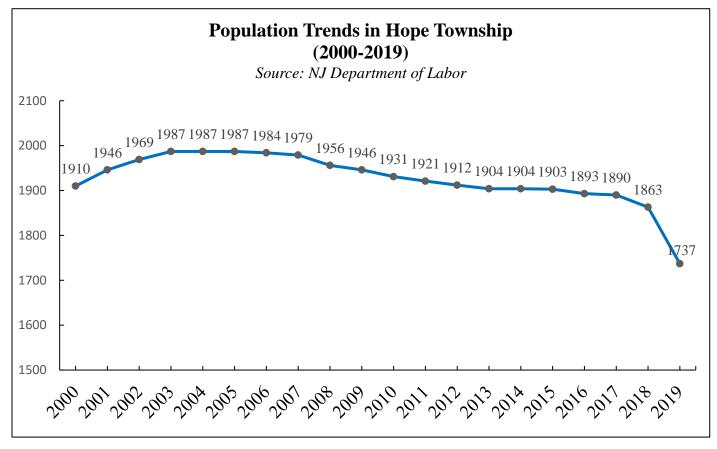


Figure 17. Population Trends in Hope Township

		Table 11. Population of Warren County (2000-2019)			
Year	% Change	Population			
2000	-	102902			
2001	2.23%	105201			
2002	1.50%	106774			
2003	1.30%	108163			
2004	0.30%	108491			
2005	0.34%	108855			
2006	0.19%	109059			
2007	0.11%	109179			
2008	0.66%	109897			
2009	-0.24%	109638			
2010	-0.94%	108605			
2011	-0.36%	108218			
2012	-0.45%	107733			
2013	-0.53%	107157			
2014	0.19%	107358			
2015	-0.07%	107282			
2016	-0.41%	106845			
2017	-0.04%	106798			
2018	-0.47%	106293			
2019	-0.97%	105267			

As the Township transitions into a post-recession world, however, development pressures may be expected to intensify in Hope for the near future, due to the relative scarcity of land for new residential development in the northeastern part of the state coupled with potential restrictions on future development in the Highlands Preservation Area within nearby municipalities.

From the perspective of land values, there has been a general upward trend in the per-acre easement values paid to preserved farms. From the 2001 to 2004 period, the average value paid per acre was \$3,600, which rose to \$5,548 from 2009 to 2012. It has since fallen to \$3,967 from 2017-2020. Between 2001 and 2020, the average easement values have remained relatively constant, primarily due to the drop in land values from the 2008 recession. (**Figure 19**)

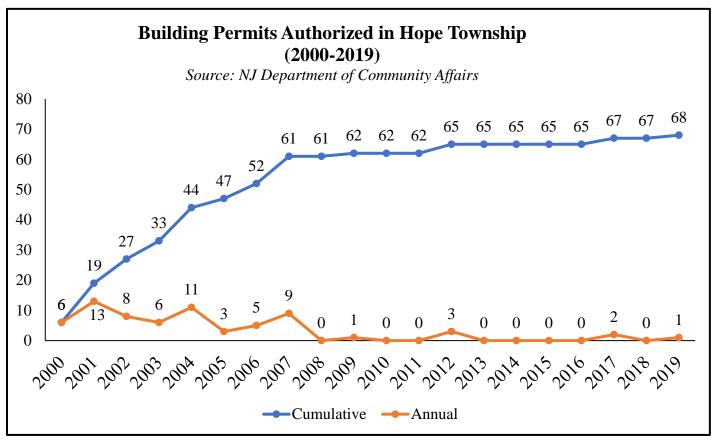


Figure 18. Building Permits Authorized in Hope Township

G. Density Transfer Opportunities

One program Hope 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.

The New Jersey TDR Bank and the Office of Planning Advocacy (Smart Growth) are facilitating TDR activities statewide. They offer Planning Assistance Grants and technical assistance to municipalities looking to establish municipal TDR programs and may provide funds for the purchase of development credits. The State TDR Bank will also provide financial backing on loans secured using development credits as collateral and keep records of all development credit transfers within the State. Hope 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. Noncontiguous cluster zoning is not currently used in Hope Township, where there is minimal opportunity for new development in the higher density zones that accommodate residential development.

The general sentiment in Hope regarding density transfer programs is that management of such a program on the local level is beyond the capacity of the municipal government.

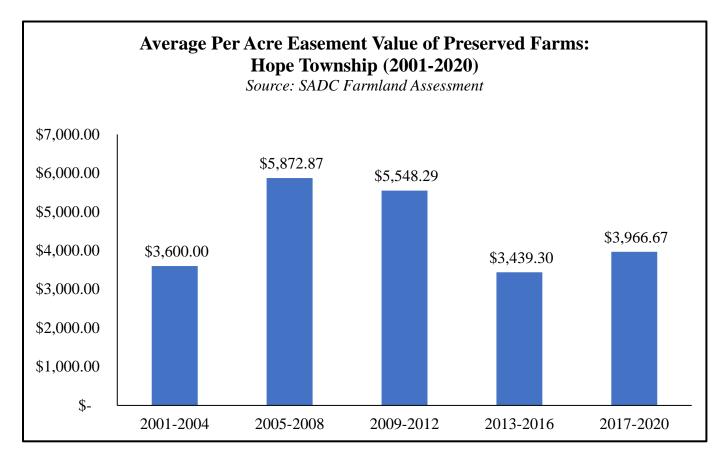


Figure 19. Average Per Acre Easement Value of Preserved Farms in Hope Township



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.

Chapter 4. Farmland Preservation Program

There are **7,354 acres** of farm-assessed land in Hope 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.^e

A. Warren County Agricultural Development Areas (ADAs)

1. Statutory and County Criteria

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

^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.

^e See Inventory Tables at the end of this document.

- 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 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, Phillipsburg, and Washington Borough. As part of the 2008 Comprehensive Farmland Preservation Plan, the CADB updated the 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.
- 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. Hope Township did not have any changes in their ADA.

2. Agricultural Development Area – Hope Township

Overall, there are **7,354 acres** of farm assessed parcels in Hope Township. Of this, **7,254 acres** (98%) of farm assessed land in Hope is included within the Warren County ADA. All lands in Hope Township are included in the Warren County ADA except for Jenny Jump State Forest and a few surrounding parcels.

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 Hope is included within **Map 4**. The Northwest Project Area, in which Hope Township is located is shown on **Map 5**.

B. Farmland Preserved to Date by Program

As of June 2021, **19 farms** (**1,424 acres**) have been preserved in Hope Township: (**Table 12** and **Table 13**)

Table 12. Preserved Farms in Hope Township										
Original Owner	Acres	Program	St	tate Cost	County Cost	Municipal Cost	Other	Total Cost	Price/Acre	Year
Scorp: Hope Township	53.00	Municipal	\$	-	\$ -			\$ -	\$ -	2003
Motyka, Richard (RVC)	77.82	NP-EP	\$	140,068	\$ 140,068			\$ 280,136.00	\$ 3,599.99	2003
Rohsler, H. Mark & B.	70.70	Cty EP	\$	105,766	\$ 56,408			\$ 162,174.00	\$ 2,293.94	2005
Rohsler, Barbara	60.17	Cty EP	\$	89,889	\$ 77,903			\$ 167,792.00	\$ 2,788.72	2005
White Oak Farm (Dering)	46.85	Cty EP	\$	193,541	\$ 118,026			\$ 311,567.00	\$ 6,649.99	2006
Grochowicz, T. & L.	128.36	Cty EP	\$	449,232	\$ 455,696			\$ 904,928.00	\$ 7,049.99	2006
Sosnovik, E. & D.	64.50	SADC Direct	\$	586,986	\$-			\$ 586,986.00	\$ 9,100.13	2008
DePietro*	26.00	Cty EP	\$	-	\$ 557,679			\$ 557,679.46	\$ 6,196.44	2009
May, R. & D.	36.87	Muni PIG	\$	125,361	\$ 29,496	\$29,496.80		\$ 184,353.80	\$ 5,000.00	2008
Bardon-Goodbody Farm Co.	178.52	SADC Direct	\$	1,088,355	\$-			\$1,088,355.00	\$ 6,096.58	2009
Motyka, R. & L.	38.62	Cty PIG	\$	119,722	\$ 73,378			\$ 193,100.00	\$ 5,000.00	2010
Pruden, Timothy	128.56	Cty PIG	\$	359,472	\$ 154,059			\$ 513,531.00	\$ 3,994.46	2014
May (TLC-NJ)	21.04	NP-EP	\$	62,588.05	\$ 62,588	\$ -	\$ -	\$ 125,176.05	\$ 5,950.00	2014
Beaver Brook (TLC-NJ)	136.39	Cty PIG	\$	373,787	\$ 159,792			\$ 533,579.00	\$ 3,911.75	2014
Cooke*	47.42	Cty PIG	\$	84,931	\$ 4,410		\$89,686.77	\$ 179,027.77	\$ 3,775.45	2015
Campbell Foundry Company	171.24	Muni PIG	\$	256,735	\$ 42,789	\$ 42,789.25		\$ 342,313.25	\$ 1,999.03	2016
Malon, G., A., H., and N.	62.17	Muni PIG	\$	192,733	\$ 43,505	\$43,505.40		\$ 279,743.40	\$ 4,499.52	2017
Maertens, Patricia	22.35	Muni PIG	\$	65,264	\$ 14,304	\$14,304.64		\$ 93,872.64	\$ 4,199.99	2018
LaBarre Family L.P	53.34	Cty PIG	\$	123,746	\$ 46,938			\$ 170,684.00	\$ 3,199.99	2020
Total (19 Farms):	1,423.92		\$	4,418,176	\$2,037,039	\$ 130,096	\$ 89,687	\$6,674,998.37		
Cost Share:			(66.19%	30.52%	1.95%	1.34%			

As noted in Table 12:

*DePietro: 90 acres located in Hope and Blairstown Townships, 26 acres in Hope Township, the cost is for all 90 acres.

**Cooke: 48 acres, a small portion of this farm is in Frelinghuysen Township. Federal Farm and Ranch Lands Protection Program (FRPP) funds were used, and the cost is for all 48 acres.

Municipal: Municipal Direct program Muni PIG: Municipal Planning Incentive Grant program Cty PIG: County Planning Incentive Grant program Cy EP: County Easement Purchase program SADC Direct: State Direct program NP-EP: Non-Profit Easement Purchase program

There are 1,424 acres of preserved farmland in Hope Township:

- Hope Township expended \$130,096 (2% of the total cost share).
 - Four farms (293 acres or 21% of the preserved farmland in Hope) were preserved through the Municipal PIG program.
 - One farm (53 acres or 4%) was preserved through the Municipal program.
- Warren County has expended \$2,037,039, or 31% of the total cost share.
 - Five farms, totaling 404 acres (29%) were preserved through the County Planning Incentive Grant (PIG) program.
 - Five projects (22% of the total preserved farmland, or 306 acres) in Hope Township are protected through the County Easement Purchase program.
- State of New Jersey, through the SADC spent \$4,418,176 (66% of the total cost share).
 - SADC Direct Easement Purchase program preserved two farms covering 243 acres, representing 17% of Hope Township's preserved farmland acres.
- Two farms totaling 99 acres (7%) were preserved through the Non-Profit Grant program.

Table 13. Cost Share by Preservation Program								
Program	NumberCost% of TotalProgramFarmsAcresSharePreserved Acres							
Municipal	1	53.00	0%	4%				
Muni PIG	4	292.63	13%	21%				
County PIG	5	404.33	24%	29%				
County EP	5	332.08	32%	22%				
SADC Direct	2	243.02	25%	17%				
NP EP	2	98.85	6%	7%				
Total:	19	1,424						

Since the completion of the *2012 Farmland Plan Amendment*, **eight farms** have been preserved, protecting **643 acres** of agricultural land. Four of the eight farms were preserved through the County PIG program, three were preserved through Municipal PIG program, and one through the Non-Profit Easement program.

As of June 2021, there are two farms pending preservation in Hope Township: one through Municipal PIG and another through the Non-Profit Easement program.

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 Hope Township, five farms have been preserved through the County Easement Purchase program, protecting 332 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. In Hope Township, five farms have been preserved through the County PIG program, protecting 404 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. 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. Hope Township is currently enrolled in the Municipal PIG program. The Township preserved its first farm under the PIG program in 2008. As of May 2021, four farms in Hope, totaling 293 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 Hope, two farms covering 243 acres have been preserved under the SADC Direct Easement Purchase program, at a cost of \$1,675,341.

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 Hope have been preserved through this program.

6. Non-profit Grant Program

Grants from the SADC to non-profit organizations fund up to 50% of the fee simple or development easement values on farms. The Ridge and Valley Conservancy and The Land Conservancy of New Jersey have used this program to preserve two farms totaling 99 acres.

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 Hope 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, one farm in Hope Township, Scorp (53 acres), has 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 NRCS. In Hope Township, no farms currently participate in the term 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. Hope has a Farmland Preservation Trust Fund, which is used to preserve farmland.

E. Farmland Preservation Program Funding Expended to Date by Source

In 2005, Hope Township taxpayers passed a binding referendum question establishing the Municipal Farmland Preservation Trust Fund at a rate not to exceed \$0.05 per \$100 of assessed valuation. The funds are to be used for acquisitions, including appraisals and other professional

services in connection with acquisitions, as well as debt service on any bonds used for farmland acquisition. The tax rate increased from \$0.004 in 2015 to \$0.020 in 2016. It rose to \$0.025 in 2018 before dropping to \$0.010 in 2019. With a modest increase in the tax rate to \$0.0125, the Fund generated approximately \$27,489 in 2020 and is expected to generate \$27,489 in 2021. Since its establishment, the Fund has expended \$517,268 and has a balance of \$179,262 as of June 3, 2021.²⁵ **Table 13** details the amount generated per year for the past six years.

Table 14. Hope Farmland Preservation Trust Fund						
Year	Tax Rate	Amount Generated				
2015	\$0.004	\$12,780				
2016	\$0.020	\$50,710				
2017	\$0.020	\$50,330				
2018	\$0.025	\$55,549				
2019	\$0.010	\$22,015				
2020	\$0.0125	\$27,489				

The Township has funded its farmland preservation to date as a direct payment from its Farmland Preservation Trust Fund. The Fund has not been bonded and is not obligated to past debts.²⁶

F. Monitoring of Preserved Farmland

Warren County monitors the property to verify that compliance with the deed restrictions on the preserved property is taking place. The Township's AAB 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
- 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, Hope Township is not currently enrolled in or developing a TDR program.



Chapter 5. Future Farmland Preservation Program

A. Preservation Goals

Hope Township is 18.29 square miles (11,706 acres) in size. Of this, **7,354 acres (63%)** are under farmland assessment, which includes croplands, woodlands, farm structures and wetlands/waterways that occur on an agricultural property.^{f27} Hope Township has preserved **1,424 acres** of farmland. (**Table 12**).

Based upon the State's Minimum Eligibility Criteria for productive soils and tillable land, of the **7,354 acres of farm assessed land** in Hope Township, the following lands are potentially eligible for preservation:

✓ 29 farms, or 3,175 acres, greater than 20 acres in size and located within the ADA.

In Hope, a locally important farm can be greater than 20 acres in size. 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 Hope Township:

One-year target:	80 acres, 1 farm
Five-year target:	650 acres, 6 farms
Ten-year target:	1,000 acres, 11 farms

^f *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 **7,354 acres** of farm assessed land in Hope Township. Of this, **7,254 acres** are included within the County's ADA. Within the County's ADA in Hope Township, **3,294 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. Hope Township falls within Project Area Northwest for Warren County. The Northwest Project Area in Hope includes **7,254** acres of farm assessed land. (**Table 14**).

