COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

UNION TOWNSHIP HUNTERDON COUNTY

FEBRUARY 2022





COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

for

Union Township County of Hunterdon

Prepared February 17, 2022 by:

The Land Conservancy of New Jersey An accredited land trust 19 Boonton Avenue Boonton, NJ 07005

Barbara Davis

Barbara Heskins Davis, PP, AICP NJ Professional Planner (License No.: 5926)

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Produced by:

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David Epstein, President Barbara Heskins Davis, PP, AICP, Vice President, Programs Kenneth Fung, Senior GIS Manager Planning Interns: Hiyabu Habtemichael, Rachel Hammelman, Ethan Wissler and Hope Wright

For further information, please contact:



Union Township 140 Perryville Road Hampton, NJ 08827 PH: (908) 735-8027 Uniontwp-hcnj.gov

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Township Committee

Mayor Frank Mazza David Stothoff, Deputy Mayor Bruce Hirt Matt Severino Page Stiger

Agricultural Advisory Committee

Scott Eichlin, Chair Paige DiRoberto Michael Matthews Ken Ravenburg Page Stiger, Township Committee

Township Staff and Professionals

Ella Ruta, Township Clerk Grace Brennan, Chief Financial Officer

Hunterdon County

Bob Hornby, County Agricultural Development Board Administrator

State of New Jersey

Steven Bruder, Planning Manager, State Agriculture Development Committee

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Cover Photograph: Milligan Farm

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Executive Summary

Union Township's farm fields comprise some of the most beautiful agricultural land in New Jersey. Much of the town lies within the scenic Clinton Wildlife Management Area and Spruce Run Reservoir. The Township is one of many horse farm municipalities within Hunterdon County.

Since the completion of the 2010 Comprehensive Farmland Preservation Plan, **5 farms** have been preserved, protecting **176 additional acres** of agricultural land. The first farm in Union Township was preserved in 1998 and since that time **1,047 acres in 21 farms** have been permanently preserved by municipal deed restrictions and through the municipal, county, and state acquisition programs.

Union Township has thus far been able to retain its agricultural landscape and hopes to continue to do so, by aggressively pursuing and supporting farmland preservation within its community. The mission statement of the Union Township Agricultural Advisory Committee is:

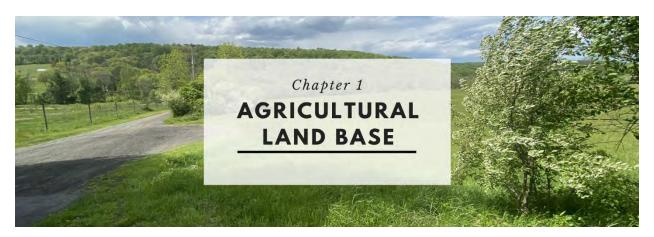
"to preserve the Township's thriving farming community and retain the Township's prime agricultural lands to secure and sustain the livelihood of its farmers. The preservation of productive farmland will ensure the health of the local economy as well as the health of the natural resources that supports the Township's agricultural industry. Protecting the agricultural lands and its supporting infrastructure will ensure the Township's rural landscape remains secure."

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 Union Township as part of this 2021 Farmland