Table 15. Northwest Project Area in Hope								
Total Farm Preserved								
Assessed Unpreserved Preserved Farm Assessed Active								
(acres)	(acres) Properties Farmland Farm Parcels as Farmland Agricultu							
Норе	7,354	5,852	1,502	1,502	3,294			
Project Area Northwest	7,254	5,752	1,502	1,502	3,207			

C. Minimum Eligibility Criteria

Minimum Eligibility Criteria are based upon the SADC's rules for farmland preservation and project eligibility.^g 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
- The land in question must exhibit development potential as defined by the SADC; or

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

• 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 AAB and the 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 Hope will not cost share on applications that do not meet SADC minimum standards. In all cases, the Hope Township AAB will work closely with the Warren CADB to review and process applications from landowners for farmland preservation. The Hope AAB 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 NJDEP 2015 LU/LC mapping for agricultural lands. The land categories that are defined as the "tillable land," 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 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 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 LU/LC 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 sitespecific 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:
 - \checkmark Practices the individual farmer has made to farm the land
 - \checkmark 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.²⁸

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

Farm Size	Requirements
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 in Hope 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 LU/LC 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 on size based upon the SADC Minimum Eligibility Criteria for tillable land and soils.

Farms in Hope that meet the minimum eligibility criteria are shown on **Map** C and listed in **Inventory Table 2.** In Hope, 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 **3,175** acres of farm assessed land which meet the minimum eligibility criteria for the state's farmland preservation program, are over 20 acres in size, and are within the ADA. There are 15 farm units and 14 individual parcels (lots) which meet these criteria. **Table 15** presents a summary of the analysis.

	Tal	ble 16. Eligible Farm Analysis – Hope Township	
Farm Parce	ls which have not been id	entified as part of a Farm Unit	
Block	Lot	Öwner/Farm	Acres (GIS)
1100	1100	SKIRTIN, E ESTATE C/O ZIARNOWSKI	70.75
200	400	MUSGRAVE P/ VANKIRK M	227.93
800	1100	GUGEL, GEORGE H	48.67
600	2200	WOODWARD, RALPH & SHELLY	32.40
3200	500	BOROCHOWSKI, MICHAEL	40.51
5000	1001	WINTER, SUSAN CARNEAL SUSAN	20.36
5300	200	BODOLSKY, THOMAS	55.89
700	900	1988 MODI LIVING TRUST	42.78
1200	3800	HOWELL, JANE M	132.77
5200	702	BURKE, BRADLEY A	33.16
600	1000	AULETTA, BEN	110.10
700	1100	BOYSEN, ROBERT & ROSE MARIE	38.70
200	700	ELONKA JR STEPHEN M	170.60
5300	100	ZUKOSKI, MICHAEL & SUSAN	51.10
	I	Total Farm Parcels (14):	1,075.73
Farm Units			/
1000;100	2200; 900	BELSTRA	165.62
1200	2304, 2303	CERAMI	24.06
3400; 3000; 2900	2200, 1900; 200; 100	CHAMBERLAIN	164.08
300; 700; 500	600; 503, 400; 500	HIGHLANDS	125.08
600	2302, 2303	JAMES	26.01
1600; 1200	1300; 1301	LOPRESTI	246.76
1600; 1200	1500; 1200	MAIER	105.35
2700; 1000; 2900	4600, 2500, 2400; 900; 400	MAIER 2	335.64
200	200, 300	MATARAZZO	94.40
1300; 1200; 1500	1500, 1100, 1400, 1200; 1700, 1300; 800	MT HERNON HILLS	294.85
300; 500	702; 300	NOVACK	61.14
100; 800	1200, 1202; 400	PLANER	95.14
200; 300	900; 300	STONE	113.66
300; 200	200; 1000	WDC	144.64
5000	400, 500	WINTER	102.96
	,	Total Farm Units (15):	2,099.40
	Total Ta	rget Farm over 20 acres within the ADA (29 farms):	3,175.13

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:	80 acres, 1 farm
Five-year target:	650 acres, 6 farms
Ten-year target:	1,000 acres, 11 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.²⁹ 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. Hope Township uses the same criteria as Warren County.

Hope's AAB and Township Committee are committed to preserving as much of the agricultural land base as possible and support innovative funding mechanisms and preservation tools. The focus of the Township's farmland preservation program is to preserve the productive agricultural landscape of the community.

E. Municipal and County Policies Related to Farmland Preservation Applications

Hope 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.³⁰ 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 the 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.³¹

These applications are reviewed by the SADC and the CADB.

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 AAB for Hope Township. In addition, the Township's position is that replacement houses should retain the same overall footprint and overly expensive dwellings should be avoided.³²

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."³³ 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 AAB 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 Hope Township AAB, 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 SADC and the CADB.

3. Approval of Exception

Exceptions are defined by the SADC as "acres 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." ³⁴ 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."³⁵

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 Hope Township AAB follow the exception policies as identified by the SADC. The AAB 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.³⁶The 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.

In 2005, Hope Township taxpayers passed a binding referendum question establishing the Municipal Farmland Preservation Trust Fund at a rate not to exceed \$0.05 per \$100 of assessed valuation. The funds are to be used for acquisitions, including appraisals and other professional services in connection with acquisitions, as well as debt service on any bonds used for farmland acquisition. The current tax rate is \$0.0125. The Fund generated approximately \$27,489 in 2020 and is expected to generate \$27,489 in 2021.

Since its establishment, the Municipal Trust Fund has expended \$517,268 and has a balance of \$179,262 as of June 2021.

2. Financial Policies - Cost-Share Requirements

Hope 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.

Hope 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 Hope Township Trust Fund generates \$27,489 per year and has a current balance of \$179,262. The average cost was \$4,454 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 preservation 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 \$27,489 per year
- Average price per acre is \$4,454
- 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 AAB's goal of preservation eleven farms (1,000 acres) in the next ten years, it is anticipated that the Township will have a total project cost of \$4,454,000 and contribute \$681,600 over the same period, if their percent contribution remains at 15%.

Utilizing the SADC sliding scale for cost-sharing, and the estimated per acre value of the purchase of a farmland easement in Hope 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 Township of Hope has an AAB that meets as needed to discuss farmland projects and issues. The AAB developed the Township's initial *Farmland Preservation Plan* and administers the program for the municipality.

The Land Conservancy of New Jersey serves as the consultant to Hope Township for their farmland preservation program.

2. Legal Support

Legal support for Hope 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 AAB 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 Hope Township for the *Comprehensive Farmland Preservation Plan Update*.

H. Factors Limiting Farmland Preservation Implementation

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



Chapter 6. Economic Development

A. Economic Development Plans and Initiatives

Hope Township has **6,387 acres** devoted to agricultural or horticultural use.³⁷ The primary crops are hay, corn, and soybeans. The farmland preservation program is a critical component of the farming industry, and the success of the farmland preservation program in Hope is measured not 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 Hope 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 decline of the commercial dairy industry in Hope. Corn, soybeans, and hay are the primary crops, and farms that supported the dairy industry have moved toward 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 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.

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 agritourism.

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.⁴¹

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 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.^{*h*} (**Table 16**)

Table 17. 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%				
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		-					

^h 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: *https://quickstats.nass.usda.gov/*. Citations throughout this document refer to information gathered from these sources for the indicated years.

Using the *Census of Agriculture*, crop sales climbed slowly 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 the 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."⁴²

Using recommendations outlined in the 2011 Economic Development Strategies report, Warren County municipalities, including Hope 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. Hope Township had 148 Farmland Assessment forms for 2017.⁴³ⁱ

Produce

Major efforts by the NJDA are directed at increasing the demand for New Jersey grown produce through branding, agritourism, farm direct sales programs, and farm markets. The NJDA 2011 *Economic Development Strategies* include all these activities. NJDA is committed to promoting agritourism through the *Jersey Fresh* website, the distribution of printed materials, and other forms of advertisement and promotion including collaborating with Rutgers University through the New Jersey Agricultural Experiment Station (NJAES-RCE), and promotion of the work of other organizations such as the New Jersey Farmers Direct Marketing Association. Hope 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.⁴⁴

ⁱ 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.

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.

Hope had a total of 14 acres which were harvested for fruits and vegetables in 2017, the same as 2015, but less than the 24 acres in 2005. 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 produce (and, in many cases, numerous other agricultural products) include:^j

- NJDA *Jersey Fresh* website⁴⁵ offers a "Find Jersey Fresh" locator, as well as 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. Genesis Farms in nearby Frelinghuysen is a community supported farm;⁴⁶
- *Rutgers New Jersey Agricultural Experiment Station Cooperative Extension (NJAES-RCE)* created an educational website dedicated to agritourism for the public, planning and policy professionals, farmers, and educators.⁴⁷
- 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 available and the best time to attend pick-your-own operations for each produce category.⁴⁸
- *Natural Jersey* is a site promoting local natural health products and sustainable living. They highlight producers, such as farms, farm stands, and farmers markets throughout New Jersey which align with their mission.⁴⁹
- *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.⁵⁰
- *Warren County Farmers Fair* is a weeklong festival in Harmony featuring many local farms offering products for sale, as well as hot air balloons, artwork and other attractions.⁵¹
- *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, where Race Farms in Blairstown offers products for sale.⁵²

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

• Other resources listing direct marketing opportunities for produce in Hope 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 the 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/*,⁵³ *https://sustainable-farming.rutgers.edu/alternative-world-crops/*.⁵⁴
- 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.⁵⁵ This subsector exhibited steady growth from \$1 million County-wide 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.

Hope had a total of 73 acres dedicated to nursery (including cultivated sod and floriculture) in 2017, an increase from the 58 acres in 2015, and on par with the 74 acres in 2005. There are no certified garden centers or nurseries listed on the *Jersey Grown* website, ⁵⁶ or on the directory of current state certifications.⁵⁷

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 three prominent crops in Hope are corn, hay, and soybeans. A total of 1,927 acres are dedicated to field crops, with a heavy focus on corn, hay, and soybeans.

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, Hope farmers harvested a total of 450 acres of corn (428 acres of corn for grain, and 22 acres of corn for silage), a decrease from 2015 when 648 acres of corn were harvested (604 acres of corn for grain, and 44 acres of corn for silage).

Hay Hope harvested 1,151 acres of hay, including alfalfa hay in 2017, a slight decrease from 1,322 acres harvested in 2015. Warren County on a whole harvested 10,340 acres of hay (including alfalfa hay, excluding haylage) in 2017, bringing in a total of 24,669 tons, an 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 an incredible 118%. Hope farmers harvested a total of 357 acres of soybeans in 2017, an increase from 264 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 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."⁵⁸
- 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 only 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, Hope had only 29 head of dairy cattle, compared to 259 head in 2006. This decrease in dairy production reflects the larger trend seen throughout Warren County.

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 Hope 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 the sale of raw milk under certain conditions and establishes a raw milk permit program (A585, re-introduced in the 2020-2021 State Legislative session).⁵⁹

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 Hope include cattle and calves, sheep and goats, hogs, bees, fur, and poultry and eggs. (Table 17)

Table 18. Livestock and Poultry in Hope Township							
	2005	2010	2015	2017	% change (2005-2017)		
Cattle and Calves	483	337	354	459	-5%		
Sheep and Goats	232	243	330	228	-2%		
Swine	39	39	21	44	11%		
Bees	10	5	10	5	-100%		
Ducks	7	6	99	29	76%		
Fur Animals	6	0	10	14	57%		
Meat Chickens	2,529	1,153	194	30	-8,330%		
Egg Chickens	449	471	468	764	41%		
Turkey	200	9	30	35	-471%		
Other Livestock	259	24	124	16	-1,519%		
Source: Farmland Ass	sessment Da	ta (SADC)					

Between the years 2005 and 2017, the cattle stock dropped by 5%. Most noticeably the ratio of beef to dairy cattle has shifted. In 2005, there were 224 beef cattle and 259 dairy cattle (both mature and young). In 2017, there were 430 beef cattle and 29 dairy cattle (both mature and young). This change is significant, but unlike many surrounding towns, there is still a cattle industry in Hope.

Other livestock that shows downward trends in Hope are bees (-100%), turkeys (-471%), meat chickens (-8,330%), and other livestock (-1,519%). The fastest growing animal industry is ducks, with 76% growth between 2005 and 2017. Other growing animal herds are swine (11% growth), egg chickens (41% growth), and fur animals (57%). These specialized products are easy to sell directly to consumers.

While sheep and goat numbers fell by 2% over this twelve-year period, these might still be a niche sector for farmers to explore to provide specialty meat and value-added, such as milk, cheeses, soaps, and mohair products to nearby markets. The national price for wool in 2019 was \$1.89 per pound and the average yield per fleece was 7.2 pounds. *Grown in Warren* highlights the growing demand for sheep and goats due to the growing ethnic food market.⁶⁰

To strengthen and expand its place in the Hope 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 Farmers 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 the sale of raw milk under certain conditions and established 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 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 the Township of Hope 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, as is organic farming. Natural farming is somewhat less costly and time consuming than "organic," and therefore may be a viable option for some farmers and their potential customers. Another alternative, for farmers transitioning to organic production, is the ability to market their products under the NJDA's newly introduced "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.⁶¹

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 Hope 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. Farms which have breeding services can make use of the *Jersey Bred* logo when marketing their animals.

On the state level, equine rules 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 retain and grow its market share in the state and regional equine industry, Hope can:

- 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 Farmers Fair.
- Promote the industry through enhanced listings of Warren County and Hope 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 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,⁶² and on July 2, 2014, the Governor signed into law another bill that established 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.⁶³ In February of 2020, A2773 was introduced which would "allow preserved farms to hold 14 special events per year,"⁶⁴ essentially establishing the pilot program in law. The legislation was passed 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.⁶⁵ In 2005, Hope had a total of 5 acres dedicated to growing grapes, but none from 2010-2017. Warren County had a total of 141 acres growing grapes in 2017, an increase of 117% from the 65 acres in 2005. Hope may consider:

- Exploring the feasibility for additional Warren County and Hope 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 Hope 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 Hope may consider:

- Working with the State Division of Animal Health to identify revenue streams to develop testing and certification for finfish species to allow transportation and sale of live farm-raised fish to markets in other states.
- Assist in crafting a supportive policy and regulatory path to allow aquaculture to grow in New Jersey, including revising the aquaculture rule providing for the Aquatic Farmer License Program, developing land-use permitting specifically for aquaculture, and assisting the industry and NJDEP in utilizing Aquaculture Development Zones.

Agritourism

Agritourism is one potential link in the long-term sustainability of the agriculture industry in Hope and Warren County. A highly successful example of agritourism is the seven-day Warren County Farmers Fair held annually in Hope. 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.

One advantage for Hope 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.⁶⁶

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.⁶⁷

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."⁶⁸

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 18**) 69

Table 19. 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 not only tasting rooms and tours, but innovative programs such as music nights and weekend runs through the vineyards in neighboring towns. 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 Hope's agricultural industry. Visibility is given to agritourism opportunities through the many websites and publications available. (**Table 19**) For every dollar in agritourism sales, \$0.58 of additional sales are generated in other businesses (e.g., restaurants, construction companies, insurance providers).⁷⁰

Table 20. Agritourism Websites and Publications	
Source	Description
State	
NJDA Jersey Fresh Website ⁷¹	Roadside markets On-farm activities Wineries
NJAES-RCE	Agritourism education ⁷²
NJDA Jersey Equine Website	Equine events ⁷³ Equine facilities ⁷⁴
Visit New Jersey Farms Website ⁷⁵	Farms, farm products, activities and events Ability for website visitor to build itinerary of farms to visit
Visitnj.org (Office Tourism Website of New Jersey)	Farms & orchards ⁷⁶ Wineries & vineyards ⁷⁷ Fairs ⁷⁸
Regional	
New Jersey Skylands Website ⁷⁹	Calendar of events Farms, Gardens, Wineries section Family Attractions section, where several regional farms and wineries are listed
Warren County Website ⁸⁰	Tourism page includes links to countrywide and regional attractions
Explore Warren ⁸¹	Farm markets, and pick-your-own
Organizations	
NJ Farmers Direct Marketing Association, Inc. (www.njfarmmarkets.org) ⁸²	Farms and farm markets
New Jersey Christmas Tree Growers' Association ⁸³	Christmas Tree farms

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.

Hope 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 Hope 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 Institute⁸⁴ 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.⁸⁵
- 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 Hope 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 contributes 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.⁸⁶ Additionally, the NJAES-RCE has publications available on its website on specific agritourism topics, such as how to budget for a corn maze.⁸⁷

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 –Updating documentation, supporting farmers in filling out applications, and supporting tax assessors in determining farmer eligibility.
- Crop Insurance Implementing an education initiative in partnership with the USDA Risk Management Agency and Rutgers Cooperative Extension to increase knowledge and skills among farmers and improve their financial health.
- Technical Assistance –Offering assistance concerning the New Jersey Uniform Construction Code as it relates to farm buildings and the Real Property Appraisal Manual, Farm Building Section.
- Recycling and Food Increasing participation in agricultural plastics recycling programs and assisting food processing industry in finding markets for soon-to expire and expired foods.

- Motor Vehicle Requirements Providing information about regulations, license plates for farm vehicles, and other vehicle related provisions through a user-friendly website.
- Financing Providing information on federal, state, and commercial lending institutions financing for agricultural loans.

Grown In Warren (2019)

Hope 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.⁸⁸ 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 consider 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 20)

bes include: population of farmers nigh cost of land ult for new farmers to access land ult access to capital
high cost of land ult for new farmers to access land
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clude:
le commodity prices cost of business lex & restrictive regulatory
p ro

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."⁸⁹ 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.⁹⁰ It is an additional opportunity for farmers to gain visibility and connect the market with the larger community.

B. Agricultural Industry Retention, Expansion, & Recruitment Strategies

There are many techniques to support the economic expansion, development, and solidification of Hope's agricultural industry. Diversity of agricultural commodities to broaden the agricultural base now dominated by hay, corn, and soybeans would help to ameliorate any economic downswing in either the general economy or a specific sector of the County's agricultural industry. The AAB and the Township stand behind the local agricultural industry.

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.⁹¹ 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, 2020.⁹² 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. Other products that are prevalent in Hope 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 Hope 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.⁹³ 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.⁹⁴ 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."⁹⁵

Resources specific to estate planning and retirement planning are available through the *Farm Link* Program's Farm Transfer, Succession, and Retirement Planning section.⁹⁶ Resources include workshops, Farm Succession Guidebook,⁹⁷ 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,⁹⁸ created as part of a Beginning Farmer grant project,⁹⁹ and a New Jersey Agricultural Mediation Program Handbook, subtitled "A Guide for Farmers, Neighbors and Municipalities."¹⁰⁰ 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.¹⁰¹ 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 of Agriculture, 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 Hope's school 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 Township.

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, and agriculture programs.
- Connect with local farms.

- Serve more local foods.
- Offer farm-to-school and nutrition trainings for foodservice staff.¹⁰²

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*.¹⁰³ Another website for Community Involved in Sustaining Agriculture (CISA),¹⁰⁴ 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 individual farmers. Municipal considerations of farming needs when drafting their sign ordinances can be helpful in supporting farmer's 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.¹⁰⁵

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 Hope 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. ¹⁰⁶

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 that is in Blairstown Township. This group sponsors the Blairstown Farmers Market and supports community agriculture in the greater Warren County area. The Foodshed Alliance 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.¹⁰⁷

Agricultural Education and Market Research Coordination

Hope 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 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."¹⁰⁸ Programs and activities include on-campus living labs, research laboratories, farms, greenhouses, gardens, living-learning communities, a historic herbarium, and an entomology museum.

Strategies Hope 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.¹⁰⁹ Without an adequate number of suppliers within reasonable driving distances of farms, the business of farming can become so expensive and time consuming as 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. Equipment and supply stores in Warren County include:

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

Seed and chemical suppliers in the area include:

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

Product Distributors and Processors

Processing facilities such as creameries, slaughterhouses, and lumber mills have become mostly absent from Warren County, and therefore Hope as well, forcing local farmers to ship their products out of town to be processed.¹¹⁰ Creveling Sawmill in Washington Township is one of the last operating sawmills in Warren County.¹¹¹

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 products^k 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. The majority 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. Farmers, as well as wholesalers, butchers, and private individuals sell, buy, and trade livestock, eggs, and crops at the Market. Hope farmers use the Livestock Cooperative Auction for the purchase and sale of agricultural livestock and products.¹¹² 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.

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,

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

many of which will raise a small amount of cattle as part-time jobs to qualify for farmland assessment.¹¹³

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

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

One emerging trend is the emerging resurgence of hemp (*cannabis sativa*). The growing support for hemp products, and the recent legislative actions which removed it from the Schedule I list of Controlled Substances Act, have created a new market. The "New Jersey Industrial Hemp Pilot Program" was signed in 2018, for hemp that is cultivated and tested to ensure that THC content does not exceed 0.3 percent.¹¹⁴

Other avenues to explore include:

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

Market Location Hope 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. Maximizing the use of nearby highways can increase the number and type of consumer markets to be reached by Hope farmers.

The agriculture community in Hope can seek contracts with the area school to supply healthy, fresh farm products for use in its cafeteria. 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 Hope 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 Hope'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 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. Most of these 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. 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.¹¹⁵

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."¹¹⁶

Flexible Land Use Regulations

State Level – Examples where regulatory flexibility is important are the NJDEP's "Freshwater Wetlands Protection Act Rules" (N.J.A.C. 7:13-et. seq.), which grants exemptions for agricultural activities, and the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13). The latter was adopted in 2007 and amended last in June 2019, with amendments for agriculture effective June 2016, including numerous agricultural permits.¹¹⁷

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. Hope farmers benefit from having a Right to Farm ordinance enacted in their town.

Other areas where municipal sensitivity to the land use needs of agriculture can be helpful include consideration of the following issues when creating municipal regulations:

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

Incorporating agriculture into local planning and zoning documents will help the Township protect its farmlands and rural character in the face of development pressure. As an example of its support of local agriculture, Hope passed a Right to Farm ordinance to ensure farmers can practice accepted agricultural operations. In addition, Hope supports farms, processing and packaging agricultural output, irrigation pumps and equipment, using tractors and other necessary equipment, and hiring and utilizing necessary farm labor. As such, the Township's zoning is supportive of agriculture.

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.¹¹⁸ 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 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 NJAES-RCE

can reach out to those interested in or just beginning their own farming operations, assisting them in reaching the point where their operations become profitable.

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

Federal agriculture support can be found through the USDA's Grants and Loans webpage¹¹⁹ including 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.¹²⁰ SARE funds are used for:

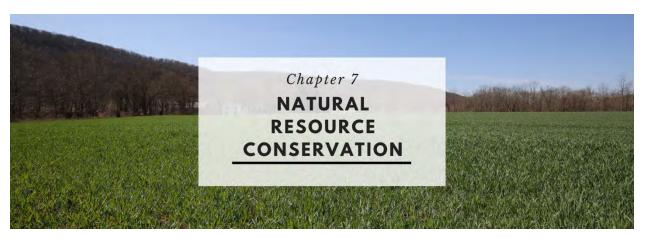
- *Farmer & Rancher Grants*: These grants have the goal of helping farmers shift to practices that are environmentally sound, profitable, and beneficial to the wider farm community.
- *Partnership grants*: These grants are for RCE and NRCS personnel, non-profits, and agricultural consultants who work 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,¹²¹ 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,¹²² 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.¹²³



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 Hope 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.¹²⁴

Hope farmers may utilize this local NCRS office for assistance. NRCS also will reach out directly to landowners if they know a farmer who needs technical assistance or could use the guidance of the NRCS staff. The local NRCS office serving Hope is:

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, 908-441-7418, dan.mull@nj.usda.gov¹²⁵

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 Hope:

- 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 under way.
- While NRCS services are voluntary, farmers can benefit from conservation. Conservation can help make farmers eligible for NRCS and USDA funding.¹²⁶

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."¹²⁷ Conservation practices discussed in the Guide that are pertinent for Hope 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.¹²⁸

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.¹²⁹

The SSCC coordinates and supports the work of the state's 14 local soil conservation districts (SCDs), including the Upper Delaware SCD. The SSCC is 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.

Hope 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 the review of Conservation Plans and program contracts and must give final approval to both.¹³⁰

Address: 51 Main St., Suite B in Blairstown, NJ 07825 Phone: 908-852-2579 District Manager: Sandra Myers, myers@upperdelawarescd-nj.com Staff: Tim Matthews, District Forester, Eileen Greason, SESC Inspector Warren County

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

The NJAES-RCE of Warren County provides both field and technical research that is focused on BMPs for farmers to ensure the long-term viability of both the agricultural economy and the natural resources upon which it is based. The NJAES-RCE of 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.¹³¹ The NJAES-RCE of Warren County is:

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.¹³² This includes the private woodlands currently under Farmland Assessment, which totaled 228,000 acres statewide in 2020.¹³³ Many properties in Hope that are farmland assessed include extensive 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.¹³⁴

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.¹³⁵ 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). So, 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 the 2019 Farmland Assessment Data for Hope, there were a total of 1,513 acres of non-appurtenant (unattached) woodland acreage. This was a slight increase from the 2009 Farmland Assessment Data (earliest available data on NJ Division of Taxation farmland reports), where the acreage was 1,221 acres. (**Table 21**)

Table 22. Woodlands in Hope Township			
Year	Non-Appurtenant Woodlands (acres)	Appurtenant Woodlands (acres)	
2019	1,513	1,734	
2009	1,221	1,734	
Source: Farmland 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 the 2019 Farmland Assessment Data for Hope, there were a total of 1,407 acres of appurtenant (attached) woodland acres. This number went down from the 2009 assessment, where the acreage was 1,734 acres.

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.¹³⁶

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.¹³⁷ 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 incentives of up to 75% of the cost of a new of revised FSP to allow the landowners to fully follow the guidelines in their plan.

As of 2020, 184 properties covering 9,891 acres in Warren County are enrolled in FSP¹³⁸ and Hope contained 350 acres enrolled in FSP on 11 different properties.¹³⁹ The New Jersey Forest Service Northern Region office is:¹⁴⁰

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

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.¹⁴¹ The NJRC&D offers no till drill rental for cover cropping and pasture reseeding, rain garden 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 Hope agriculture community has the support of a variety of committees and organizations, including the Hope Township AAB. Other committees and organizations include the Hope Planning Board, the Hope Zoning Board, the Hope Environmental Commission, Warren County Board of Agriculture, Warren County Agriculture Development Board (CADB), 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.¹⁴²

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:¹⁴³

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 U.S. Congress 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).¹⁴⁴ 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) ¹⁴⁵ The 2018 Farm Bill will be active until 2023. As in the past, 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.¹⁴⁶ 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.*"¹⁴⁷ Since a significant acreage of field crops such as corn and soybeans are grown in Hope, 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.
- Increases Conservation Reserve Program (CRP) acreage cap from 24 million acres to 27 million acres by 2023.
- Continues the Conservation Stewardship Program (CSP), but at a reduced funding level, and replaces 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).¹⁴⁸

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.¹⁴⁹

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.¹⁵⁰

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. The program's goal is to provide, "payments for implementing conservation practices that have a positive environmental impact, while protecting long term agricultural production and sustainability."¹⁵¹ Major opportunities of this program 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

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 \$141,205.36 (amount available, not paid out). While some farms in Hope may be assisted through EQIP, the number of farms enrolled is not tracked on a municipal level.¹⁵²

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 crops.¹⁵³

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.¹⁵⁴

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. Hope is situated in focal areas for three target species in New Jersey, the Golden Winged Warbler, the American Black Duck, and the Bog Turtle.¹⁵⁵

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 nonagricultural 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).¹⁵⁶

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.¹⁵⁷

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 into 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.¹⁵⁸

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.¹⁵⁹

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. Hope has most of the prime land soils along Hope Bridgeville Road and above Interstate 80. Soils of statewide importance are usually along the headwaters of stems and pockets near ponds. The third category, soils of unique importance, are generally situated near the Muddy Brook and the Buckaloo Swamp towards the north of the town.

According to the 2018 *Environmental Resource Inventory*, the town predominantly relies on individual wells and septic systems, as there are no public community wells or supplies within the municipality. The drinking water is supplied through groundwater. The Jacksonburg Limestone, Kittatinny Supergroup, and Hardyston Quartzite bedrock aquifer covers most of the town, ranging through 6,054 acres and covering 50% of the town. The next biggest aquifer is the Martinsburg Formation and Jutland Sequence which covers 1,354 acres and 36% of the town. These three are all bedrock aquifers, meaning that they contain more fractures within the rock while surficial aquifers often contain water between the spaces within sand and gravel particles. The remaining of the 11% of the municipality is covered by igneous and metamorphic rocks. The Jacksonburg aquifer is rated as C-B and is considered a fair aquifer. They have a greater permeability than the Martinsburg formation which has been rated at a D level.

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." ¹⁶⁰

2. Agricultural Demand & Supply Limitations

Agricultural lands are identified as cropland harvested, cropland pastured, woodland, equine, and permanent pasture. The most recent assessment in 2019 listed Hope's total agriculture acreage at 6,387 acres. 35% of this total acreage is harvested cropland, a category which requires the most amount of water for production.

Hope's water demand for agricultural use stems primarily from water-intensive crops such as hay, corn, and soybeans, which make up most of the field crops grown in Hope Township. However, because of the region's climate, none of the town's field crops are labeled as irrigated. The town has four irrigated acres for fruit farming.

Both population increases and agricultural irrigation can affect Hope's water supply. Increased population pressure from development can cause stress on water supplies which are important to

farmers. An increase in development causes an increase in impervious surfaces, which can limit natural water infiltration and cause contaminants from stormwater to wash into waterways. Development can also compromise soil conditions and provide less opportunity for aquifer recharge. Disturbing the balance of natural states of water distribution can adversely impact the region.

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. ¹⁶¹ The dominant crops in Hope Township 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. Since fruits, vegetables, and nursery agriculture is not a huge commodity in Hope Township, opportunities for water conservation efforts can be minimal.

The NJDA encourages farmers to implement water-management practices as a routine part of their conservationist approach to agriculture.¹⁶² 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. 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, School of Environmental and Biological Sciences, operates the NJ Weather and Climate Network of weather monitoring stations. Farmers can use the information from stations near them to assist with irrigation scheduling, as well as pest management and other conservation issues, temperature, precipitation, wind speed and gusts. Other stations measure barometric pressure and New Brunswick measures soil temperatures as well. Farmers can set favorite locales and view charts and tabular data.¹⁶³

D. Waste Management Planning

Livestock farmers in Hope 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.¹⁶⁴

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.¹⁶⁵

Many farmers have "Nutrient Management Plans" to manage the manure generated on their farms.¹⁶⁶ 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

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.¹⁶⁷ 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.¹⁶⁸

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).¹⁶⁹

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 Hope, use limited products that can be recycled, and as such limit recycling opportunities. Although nursery and produce make up a small part of Hope'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 Hope 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.¹⁷⁰
- The Recycling Center of North Jersey 48 Hope Road, Blairstown, 908-362-1255. This facility accepts comingled glass and plastics, all types of metal, aluminum, and more.¹⁷¹

Warren County considers tire recycling an important component to preserving its pastoral beauty. Hope farmers can contribute to and benefit from this mission by accessing the various low-cost options provided by the Pollution Control Financing Authority of Warren County (PCFAWC). Farmers can bring their recyclable tires to:

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".¹⁷²

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, and flats, and mulch film and irrigation tape. Some of these services are free, and others come at a cost to the farmer.¹⁷³

E. Energy Conservation Planning

In January 2010, (P.L. 2009, c.213) was enacted, which 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, etc.¹⁷⁴

In 2019, Governor Phil Murphy signed the Updated Global Warming Response Act seeking to reduce greenhouse gas 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 2050.¹⁷⁵ Hope farmers can take advantage of this initiative by applying for the financial incentives to implement energy efficient improvements to their farms and operations. One example of these financial incentives is the Rural Energy for America Program (REAP) which funds grant and loan guarantees to agricultural producers for assistance in purchasing renewable energy systems. Renewable energy systems include generation from the following ways: biomass, geothermal, hydropower, hydrogen, wind, and solar.¹⁷⁶

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.¹⁷⁷ 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.¹⁷⁸ 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 and rules for these installations are contained in Subchapter 24 of Chapter 76.¹⁷⁹ Solar generating facilities are also allowed on unpreserved farms and the SADC has provided AMP (agricultural management practices) for these facilities.¹⁸⁰ A summary of the policies aligned by both the subchapter and the AMP is given below:

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

EQIP provides cost-share funding for a 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.¹⁸¹

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 Hope 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 2011.¹⁸²

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 NJ 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 Hope as Hackettstown and Long Valley.¹⁸³

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. Hope farmers can find the program eligibility requirements and the program's financial incentives in the CHP-FC Program Guide.¹⁸⁴

Ethanol and Pelletized Switchgrass

Corn, a dominant field crop in Hope, 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 Hope farmers, and another source of clean energy.¹⁸⁵

Biodiesel

Biodiesel, made from the oils of soybeans, is an alternative to petroleum diesel. The U.S. 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 (*NASS*). Warren County leads northern New Jersey in soybean production. Although Hope is a smaller soybean production area when compared to their neighboring Warren County municipalities, Hope can still utilize its soybean production to maximize energy benefits. While no bio-diesel producers are available nearby, several retailers operate within the region, including:

- Dixon Energy 99 Cobb Street, Rockaway, 973-334-1000.
- Wooley Fuel Company 12 Burnett Avenue, Maplewood, 973-762-7400.
- Quarles 1046 N Godfrey Street, Allentown, PA, 877-444-3835.¹⁸⁶

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.¹⁸⁷

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. Additional information is at https://njcleanenergy.com.

Renewable Energy Incentive Program (REIP): This program previously offered funding assistance for solar, wind, and sustainable biomass installations. Currently, this program is on hold for wind systems. 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).¹⁸⁸ Since the Spring of 2020, those who seek solar projects register through the Transition Incentive Program (TI).¹⁸⁹

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.¹⁹⁰

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.¹⁹¹

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.¹⁹² For agricultural producers, a guaranteed loan and grant program can provide financial assistance with the installation of renewable energy systems.

Advanced Biofuel Payment Program: The goal of 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. More information can be found at *https://www.rd.usda.gov/sites/default/files/fact-sheet/508_RD_FS_RBS_AdvancedBioFuel.pdf*.¹⁹³

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.¹⁹⁴

F. Outreach and Incentives

The Township's AAB 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. Hope Township looks to the County, State and regional agencies for leadership, direction and help. The Hope AAB 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 Hope, 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.¹⁹⁵

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.¹⁹⁶

As of 2020, the SADC had 12 AMPs in place, the latest, an AMP for On-Farm Direct Marketing Facilities, Activities and Events, adopted April 7, 2014. The SADC lists 15 site-specific AMPs for Warren County, all of which the Warren CADB resolved.¹⁹⁷

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.¹⁹⁸

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 (RTF) 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.

RTF ordinances are a necessary item for municipalities that wish to enter the Farmland Preservation Program. A strong RTF Ordinance exists in Hope Township, showing its commitment to safeguarding and strengthening agricultural activities. Hope adopted its RTF Ordinance (Ord. No. 98-13) in June of 2009. (**Appendix C**)

The Ordinance states that its intent is to "assure the continuation and expansion of commercial and home agricultural pursuits by encouraging a positive agricultural business climate and protecting the farmer against municipal regulations and private nuisance suits, where recognized methods and techniques of agricultural production are applied and are consistent with relevant federal and state law and nonthreatening to the public health and safety."¹⁹⁹

To protect its farmers, the Hope Township RTF Ordinance requires for all zoning districts where agriculture is a permitted use:

- That residents near farming areas will be given a notice of this section of the ordinance. "The grantee hereby acknowledges notice that there are presently or may be future farm uses adjacent or in close proximity to the above-described premises ... activities which may result in the emanation of noise, odors, dust, and fumes caused by such necessary activities when conducted in accordance with recognized agricultural practices."
- Further includes other agricultural activities such as:
 - Production and processing of agricultural and horticultural crops and livestock
 - Aerial and ground spraying
 - Manure and chemical/organic fertilizers
 - Wholesale and retail marketing of agricultural products
- Furthermore, these activities can take place at any time of the day²⁰⁰

The Ordinance recognizes the "uses, activities, and structures associated with agriculture shall not constitute a public or private nuisance, provided that such agricultural uses are conducted in conformance with acceptable agricultural management practices defined herein." The protected farming activities under the RTF Ordinance are:

- Produce agricultural and horticultural crops, trees and forest products, livestock, poultry, and other related commodities.
- Process and package the agricultural output of the farm.
- The use of land for the grazing of livestock.
- Replenishing soil nutrients and spreading manure and other federally approved chemical and organic fertilizers.
- Use federally approved products in accordance with labeled instructions as recommended by State, Federal or County bodies such as the NJAES and the U.S. Environmental Protection Agency for the control of:
 - pests, predators, varmints, diseases affecting plants and livestock, and for the control of weed infestation.
- Clear woodlands using open burning and other accepted techniques and install and maintain vegetative terrain alterations and other physical facilities for water and soil conservation and surface water control in wetland areas.
- Use irrigation pumps and equipment and aerial/ground seeking and spraying, tractors and other necessary equipment.
- Hire and utilize necessary farm labor.
- Construct fences.
- Conduct on-site disposal of organic and agricultural waste, in accordance with guidelines issued by the NJDA and NJDEP.
- The utilization of tractors and other necessary equipment, and the transport of tractors and other large slow-moving equipment on the public roads within the town.
- The creation of noise, odors and fumes inherently associated with agricultural uses.
- Conduct farming activities on holidays and Sundays as well as weekdays, in the evening and during the day, notwithstanding the production thereby of normal but unavoidable noise, dust, odors and fumes caused by such necessary activities in accordance with recognized agricultural practices.

Hope's RTF Ordinance does not specifically list some of the suggested activity rights in the SADC Model RTF 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). ²⁰¹

It also does not mention the Agricultural Mediation Program, which is a process where an impartial mediator can help disputing parties solve issues. However, throughout the Hope Township Ordinance, there are several other areas which show protection for agriculture. Examples include allowing agriculture as a permitted use in LDAR and LDAR-H Zones and creating design standards for Low Density Agricultural Zones and Low Density Agricultural Residential-Historic zones.

Hope's Township's AAB can help avoid or minimize RTF 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 AAB or Township officials to try to resolve issues before engaging the formal processes of appeals to the Warren CADB or the SADC. Although Township officials feel the current RTF Ordinance and other Township code meets the needs of its farmers, the AAB take advantage of opportunities in the Township's planning process to promote strengthening of the RTF ordinance, as appropriate.

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.²⁰²

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

There are **6,387 acres** in Hope devoted to agricultural and horticultural use. Within these **6,387** acres, **3,447 acres** are in agricultural use as either cropland or pasture. The remaining **2,940 acres** are woodland/wetland areas or equine boarding/rehabilitation or training operations.²⁰³ According to New Jersey Farmland Assessment data from 2009 to 2019, general trends indicate:

- Harvested cropland decreased 14% from 2009 (2,616 acres) to 2019 (2,244 acres).
- Pastured cropland decreased 52% from 2009 (253 acres) to 2019 (121 acres).
- Permanent pasture decreased 5% from 2009 (1,142 acres) to 2019 (1,082 acres).

- Total acreage in active agricultural use (cropland harvested, cropland pastured, and permanent pasture) decreased 14% in 2009 (4,011 acres) to 2019 (3,447 acres).
- Woodland/wetland acreage decreased 1% from 2009 (2,955 acres) to 2019 (2,921 acres).
- Equine acreage increased 12% from 2009 (17 acres) to 2019 (19 acres).²⁰⁴

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 Hope's strong agricultural base requires support on many fronts, one of which is flexibility in government regulation.²⁰⁵

- *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 Hope 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

Hope 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, 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 Hope'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. Hope Township does include slow-moving vehicles and tractors as a protected farming activity in their RTF 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 Hope 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, Hope 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.²⁰⁶ As of 2017, only 14 acres in Hope Township were devoted to fruits, berries, and vegetables. Most of Hope Township's agricultural output comes from its field crops (1,978 acres). Since the overall acreage devoted to labor intensive farming is small in Hope, 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 (\$10.44/hour) for agricultural employers as of January 1, 2021. It is expected to increase to \$15.00/hour by 2027.²⁰⁷ 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 Hope.

Agricultural Labor Housing

Since the overall acreage in Hope 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.²⁰⁸

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.²⁰⁹

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.²¹⁰

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.²¹¹ The NJDA hosts a web page with links and information on Agricultural Education, geared mostly toward teachers but also listing conferences and other educational information of potential interest to farmers.²¹²

The NJFB also hosts educational meetings and provides educational information for farmers on its website about legislative issues, farmland preservation, and labor resources.²¹³

Youth Farmer Education Programs

According to the Census of Agriculture, the farmer population in Warren County is getting older, with an increase of 1.2 years of an average age of 58.4 in 2017 versus 57.2 in 2007.²¹⁴ The nationwide average age of operators in 2017 was 58.6, less than a half year difference compared to Warren County.²¹⁵ Furthermore, in 2017, there were only 44 farmers (3.6%) out of 1,233 farmers in Warren County who were under the age of 35.²¹⁶

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.²¹⁷ 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 Hope farms.²¹⁸

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

- 17 miles Sussex County Community College, One College Hill Road, Newton.
- 23 miles County College of Morris, 214 Center Grove Road, Randolph.
- 56 miles Bergen County Community College, 400 Paramus Road, Paramus.

• 61 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.²¹⁹

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.²²⁰ The National FFA has 8,612 chapters and 700,170 members ages 12-21 in all 50 states.²²¹ In 2020, there were 36 chapters in New Jersey with more than 2,400 members.²²² North Warren Regional High School in Blairstown offers Applied Horticulture/Horticultural Operations²²³ and has a local FFA Chapter. The school 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.²²⁴

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.²²⁵ The 4-H program is led by volunteers that teach 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.²²⁶

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.

There are several other secondary institutions (high schools) offering agricultural courses and are FFA chapters close to Hope in the Northern Region and Warren County area. These include:

- 9 miles Belvidere High School, Belvidere.
- 13 miles Warren Hills Regional High School, Washington.
- 20 miles Phillipsburg High School, Phillipsburg.

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.²²⁷

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.²²⁸

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 farmer's 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.²²⁹

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 2018.²³⁰

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.²³¹ 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 has never been reported as a "severe problem" in Hope Township but was reported as a "heavy" problem in aerial surveys from in 2015 and 2016. In the latest aerial defoliation surveys in which Hope was included (2017), their status has been in the lowest "moderate" category. This data shows that the invasion has improved through the years, though it is still present.²³²

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 area 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.²³³

Grants and loans are available in three key areas: Business-Cooperative, Housing and Community Facilities (including farm labor housing), and Utilities (including Broadband). ²³⁴ 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 1,737 as of July 2019,²³⁵ Hope 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.²³⁶

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 Hope 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 \$300,015.²³⁷ The Hackettstown Service Center handles loans for Warren County,²³⁸ and can be found at:

Address: 101 Bilby Rd Suite 1H, Hackettstown, NJ 07840 Phone: (908) 852-2576 Contact: Geraldine Manganaro, Housing Director, (856) 285-7679 Email: nj.direct.origination@usda.gov

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.²³⁹

Maps

Map 1. Farmland

- Map 2. Preserved and Public Lands
- Map 3. Agricultural Soil Categories
- Map 4. Agricultural Development Area

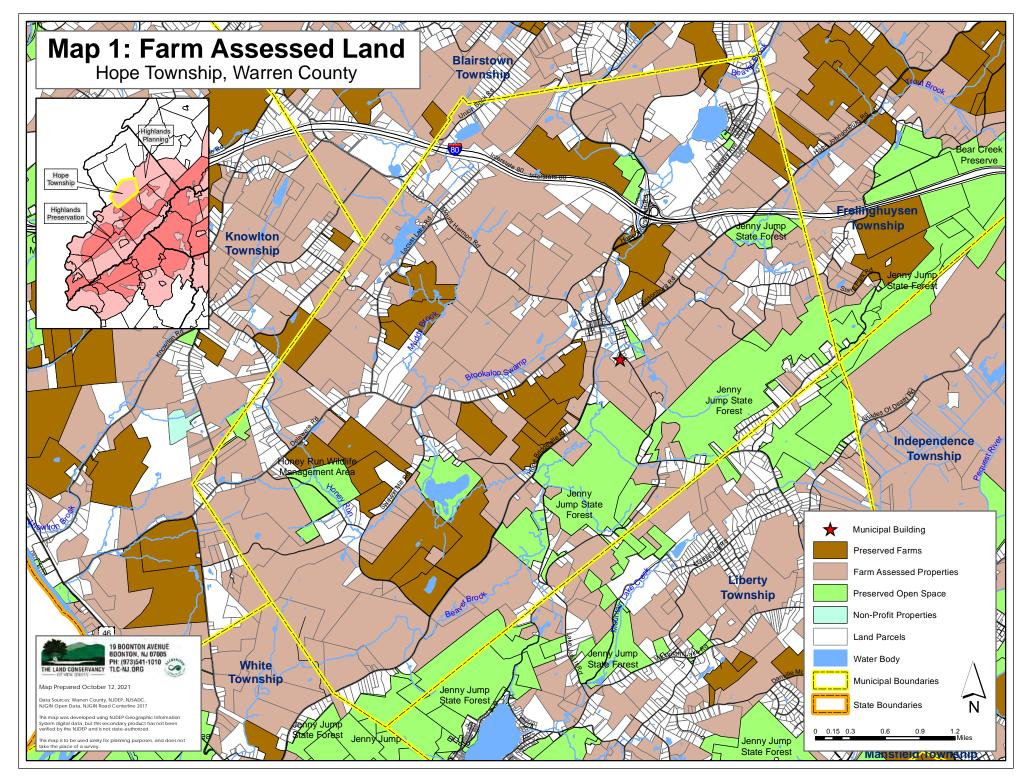
Map 5. Project Area Map

Target Farm Analysis Maps:

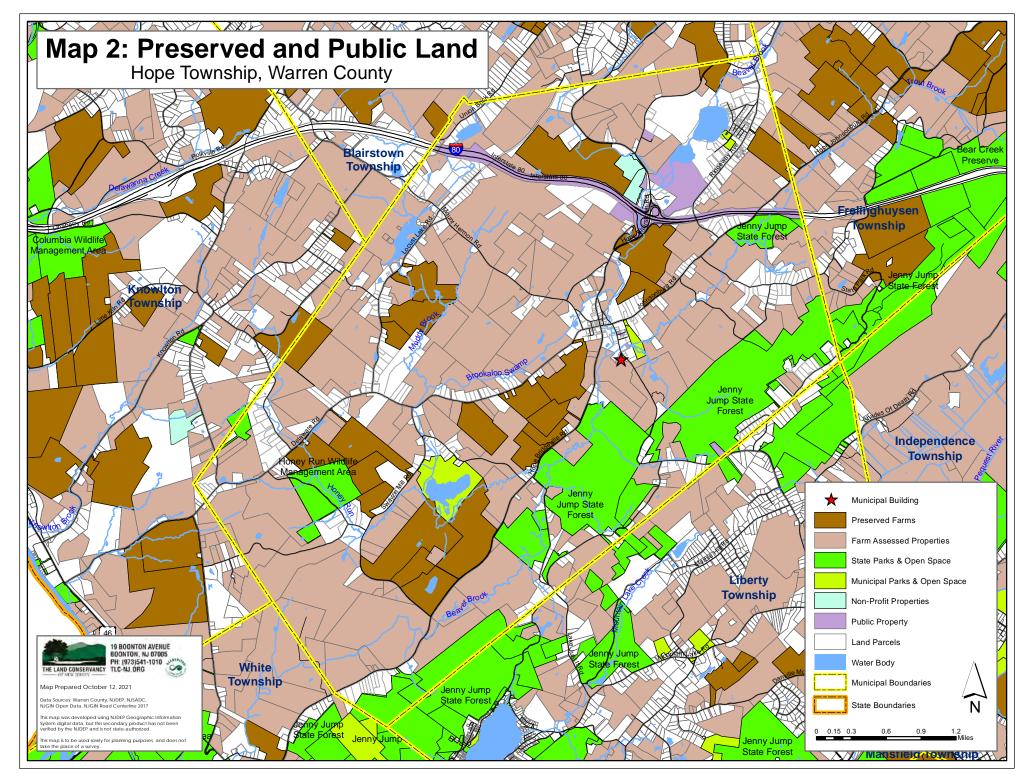
Map A. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Tillable Land

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

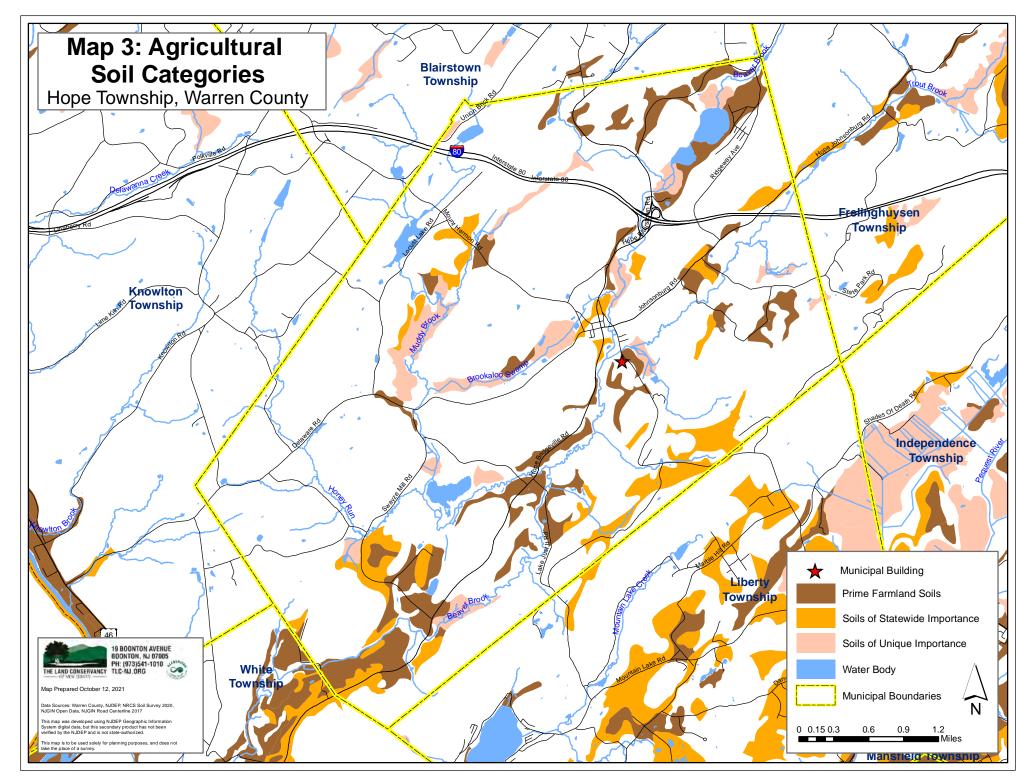
Map C. Target Farms: Potentially Eligible Farm Parcels & Units that meet SADC criteria for Agricultural Soils and Tillable Land



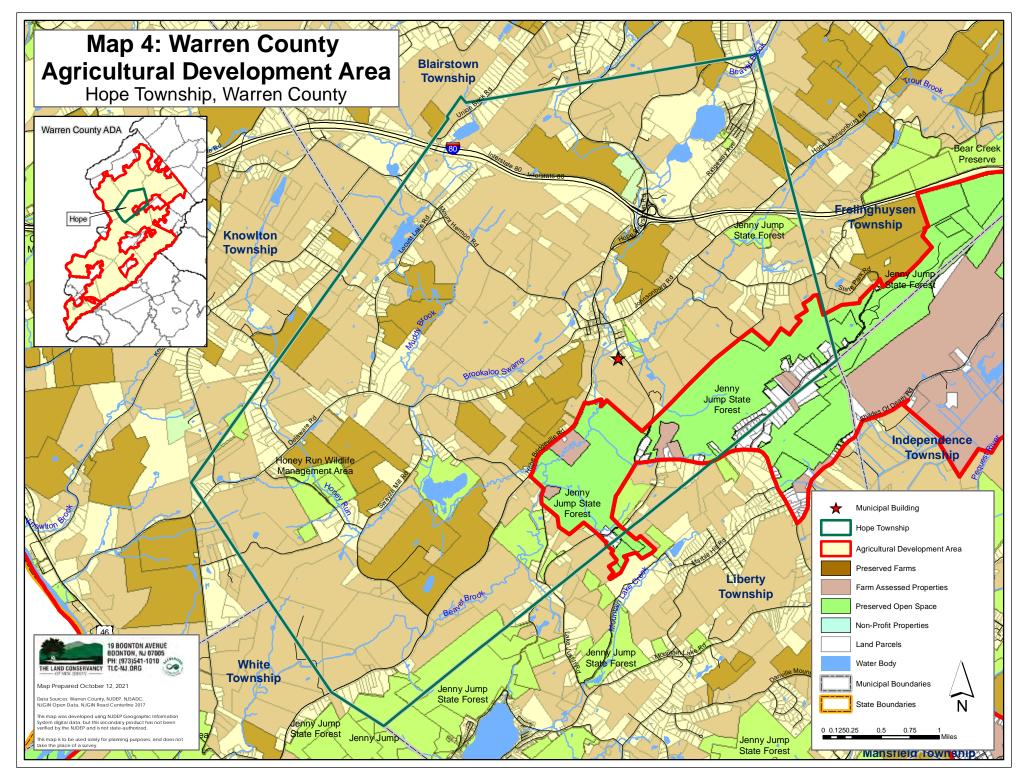
Hope Township - Comprehensive Farmland Preservation Plan Update



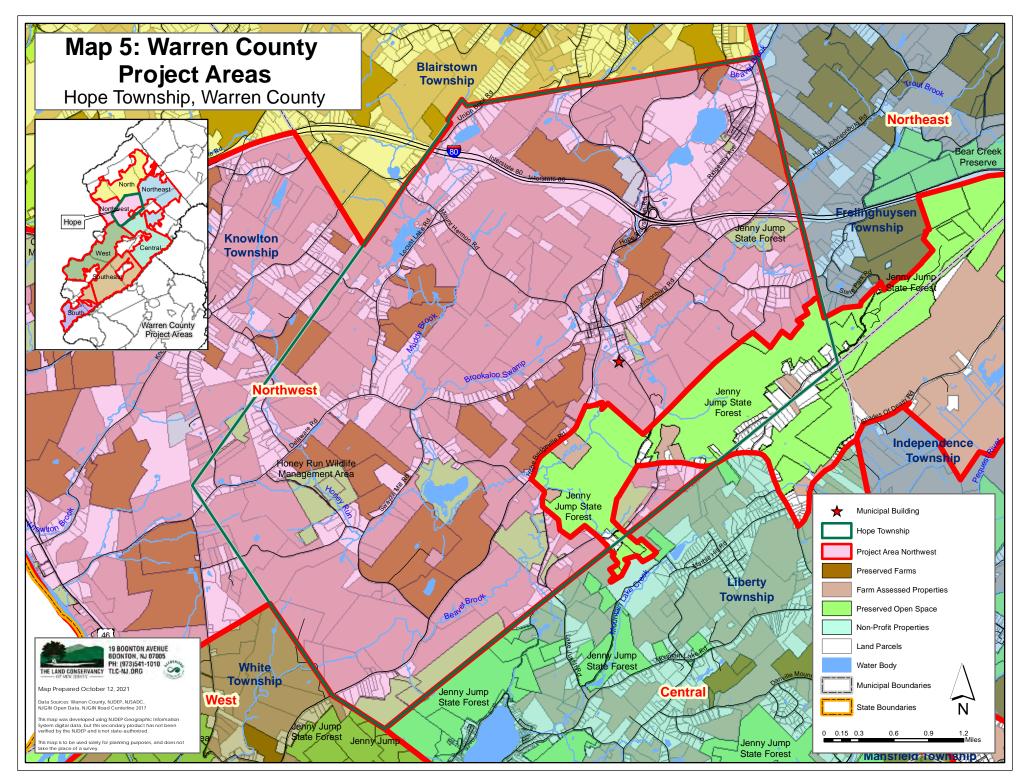
Hope Township - Comprehensive Farmland Preservation Plan Update



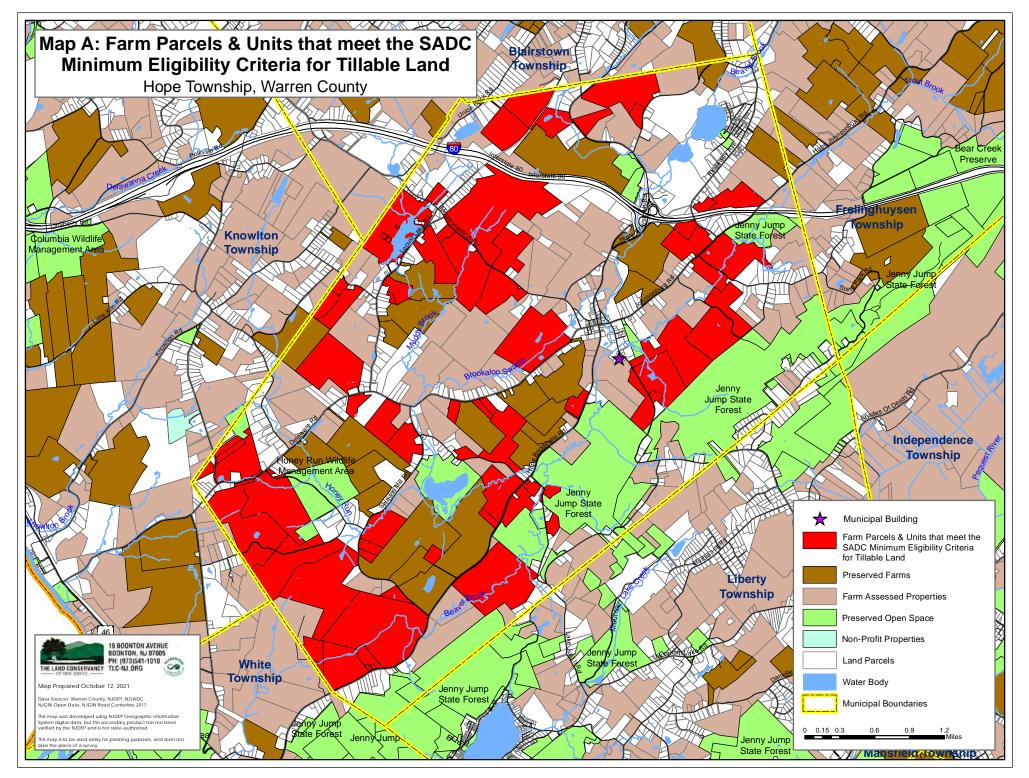
Hope Township - Comprehensive Farmland Preservation Plan Update



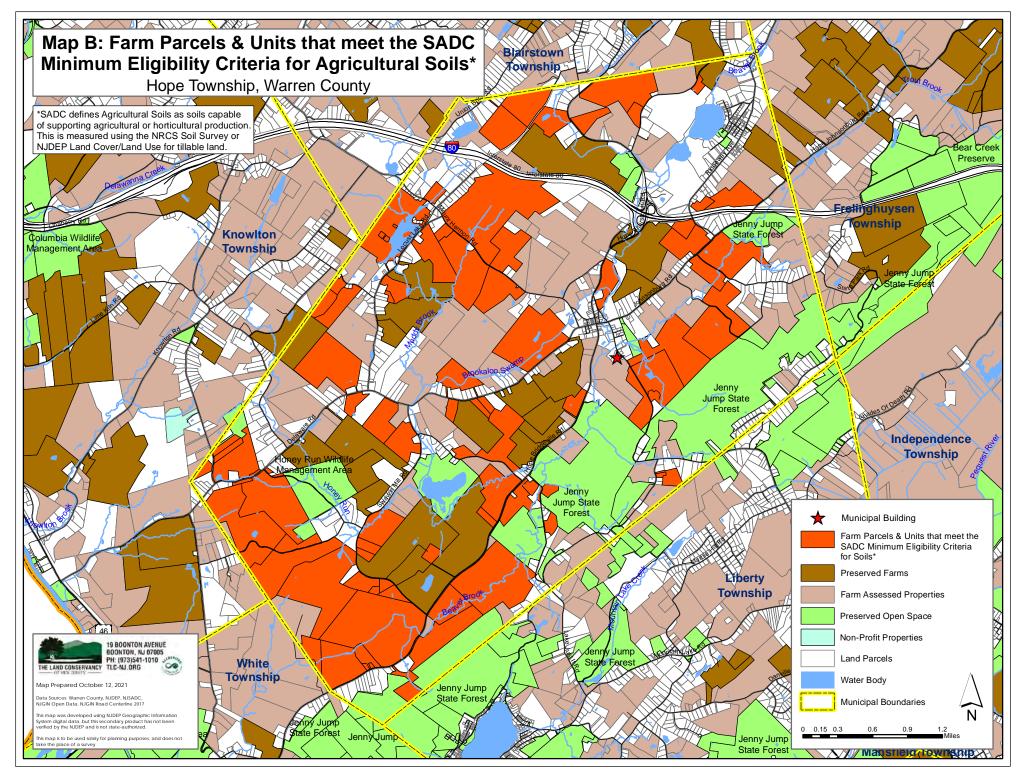
Hope Township - Comprehensive Farmland Preservation Plan Update



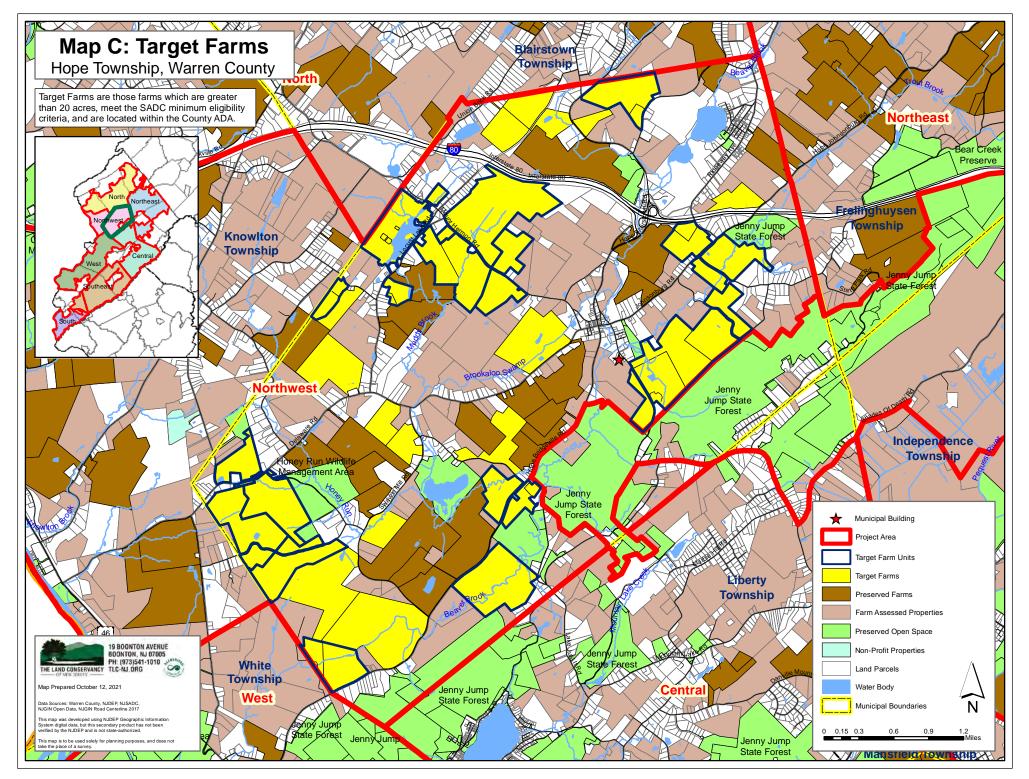
Hope Township - Comprehensive Farmland Preservation Plan Update



Hope Township - Comprehensive Farmland Preservation Plan Update



Hope Township - Comprehensive Farmland Preservation Plan Update



Hope Township - Comprehensive Farmland Preservation Plan Update

Appendix

Appendix A. Public Meeting Materials

Appendix B. Agricultural Support Services

Appendix C. Hope Right to Farm Ordinance (2009)





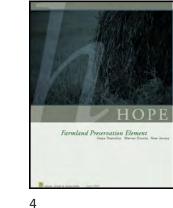
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SADC Rules Adopted May 24, 2007 Amended July 25, 2019:

- 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 Hope Township to complete Plan Update



2009 Comprehensive Farmland Plan

- Hope Township is a rural community consisting primarily of wooded or agricultural lands •
- As of 2009, preserved **738 acres** of farmland
- 2009 Goals of the Farmland Preservation Program
 - Preserve an additional 1,000 acres over the next 5 years









IV. Farmland Preservation Program Farmland preservation program and expenditures County Agricultural Development Areas (ADA) anning Incentive Grant oject Areas (PIGs) Coordination with open preservation Easement monitoring and enforcement A State State

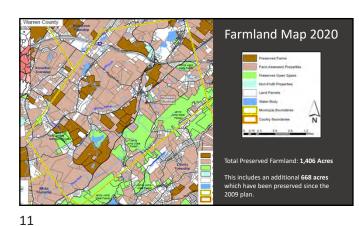
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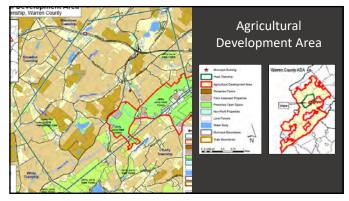


Mar Farmland Map 2012 Amendment reserved Farmland Farm Assessed Property (Class 3A and 3B) Preserved Open Space Water Body Rivers/Streams Municipal Boundaries Hope Township is **12,288 acres** in size. Of this, **7,261 acres (59 percent)** are under farmland assessment.

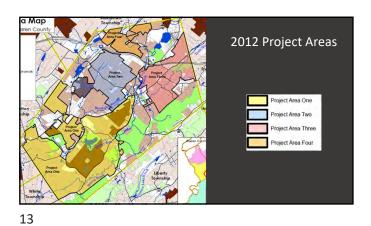
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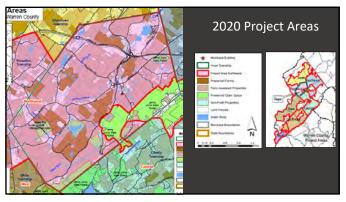
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14



2021 Farmland Preservation Plan Update

Township of Hope September 13, 2021 Planning Board



Why Update the Farm Plan?

- Township's current Farm Element (dated 2009) is out-of-date
- The updated plan will keep the municipality current for 10 years
- The plan is funding through a 50% matching grant from the SADC

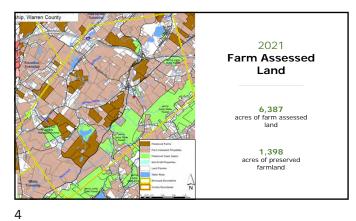
Schedule and Deliverables

2

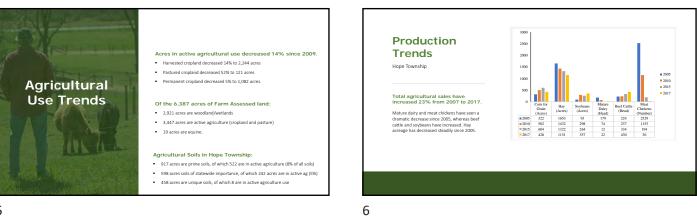
- March 5, 2020 Kickoff Meeting with SADC
- October 5, 2020 First Public Meeting (Planning Board)
- July 15/September 1, 2021 Draft Farm Plan delivered to Hope Twp.
- September 13, 2021 Second Public Meeting (Planning Board)

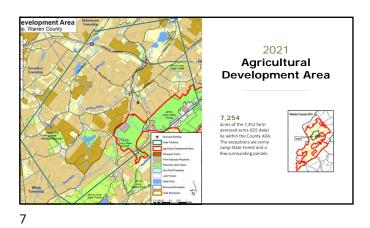
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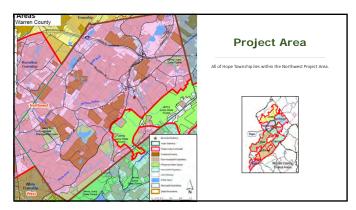
	n Update erview		
I	Agricultural Land Base	v	Future Farmland Preservation Program
п	Agricultural Industry	VI	Economic Development
m	Land Use Planning	VII	Natural Resource Conservation
IV	Farmland Preservation Program	VIII	Sustainability, Retention, and Promotion





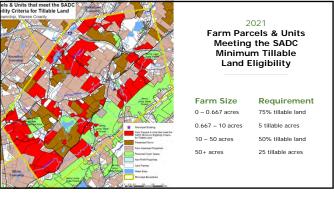


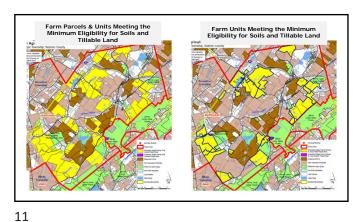




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15



Agricultural Businesses Servicing Warren County and Hope 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

HOPE CODE

constructing affordable units on site (if permitted by ordinance or by agreement with the Township), funds from the sale of units with extinguished controls, barrier free escrow funds, rental income from Township-owned affordable housing units, repayments from affordable housing program loans, and any other funds collected in connection with Hope's affordable housing programs, as well as an accounting of the expenditures of revenues and implementation of the spending plan approved by the court.

- j. Ongoing Collection of Fees.
 - 1. The ability for the Township of Hope to impose, collect and expend development fees shall expire with the expiration of the repose period covered by its Judgment of Compliance unless the Township of Hope has first filed an adopted Housing Element and Fair Share Plan with the court or with a designated state administrative agency, has petitioned for a Judgment of Compliance from the court or for Substantive Certification or its equivalent from a state administrative agency authorized to approve and administer municipal affordable housing compliance and has received approval of its Development Fee Ordinance from the entity that will be reviewing and approving the Housing Element and Fair Share Plan.
 - 2. If the Township of Hope fails to renew its ability to impose and collect development fees prior to the expiration of its Judgment of Compliance, it may be subject to forfeiture of any or all funds remaining within its Affordable Housing Trust Fund. Any funds so forfeited shall be deposited into the New Jersey Affordable Housing Trust Fund established pursuant to Section 20 of P.L. 1985, c. 222 (N.J.S.A. 52:27D-320).
 - 3. The Township of Hope shall not impose a residential development fee on a development that receives preliminary or final site plan approval after the expiration of its Judgment of Compliance, nor shall the Township of Hope retroactively impose a development fee on such a development. The Township of Hope also shall not expend any of its collected development fees after the expiration of its Judgment of Compliance.

§ 20-29. RIGHT TO FARM.

§ 20-29.1. Title. [Ord. #98-13, § I]

This section may be cited and referred to as the "Right to Farm" Ordinance of the Township of Hope.

§ 20-29.2. Purpose. [Ord. #98-13, § I]

The purpose of this section is to assure the continuation and expansion of commercial and home agricultural pursuits by encouraging a positive

20:128

§ 20-29.2

ZONING

agricultural business climate and protecting the farmer against municipal regulations and private nuisance suits, where recognized methods and techniques of agricultural production are applied and are consistent with relevant Federal and State law and non-threatening to the public health and safety; at the same time, this section acknowledges the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in the State of New Jersey. The retention of agricultural activities is desirable to all citizens in the Township of Hope because it insures numerous social, environmental and economic benefits including the preservation of open space; the preservation of land as a nonreplenishable resource and as a source for agricultural products for this and future generations; and the protection and maintenance of the aesthetic beauty of the countryside and rural character of the community which includes farm architecture and scenic variety.

This section shall be applicable in all zones within the Township in which " agriculture" is a permitted use.

§ 20-29.3. Definitions. [Ord. #98-13, § I]

ACCEPTABLE AGRICULTURAL MANAGEMENT PRACTICES — Shall mean the agricultural management practices recommended or endorsed by the New Jersey Department of Agriculture, the Rutgers University Extension Service, the State Agricultural Development Committee, the New Jersey Department of Environmental Protection and relevant Federal or State statutes rules and regulations adopted pursuant thereto.

AGRICULTURE — Shall mean the production principally for the sale to others of plants, animals or their products, including, but not limited to, forage and sod crops, grain and feed crops, dairy animals and dairy product; livestock including dairy and beef cattle, poultry, sheep, swine, horses, ponies, mules and goats; including grapes, nuts and berries; vegetables; nursery, floral, ornamental and greenhouse products and other commodities as described in the Standard Industrial Classification for agriculture, forestry, fishing and trapping. Agriculture shall not include intensive poultry or swine production or commercial feedlot operations.

FARM — Shall mean an area of land made up of single or multiple joining or non-joining parcels which is organized as a management unit actively devoted to agricultural or horticultural use, including, but not limited to, cropland, pasture, idle or fallow land, woodland, wetlands, farmponds, farm roads and under farm buildings and other enclosures related to agricultural pursuits, which occupies a minimum of the lesser of five acres or five times the minimum lot size of the zone in which the property is located, exclusive of the land upon which the farmhouse is located and such additional and as may actually be used in connection with the farmhouse as provided in the Farmland Assessment Act of 1965, R.S. 54:4-23.3, 4-23.4, 4-23.5 and 4-23.11.

NUISANCE — Shall mean any private action which unreasonably interferes with the comfortable enjoyment of another's property, which may be

20:129

§ 20-29.3

HOPE CODE

enjoined or abated and for which the injured or affected property owner may recover damages.

PERMANENT FARM STAND — Shall mean an enclosed, fixed accessory building with a maximum height of sixteen (16') feet or one story, which ever is less, and a maximum square footage of 500 square feet. Not less than 75% of the retail area shall be devoted to the sale of farm products grown or made on site. A non-illuminated sign, not to exceed eight square feet, advertising the farm stand shall be permitted.

§ 20-29.4. Protected Farming Activities. [Ord. #98-13, § I]

In accordance with the purposes and preambles set forth herein, it shall be presumed that uses, activities and structures associated with agriculture shall not constitute a public or private nuisance, provided that such agricultural uses are conducted in conformance with acceptable agricultural management practices as defined herein. Protected agricultural uses and activities shall be deemed to include, but shall not be limited to the following:

- a. Produce agricultural and horticultural crops, trees and forest products, livestock, poultry and other related commodities;
- b. Process and package the agricultural output of the farm;
- c. The use of land for the grazing of animals;
- d. Replenish soil nutrients, including but not limited to, the spreading of manure and applying federally approved chemical and organic fertilizers;
- e. Use federally approved products in accordance with labeled instructions as recommended by State, Federal or County bodies such as the New Jersey Agricultural Experiment Station and the U.S. Environmental Protection Agency for the control of pests, predators, varmints, diseases affecting plants and livestock, and for the control of weed infestation;
- f. Clear woodlands using open burning and other accepted techniques and install and maintain vegetative and terrain alterations and other physical facilities for water and soil conservation and surface water control in wetland areas;
- g. Use irrigation pumps and equipment and aerial and ground seeking and spraying, using tractors and other necessary equipment;
- h. Hire and utilize necessary farm labor;
- i. Construct fences;
- j. Conduct of on-site disposal of organic and agricultural waste, in accordance with guidelines issued by the New Jersey Departments of Agriculture and Environmental Protection;

20:130

§20-29.4

ZONING

- k. The utilization of tractors and other necessary equipment, and the transport of tractors and other large slow-moving equipment on the public roads within the Township;
- 1. The creation of noise, odors and fumes inherently associated with agricultural uses;
- m. Conduct farming activities on holidays and Sundays as well as weekdays, in the evening and during the day, notwithstanding the production thereby of normal but unavoidable noise, dust, odors and fumes caused by such necessary activities in accordance with recognized agricultural practices.

§ 20-29.5. Wholesale and Retail Marketing. [Ord. #98-13, § I]

The agricultural output of a farm as defined herein, and related products that contribute to farm income, may be sold from the farm for wholesale or retail use. " U-pick" and farm stand marketing and sales shall be specifically permitted. Both farm and non-farm produced products may be sold from a farm stand provided that non-farm products occupy not more than 25% of the retail area of the stand. All farm stands shall be operated only during daylight hours and only during the normal "growing season" for this area.

§ 20-29.6. Notice of Farm Use. [Ord. #98-13, § I]

For the purpose of giving due notice of nearby farming uses to proposed new residential areas adjacent to land then being commercially farmed or suitable, therefore, the Planning Board shall require an applicant for an adjacent major or minor subdivision, as a condition of approval of such application, to include a provision in each and every deed conveying all or any portion of the lands thereby subdivided, as well as on filed final subdivision maps, the following record notice to and waiver by grantees of objection to such present or future proximate farming uses, which such provision shall be made to run with the land:

"The grantee hereby acknowledges notice that there are presently or may in the future be farm uses adjacent or in close proximity to the abovedescribed premises. The grantee further acknowledges that the Township of Hope, in its adopted Right-to-Farm Ordinance, has deemed established as acceptable activities which may result in the emanation of noise, odors, dust and fumes caused by such necessary activities when conducted in accordance with recognized agricultural practice. Such activities include but are not limited to the production and processing of agricultural and horticultural crops and livestock, aerial and ground spraying, the spreading of manure and chemical and organic fertilizers and the wholesale and retail marketing of agricultural and related products. The grantee further acknowledges that such activities may occur on holidays, weekends and at all times of the day, including early morning, evening and nighttime hours. By acceptance of this conveyance, the grantee does hereby waive objection to such activities." § 20-29.7

§ 20-29.7. Severability. [Ord. #98-13, § I]

If any provisions hereof shall be adjudicated invalid, such determination shall not affect the remaining provisions hereof, which shall remain in full force and effect to the extent severable for such determination.

§ 20-29.8. Repealer. [Ord. #98-13, § I]

All ordinances and all provisions thereof inconsistent or conflicting with the provisions of this section are hereby repealed to the extent of such conflicts or inconsistency provided not otherwise required by law.

Inventory Tables

Inventory Table 1. Farm Assessed Property in Hope Township

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

					Farm Pa	Farm Parcel*	
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
700	900	3B	435 DELAWARE RD	1988 MODI LIVING TRUST	43.35	42.78	
2700	4800	3B	344 JOHNSONBURG RD	AGENS, JAMES & AGATHE	27.21	27.04	
3400	1505	3B	359 JOHNSONBURG RD	APK JR 2009 IRREVOCABLE FAMILY TR	5.93	6.79	9.91
3400	1506	3B	357 JOHNSONBURG RD	APK JR 2009 IRREVOCABLE FAMILY TR	3.01	3.12	9.91
600	1000	3B	455 DELAWARE RD	AULETTA, BEN	105.77	110.10	
800	1201	3B	SWAYZE MILL RD	BARDON-GOODBODY FARM CO	9.90	10.91	
100	900	3B	1122 HOPE-BRIDGEVILLE RD	BELSTRA, ROBERT	174.00	165.59	405.00
1000	2200		153 LAKE JUST-IT RD	BELSTRA, ROBERT	0.14	0.03	165.62
1200	1000		335 MT HERMON RD	BELVERIO, FRED CHARLES	30.15	33.09	
200	302	3B	1025 HOPE-BRIDGEVILLE RD	BERGHAHN FRED N	1.48	1.41	1
200	301	3B	1027 HOPE-BRIDGEVILLE RD	BERGHAHN, FRED W	13.94	14.02	16.47
200	303	3B	1029 HOPE-BRIDGEVILLE RD	BERGHAHN, PATRICIA H	1.04	1.04	
3400		3B	WALNUT ST	BILLOW, MARY L	28.03	28.01	
5300		3B	305 UNION BRICK RD	BODOLSKY, THOMAS	59.50	55.89	
3200	500	3B	425 JOHNSONBURG RD	BOROCHOWSKI, MICHAEL	40.50	40.51	
700	1100		137 SWAYZE MILL RD	BOYSEN, ROBERT L & ROSE MARIE	39.22	38.70	
3200	100	3B	541 JOHNSONBURG RD	BROWN, SCOTT & TRACEY	13.48	13.99	
5200	702	3B	561 HOPE-BLAIRSTOWN RD	BURKE, BRADLEY A	43.66	33.16	
1000	3500	3B	1256 HOPE-BRIDGEVILLE RD	BURKE, GLENN & MCCARTHY, ANNA K S	26.20	31.86	
1300	202	3A	112 CEMETARY RD	CAMEJO, RONALD & REBECCA	1.00	18.02	
5400	400	3B	312 UNION BRICK RD	CAMPGAW CLUB L L C C/O D SCHWARTZ	13.93	15.06	
1100	302	3B	1231 HOPE-BRIDGEVILLE RD	CASELLA, JOHN M	5.01	6.10	
1200	2304	3B	72 LOCUST LAKE RD	CERAMI, CHARLES & BEATRICE	20.23	21.25	04.00
1200	2303	3B	70 LOCUST LAKE RD	CERAMI, CHARLES & BEATRICE REV LV TR	2.82	2.81	24.06
700	700	3A	458 DELAWARE RD	CERQUEIRA, MANUEL S & MARIA	5.05	14.36	
2900	100	3B	382 JOHNSONBURG RD	CHAMBERLAIN, ROBERT	30.02	26.89	1
3000	200	3B	388 JOHNSONBURG RD	CHAMBERLAIN, ROBERT	81.95	79.25	404.00
3400	1900	3B	385 JOHNSONBURG RD	CHAMBERLAIN, ROBERT	45.46	45.01	164.08
3400	2200		9 RIDGEWAY AVE	CHAMBERLAIN, ROBERT	12.53	12.93	
3200		3B	14 RIDGEWAY AVE	CHAMBERLAIN, ROBERT	9.17	8.56	
3200	400	3B	429 JOHNSONBURG RD	CHAMBERLAIN, ROBERT & L & ZELINSKI	61.62	61.78	
600	300	3B	499 DELAWARE RD	CHAPKOVICH, SCOTT M & NICHOLE M	26.11	26.38	
3000		3B	SHILOH ROAD	CHARLES, THOMAS & RAVO JEAN	24.00	24.55	
1200	3500	3B	357 DELAWARE RD	CINI, JOHN K	38.39	40.12	
2700	2800	3B	324 HOPE-GT MEADOWS RD	COJOCAR, ALEX D & DEBORAH M	21.10	21.98	
1200	400	3A	321 MT HERMON RD	COMMISSO, LAWRENCE A & K NIKOLLE	1.15	7.04	

 					Farm Parcel*		Farm Unit **
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
3100	100	3B	462 JOHNSONBURG RD	COOKE, SCOTT & DIANE	0.73	0.45	
900	1101	3B	100 HISSIM RD	COPLEY, DUANE & PATRICIA	1.07	1.97	15.45
900	1100	3B	102 HISSIM RD	COPLEY, DUANE G	14.03	13.48	15.45
300	100	3B	181 OSMUN RD	CORNERSTONE FARM	4.79	6.76	
700	601	3A	472 DELAWARE RD	CORONA, CARMEN & DANIELLE	1.00	7.12	
600	500	3B	471 DELAWARE RD	COUNTRY ACRE DEVELOPMENT CO LLC	53.20	52.56	
700	1000	3B	147 SWAYZE MILL RD	DANCKWERTH, EDWARD	10.20	11.72	
3100	200	3B	460 JOHNSONBURG RD	DECAROLIS, ALAN	22.54	21.55	
5000	200	3B	445 SILVER LK-MARKSBR RD	DONOHUE, ELSIE	49.20	48.62	
500	302	3B	120 KOECK RD	D'OTTAVIO, DANIEL J & CAROL ANN	8.07	8.80	
3200		3B	JOHNSONBURG RD	DOWD, DAVID J & JOHANNA HUSS	3.71	4.57	
200	700	3B	37 SWAYZE MILL RD	ELONKA JR STEPHEN M	169.00	170.60	
1700	601	3B	FOUNDRY RD	ENERLICH, EDWARD	4.46	4.51	
1200	3300	3B	391 DELAWARE RD	EVANS, PAUL & VIRGINIA/LAFEMINA, K	59.83	79.62	
100	1400	3B	182 LAKE JUST-IT RD	FARIS, LABIB F & PAMELA L	0.50	1.55	0 50
1000	2800	3B	181 LAKE JUST-IT RD	FARIS, LABIB F & PAMELA L	6.79	7.03	8.58
2700	4301	3B	212 SHILOH ROAD	FOREST, SCOTT & KAREN	10.77	10.49	04.00
2700	4303		212 SHILOH ROAD	FOREST, SCOTT & KAREN	17.00	14.43	24.92
4000		3B	464 SILVER LK-MARKSBR RD	GABEL, THOMAS & LINDA	5.68	5.99	
800		3B	7 KOSTENBADER RD	GATTELLI, CHRISTOPHER & BIENSKIE S	22.45	22.24	
1300	200	3B	120 CEMETARY RD	GOODBODY, RICHARD P & J SCHENNUM	20.06	20.61	
1500	1501	3A	141 UNION BRICK RD	GRANGER, EVERETT & LORRAINE	2.03	2.07	
100	600	ЗA	1060 HOPE-BRIDGEVILLE RD	GRIFFETT, JR, WILLIAM	5.03	73.57	
100		3B	1060 HOPE-BRIDGEVILLE RD	GRIFFETT, JR, WILLIAM	42.30	23.71	97.28
100	1000		1138 HOPE-BRIDGEVILLE RD	GROCHOWICZ KATHERINE ESTATE	2.80	2.93	
800	1100		60 SWAYZE MILL RD	GUGEL, GEORGE H	44.10	48.67	
1000	800	3B	405 HOPE-GT MEADOWS RD	GULICS, DANIEL S & KRISTINA R	64.80	61.92	
800	1104		80 SWAYZE MILL RD	HEFTER, JR, EDWARD W	5.00	6.37	
700	400	3B	252 HONEY RUN RD	HIGHLANDS HOPE LLC	1.90	1.09	
700	503	3B	526 DELAWARE RD	HIGHLANDS HOPE LLC	1.35	1.00	
300	600	3B	530 DELAWARE RD	HIGHLANDS HOPE, LLC	121.84	121.42	125.08
500	500	3B	529 DELAWARE RD	HIGHLANDS HOPE, LLC	1.26	1.30	
1200	3800		329 DELAWARE RD	HOWELL, JANE M	130.22	132.77	
500		3B	34 NIGHTINGALE RD	HUNT, THOMAS	0.13	0.25	
1700	600	3B	429 HOPE-BLAIRSTOWN RD	JACOSKI, PETER/TALHMORE, JR, GARY	8.70	8.61	

					Farm Parcel*		Farm Unit **
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
600	2303		1 HONEY RUN RD	JAMES, GEORGE A & BRENDA	17.80	17.37	26.01
600	2302		121 CEMETARY RD	JAMES, III, GEORGE	6.85	8.65	20.01
600	2304		1 HONEY RUN RD	JAMES, GEORGE A & BRENDA	1.95	0.04	
4000	101	3B	121 RIDGEWAY AVE	JOHNSON, WILLIE C	14.80	15.37	
4000	700	3B	402 SILVER LK-MARKSBR RD	KIRBY, ALLAN P JR	15.12	14.56	48.31
4000	800	3B	500 HOPE-BLAIRSTOWN RD	KIRBY, ALLAN P JR	33.70	33.75	40.51
1100	1904	3B	384 DELAWARE RD	LEARY, WARREN J & LORI	8.75	9.68	
5000		3B	407 SILVER LK-MARKSBR RD	LEE, ARTHUR H	44.07	43.70	
1100	1903		386 DELAWARE RD	LEONARDELLI, PAUL & KATHLEEN	10.89	12.79	
1500	1600		137 UNION BRICK RD	LITTLEHALE, GEOFF	1.00	12.09	
600	1500	3B	19 LOCUST LAKE RD	LLRD ASSOCIATES LLC	70.88	72.53	
1600	1300	3B	376 MT HERMON RD	LO PRESTI, ARTHUR & EDWARD & THOMAS	242.11	238.55	246.76
1200	1301	3B	391 MT HERMON RD	LO PRESTI, GARY B & DONNA M	7.00	8.21	240.70
5200	1000	3B	41 OLD MT HERMON RD	LO PRESTI, ARTHUR & EDWARD & THOMAS	20.82	20.39	
1600	3300	3B	MT HERMON RD	LO PRESTI, ARTHUR EDWARD & THOMAS	6.15	6.33	
900	300	3B	2 HISSIM RD	LOUIE, MON & NANCY	20.07	21.40	
3000	500	3B	201 SHILOH ROAD	M&A INVESTMENTS, LLC	37.90	36.54	
1200	1200	3B	341 MT HERMON RD	MAIER, CHRISTOPHER ET AL	58.40	54.28	105.35
1600	1500	3B	354 MT HERMON RD	MAIER, CHRISTOPHER ETAL	45.60	51.07	105.35
2700	2500	3B	354 HOPE-GT MEADOWS RD	MAIER, CHRISTOPHER F	73.22	79.76	
2700	4600	3B	50 JENNY JUMP ROAD	MAIER, CHRISTOPHER F	72.23	75.55	
2900	400	3B	27 JENNY JUMP ROAD	MAIER, HERMANN R	48.27	45.29	335.64
1000	900	3B	365 HOPE-GT MEADOWS RD	MAIER, HERMANN R & MARIE A	7.81	32.84	
2700	2400	3B	396 HOPE-GT MEADOWS RD	MAIER, HERMANN R. & MARIE A.	108.58	102.20	
1600	1900	3B	328 MT HERMON RD	MALICK, MACK	58.88	59.13	
1100	1902		360 DELAWARE RD	MALON HOWARD	6.07	6.14	40.00
1100	1901		356 DELAWARE RD	MALON, MATTHEW & KATHLEEN K	5.13	6.08	12.22
2700	4200		202 SHILOH ROAD	MARINO, BENNY & PAOLA	1.00	10.64	
5300			313 UNION BRICK RD	MARINO, DONNA M	22.30	24.72	
200	200	3B	10 DOE HOLLOW LANE	MATARAZZO, ROBERT J & LAURA R	5.10	24.35	
200		3B	1001 HOPE-BRIDGEVILLE RD	MATARAZZO, ROBERT J & LAURA R	51.03	70.05	94.40
100	2101		26 JENNY JUMP AVE	MAURIELLO, KENNETH & AMY	1.00	11.60	
		3B	11 JENNY JUMP ROAD	MAZA, ANICETO & ROSA	7.41	10.46	
1000	1900	1	39 HISSIM RD	MONDELLO, RICHARD & RICHARD JR	7.87	11.39	
1000	1903		HISSIM RD	UNKNOWN C/O R MONDELLO	9.00	7.82	19.21

					Farm Pa	arcel*	Farm Unit **
Block		Class		Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
	2200		11 DOGWOOD RD	MORGAN, HENRY G	62.00	63.46	
1100	2307	3B	316 DELAWARE RD	MOTYKA JOYCE D	6.84	8.03	
1200	1700	3B	94 LOCUST LAKE RD	MT HERMON HILLS C/O J DENEUFVILLE	59.16	54.53	
1500	800	3B	412 MT HERMON RD	MT HERMON HILLS C/O J DENEUFVILLE	11.40	11.93	
1200	1300	3B	385 MT HERMON RD	MT HERMON HILLS COMPANY LLC	95.52	95.29	
1300	1100	3B	LOCUST LAKE RD	MT HERMON HILLS COMPANY LLC	1.32	1.16	294.85
1300	1200	3B	LOCUST LAKE RD	MT HERMON HILLS COMPANY, LLC	1.38	1.32	
1300	1400	3B	LOCUST LAKE RD	MT HERMON HILLS COMPANY, LLC	0.49	0.47	
1300	1500	3B	113 LOCUST LAKE RD	MT HERMON HILLS COMPANY, LLC	133.95	130.14	
200	400	3B	1075 HOPE-BRIDGEVILLE RD	MUSGRAVE P / VANKIRK M D/B/A P/M	221.81	227.93	
700	600	3A	482 DELAWARE RD	NIESWAND, GEORGE H & ANNA MARIA	1.00	22.00	
1000	1400	3B	108 HISSIM RD	NIKETAKIS, LUCILLE	4.24	3.72	
900	1000		108 HISSIM RD	NIKETAKIS, LUCILLE	20.10	21.56	25.28
600		3B	128 NIGHTINGALE RD	NORGARD, JOHN R JR & LAURA A	42.19	43.65	
500		3B	531 DELAWARE RD	NOVACK ARNOLD	8.25	8.73	
500	300	3B	231 DELAWARE RD	NOVACK, ANDREW A & LAURA L	62.44	58.09	
300		3B	536 DELAWARE RD	NOVACK, ARNOLD A	3.03	3.05	61.14
600	1600		39 LOCUST LAKE RD	NURENBERG, JEFFREY	5.66	6.26	
900		3B	36 HISSIM RD	OBSER HERBERT / PRYOR HELEN S	12.18	35.89	
2900		3B	85 JENNY JUMP ROAD	OGDEN EQUITY, LLC	7.60	21.15	
	2400		167 LAKE JUST-IT RD	OZGA, MARC P & JANE M	9.33	9.76	
100		3B	1070 HOPE-BRIDGEVILLE RD	P MUSGRAVE & M VANKIRK D/B/AP&M	6.19	6.16	
600		3A	461 DELAWARE RD	PAOLELLA, NICHOLAS	9.22	8.93	
2700	4400	3B	28 JENNY JUMP ROAD	PETRIW, JOHN & THERESA	12.06	12.57	
1200	3700	3B	347 DELAWARE RD	PREZIOSO, SERGIO C & ANNA ROSE	33.81	32.72	
3200	2200	3A	34 RIDGEWAY AVE	RAFAEL, JOAQUIM ROSA DANNY & MICH	-	12.68	
1100	1600	3A	70 KOSTENBADER RD	RAMBELLI ROBERTO / BURT SABINE	1.00	7.27	
3400	1500	3B	369 JOHNSONBURG RD	RAPHAEL, RONALD & BEVERLY	11.91	12.43	
5000	1002	3B	540 HOPE-BLAIRSTOWN RD	RENES, LIDIA	5.15	14.60	
5400	100	3B	308 UNION BRICK RD	RENNSPIES, ERICH & ELISABETH	0.71	0.84	
5400	300	3B	UNION BRICK RD	RENNSPIES, ERICH & ELISABETH	0.44	0.45	1.29
1100	300	3B	1245 HOPE-BRIDGEVILLE RD	RONCORONI, RICHARD & ROBBIN	15.66	16.24	
1100	100	3B	1000 HOPE-BRIDGEVILLE RD	ROSENBERG NEIL J & ROBERTA	13.41	15.22	
1100		3A	1281 HOPE-BRIDGEVILLE RD	ROSENBERG, ROSS A & EVAN E	1.00	2.73	25.39
1100		3B	1283 HOPE-BRIDGEVILLE RD	ROSENBERG, ROSS A & EVAN E	9.20	7.44	

					Farm Pa		Farm Unit **
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
800	1102	3B	48 SWAYZE MILL RD	RUSS, DONALD E & EMILY E	10.36	10.78	16.72
800	1101	3B	44 SWAYZE MILL RD	RUSS, DONALD E. & EMILY E.	5.06	5.94	10.72
1000	3000	3B	1222 HOPE-BRIDGEVILLE RD	SCHAEDEL, WILLIAM KING	35.12	34.59	
1100	1500	3B	410 DELAWARE RD	SCHNEPER F A & W R / RILEY L A	40.00	38.25	
800	1105	3B	82 SWAYZE MILL RD	SCHROR, MATTHEW S	14.01	13.12	
2900	502	3B	23 JENNY JUMP ROAD	SEABECK, JOHN P & JEAN	6.00	6.89	
2700	3504	3B	59 FAR VIEW ROAD	SEVERNS, SCOTT & TRACEY	4.86	6.30	44.20
2700	3505	3B	57 FAR VIEW ROAD	SEVERNS, SCOTT & TRACEY	6.19	8.00	14.30
			117 KOECK RD	SHIPPS, BRIAN R	13.20	8.54	
	3707		335 DELAWARE RD	SIRO, STEVEN R & LORRY	6.01	6.69	
1100	1100	3B	12 KOSTENBADER RD	SKIRTIN, E ESTATE C/O ZIARNOWSKI, T	62.35	70.75	
900	400	3B	HISSIM RD	SMITH, DAWN	2.07	2.66	
200	500	3B	11 SWAYZE MILL RD	SOSNOVIK, RAYMOND J	11.80	11.12	
100	800	3B	1104 HOPE-BRIDGEVILLE RD	SOSNOVIK, RUSS, RAY & CLYDE/MILLER	66.97	42.00	
1000	1100	3B	105 HISSIM RD	SOUTH, E WAYNE & ANITA	17.77	22.22	
2700	4300	3B	10 JENNY JUMP ROAD	STEINMAN, JEAN, TRSTEE STEINMAN REV	22.91	22.21	
1200	1100	3A	345 MT HERMON RD	STEPHANS JR, FREDERICK & FRED III	0.17	0.20	00.57
	1800		344 MT HERMON RD	STEPHANS, JR, FREDERICK & III, FRED	21.10	23.36	23.57
	4302		18 JENNY JUMP ROAD	STEPHANS, FREDERICK B JR	27.86	28.30	
			112 OSMUN RD	STONE, HARRY A	95.72	93.22	1
300		-	149 OSMUN RD	STONE, HARRY A	20.46	20.44	113.66
000	000	00			20.40	20.77	
1200	3900	20	349 MT HERMON RD	STROUD, DAVID & KAREN	121.52	120.31	
1200	4000		LOCUST LAKE RD	STROUD, DAVID & KAREN STROUD, DAVID W	43.35	46.49	166.80
1200	4000	SD	LOCUST LAKE RD		43.33	40.49	
000	000	0D				00.44	
			29 SWAYZE MILL RD	SWAYZE MILL ESTATES LLC	19.68	20.14	20.20
			19 SWAYZE MILL RD	SWAYZE MILL ESTATES LLC	5.77	5.92	29.29
			23 SWAYZE MILL RD	SWAYZE MILL ESTATES LLC	3.16	3.23	1
	1000		92 SWAYZE MILL RD	THE MASI 1995 TRUST	20.82	22.80	
	1200		1150 HOPE-BRIDGEVILLE RD	THE PLANER FAMILY TRUST BY PLANER M	35.17	29.93	
			3 KOSTENBADER RD	THE PLANER FAMILY TRUST BY PLANER M	63.63	58.23	95.14
	1202		182 LAKE JUST IT RD	PLANER, MICHAEL R & JENNIFER A	6.12	6.98	
	2306		324 DELAWARE RD	THOMAS, PETER C & RUSIN CHRISTINE L	5.00	6.18	
	3100		316 HOPE-GT MEADOWS RD	TRUMPORE LAWRENCE R & LORETTA M	9.73	9.89	
2700	4700	3B	90 JENNY JUMP ROAD	URFER, TERRY	61.00	60.39	

					Farm Parcel*		Farm Unit **
Block	Lot	Class	Location	Owner's Name	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
900	800	3B	72 HISSIM RD	VAN WALLENDAEL, LAWRENCE & NANCY	6.13	4.46	
900	802	3B	HISSIM RD	VAN WALLENDAEL, LAWRENCE & NANCY	2.98	1.31	7.68
1000	1600	3B	73 HISSIM RD	VAN WALLENDAEL, LAWRENCE W & NANCY	2.01	1.90	
1100	1400	3B	60 KOSTENBADER RD	VANSWERINGEN, ALAN & CHRISTINA	14.58	15.72	
800	300	3B	1143 HOPE-BRIDGEVILLE RD	VORSE LENORA	6.47	7.44	
600	1902	3A	105 CEMETARY RD	WARGO JANET	6.21	6.46	
200	1000	3B	154 OSMUN RD	WDC, LLC	23.32	23.24	144.65
300	200	3B	167 OSMUN RD	WDC, LLC	71.58	121.41	144.05
5000	1000	3B	562 HOPE-BLAIRSTOWN RD	WHITE, ELIZABETH	20.01	20.04	
5000	500	3B	413 SILVER LK-MARKSBR RD	WINTER, GEORGE R	10.62	10.90	400.00
5000	400	3B	425 SILVER LK-MARKSBR RD	· · · · · · · · · · · · · · · · · · ·	53.64	92.06	102.96
5000	1001	3B	562 HOPE-BLAIRSTOWN RD	WINTER, SUSAN KNA CARNEAL SUSAN	21.01	20.36	
5400	500	3B	120 UNION BRICK RD	WOODCOCK, MARY	5.23	6.63	7.00
		3B	125 UNION BRICK RD	WOODCOCK, MARY	1.08	0.64	7.28
600	2200	3B	111 CEMETARY RD	WOODWARD, RALPH P & SHELLY W	32.75	32.40	
200	100	3B	24 DOE HOLLOW LANE	ZHENG YUAN INTERNATIONAL FLAGSHIP S	96.93	62.07	
1200	500	3B	323 MT HERMON RD	ZORN, JOSEPH	19.80	13.17	
			2 FOUNDRY RD	ZORN, JOSEPH	15.05	13.52	
	3100	3B	MT HERMON RD	ZORN, JOSEPH & CHRISTINA	9.00	8.74	177.80
1600	2000	3B	9 FOUNDRY RD	ZORN, JOSEPH & INGEBORG	121.13	130.06	
1600	3500	3B	MT HERMON RD	UNKNOWN C/O J ZORN & LOPRESTI	14.78	12.31	
1600	3600	3B	MT HERMON RD	UNKNOWN C/O JOSEPH ZORN	4.40	4.49	
5300		3B	15 OLD MT HERMON RD	ZUKOSKI, MICHAEL A & SUSAN	53.63	51.10	
5200	800	3B	116 HELLER HILL RD	ZUKOSKI, STEVEN	1.05	0.91	
				Total (Unpreserved Farmland):	5,519.32	5,851.95	Acres
				Total (Preserved Farmland):	1,477.46	1,501.57	Acres
				Total Farm Assessed Land:	6,996.78	7,353.52	Acres
				Total (Unpreserved Farm Units):	2,847.14	Acres	
				Number of Farm Units:	34		

					Acres	Acres
Block	Lot	Class	Location	Owner	(Tax Data)	(GIS)
1100	2100	3B	334 DELAWARE RD	ABEVANWINGERDEN COMPANY INC	47.74	48.21
700	500	3B	494 DELAWARE RD	ALMEIDA, ORLANDO & CANDIDA	53.69	54.18
800	1200	3B	12 SWAYZE MILL RD	BARDON-GOODBODY FARM CO	175.52	187.31
5200	1100	3B	549 HOPE-BLAIRSTOWN RD	CAMPBELL FOUNDRY CO.	170.50	174.10
3200		3B	459 JOHNSONBURG RD	COOKE, PATRICIA A	52.38	51.68
4000	300	3B	476 SILVER LK-MARKSBR RD	DE PIETRO ANN	24.15	21.38
5000		3B	483 SILVER LK-MARKSBR RD	DE PIETRO, ANN	4.50	5.25
800	200	3B	1141 HOPE-BRIDGEVILLE RD	GROCHOWICZ KATHERINE EST	133.64	134.27
1200	2300	3B	84 LOCUST LAKE RD	KOSKI, MATTHEW	61.90	66.22
600		3B	CEMETARY RD	LABARRE FAMILY LIMITED PARTNERSHIP	56.40	54.95
1200	2403	3B	40 LOCUST LAKE RD	MAERTENS, EDGAR EST & PATRICIA	22.33	22.24
1100	500	3B	1199 HOPE-BRIDGEVILLE RD	MAY, ROBERT C & DIANE L	36.33	37.01
1100		3B	1211 HOPE-BRIDGEVILLE RD	MAY, ROBERT C & JASON R	21.04	25.28
1100		3B	1239 HOPE-BRIDGEVILLE RD	MOTYKA, RICHARD J & LISA M	39.60	40.51
1100		3B	300 DELAWARE RD	MOTYKA, RICHARD J & LISA M	77.93	76.56
700		3B	73 SWAYZE MILL RD	PRUDEN, TIMOTHY LEE	31.54	30.07
700	1300	3B	99 SWAYZE MILL RD	PRUDEN, TIMOTHY LEE	84.18	89.07
700	1302		SWAYZE MILL RD	PRUDEN, TIMOTHY LEE	43.94	43.95
1100	1900		364 DELAWARE RD	RIOTTO, VINCENT MARIO	64.32	64.26
1200		3B	42 LOCUST LAKE RD	ROHSLER, HERMAN MARK	71.88	70.74
3400	400	3B	442 HOPE-BLAIRSTOWN RD	SCHOEN, STEFAN LORENA HELMUT & DONN	93.96	92.64
3400	1400	3B	341-355 JOHNSONBURG RD	SCHOEN, STEFAN, LORENA, HELMUT&DONN	37.46	36.92
3401		3B	2 DOGWOOD RD	SCHOEN, STEFAN, LORENA, HELMUT&DONN	8.00	7.33
800	100	3B	10 SWAYZE MILL RD	SOSNOVIK, RUSS, RAY, CLYDE/MILLER	64.53	67.45
				Total (Preserved Farmland):	1,477.46	1,501.57

Farm L	Inits			Farm I	Parcel	Farm Unit	
				Acres	Acres		Acres
Block	Lot	Location	Owner	(Tax Data)	(GIS)	Farm	(GIS)
1000	2200	153 LAKE JUST-IT RD	BELSTRA, ROBERT	0.14	0.03	Belstra	165.62
100	900	1122 HOPE-BRIDGEVILLE RD	BELSTRA, ROBERT	174.00	165.59	Deistra	105.02
1200	2304	72 LOCUST LAKE RD	CERAMI, CHARLES & BEATRICE	20.23	21.25	Cerami	24.06
1200	2303	70 LOCUST LAKE RD	CERAMI, CHARLES&BEATRICE REV, LVTR	2.82	2.81	Ceram	24.00
3400	2200	9 RIDGEWAY AVE	CHAMBERLAIN, ROBERT	12.53	12.93		
3400	1900	385 JOHNSONBURG RD	CHAMBERLAIN, ROBERT	45.46	45.01	Chamberlain	164.08
3000	200	388 JOHNSONBURG RD	CHAMBERLAIN, ROBERT	81.95	79.25	Chambenain	104.00
2900	100	382 JOHNSONBURG RD	CHAMBERLAIN, ROBERT	30.02	26.89		
300	600	530 DELAWARE RD	HIGHLANDS HOPE, LLC	121.84	121.42		
700	503	526 DELAWARE RD	HIGHLANDS HOPE LLC	1.35	1.28	9 Highlands	125.08
700	400	252 HONEY RUN RD	HIGHLANDS HOPE LLC	1.90	1.09		
500	500	529 DELAWARE RD	HIGHLANDS HOPE, LLC	1.26	1.30		
600	2302	121 CEMETARY RD	JAMES, III, GEORGE	6.85	8.65	lames	26.01
600	2303	1 HONEY RUN RD	JAMES, GEORGE A & BRENDA	17.80	17.37		
1600	1300	376 MT HERMON RD	LO PRESTI, ARTHUR, EDWARD& THOMAS	242.11	238.55	- Lo Presti	246.76
1200	1301	391 MT HERMON RD	LO PRESTI, GARY B & DONNA M	7.00	8.21	LOFIESU	240.70
1600	1500	354 MT HERMON RD	MAIER, CHRISTOPHER ETAL	45.60	51.07	Maier	105.35
1200	1200	341 MT HERMON RD	MAIER, CHRISTOPHER ET AL	58.40	54.28	Malei	105.55
2700	4600	50 JENNY JUMP ROAD	MAIER, CHRISTOPHER F	72.23	75.55		
2700	2500	354 HOPE-GT MEADOWS RD	MAIER, CHRISTOPHER F	73.22	79.76		
2700	2400	396 HOPE-GT MEADOWS RD	MAIER, HERMANN R. & MARIE A.	108.58	102.20	Maier 2	335.64
1000	900	365 HOPE-GT MEADOWS RD	MAIER, HERMANN R & MARIE A	7.81	32.84		
2900	400	27 JENNY JUMP ROAD	MAIER, HERMANN R	48.27	45.29		
200	200	10 DOE HOLLOW LANE	MATARAZZO, ROBERT J & LAURA R	5.10	24.35	Motorozzo	94.40
200	300	1001 HOPE-BRIDGEVILLE RD	MATARAZZO, ROBERT J & LAURA R	51.03	70.05	 Matarazzo 	94.40
1300	1500	113 LOCUST LAKE RD	MT HERMON HILLS COMPANY, LLC	133.95	130.14		
1200	1700	94 LOCUST LAKE RD	MT HERMON HILLS C/O J DENEUFVILLE	59.16	54.53		
1500	800	412 MT HERMON RD	MT HERMON HILLS C/O J DENEUFVILLE	11.40	11.93		
1300	1100	LOCUST LAKE RD	MT HERMON HILLS COMPANY LLC	1.32	1.16	MT Hermon Hills	294.85
1200	1300	385 MT HERMON RD	MT HERMON HILLS COMPANY LLC	95.52	95.29	1 1113	
1300	1400	LOCUST LAKE RD	MT HERMON HILLS COMPANY, LLC	0.49	0.47]	

				Acres	Acres	F a	Acres
Block	Lot	Location	Owner	(Tax Data)	(GIS)	Farm	(GIS)
1300	1200	LOCUST LAKE RD	MT HERMON HILLS COMPANY, LLC	1.38	1.32		
300	702	536 DELAWARE RD	NOVACK, ARNOLD A	3.03	3.05	Novack	61.14
500	300	231 DELAWARE RD	NOVACK, ANDREW A & LAURA L	62.44	58.09	NUVACK	01.14
100	1200	1150 HOPE-BRIDGEVILLE RD	PLANER FAMILY TRUST BY PLANER M	35.17	29.93		
100	1202	182 LAKE JUST IT RD	PLANER, MICHAEL R & JENNIFER A	6.12	6.98	Planer	95.14
800	400	3 KOSTENBADER RD	PLANER FAMILY TRUST BY PLANER M	63.63	58.23	3	
200	900	112 OSMUN RD	STONE, HARRY A	95.72	93.22	Stone	112.66
300	300	149 OSMUN RD	STONE, HARRY A	20.46	20.44	Stone	113.66
300	200	167 OSMUN RD	WDC, LLC	71.58	121.41	WDC	144.65
200	1000	154 OSMUN RD	WDC, LLC	23.32	23.24	VVDC	144.00
5000	400	425 SILVER LK-MARKSBR RD	WINTER, GEORGE R & JULIE	53.64	92.06	Winter	102.06
5000	500	413 SILVER LK-MARKSBR RD	WINTER, GEORGE R	10.62	10.90	Winter	102.96
					Total Target Farm Units		2,099.40
							farm units

Block	Lat	Location	Owner	Acres (Tax Data)	Acres (GIS)	
		which have not been identified as part of		(Tax Data)	(013)	
Block		Location	Owner	Acres (Tax Data)	Acres (GIS)	
1100	1100	12 KOSTENBADER RD	SKIRTIN, E ESTATE C/O ZIARNOWSKI, T	62.35	70.75	
200	400	1075 HOPE-BRIDGEVILLE RD	MUSGRAVE P / VANKIRK M D/B/A P/M	221.81	227.93	
800	1100	60 SWAYZE MILL RD	GUGEL, GEORGE H	44.10	48.67	
600	2200	111 CEMETARY RD	WOODWARD, RALPH P & SHELLY W	32.75	32.40	
3200	500	425 JOHNSONBURG RD	BOROCHOWSKI, MICHAEL	40.50	40.51	
5000	1001	562 HOPE-BLAIRSTOWN RD	WINTER, SUSAN KNA CARNEAL SUSAN	21.01	20.36	
5300	200	305 UNION BRICK RD	BODOLSKY, THOMAS	59.50	55.89	
700	900	435 DELAWARE RD	1988 MODI LIVING TRUST	43.35	42.78	
1200	3800	329 DELAWARE RD	HOWELL, JANE M	130.22	132.77	
5200	702	561 HOPE-BLAIRSTOWN RD	BURKE, BRADLEY A	43.66	33.16	
600	1000	455 DELAWARE RD	AULETTA, BEN	105.77	110.10	
700	1100	137 SWAYZE MILL RD	BOYSEN, ROBERT L & ROSE MARIE	39.22	38.70	
200	700	37 SWAYZE MILL RD	ELONKA JR STEPHEN M	169.00	170.60	
5300	100	15 OLD MT HERMON RD	ZUKOSKI, MICHAEL A & SUSAN	53.63	51.10	
			Total Target Farm Parcels not part of	f a Farm Unit:	1,075.73	
				14 fa	arm parcels	
			Total T	arget Farms: 3,175.13		
					29 farms	

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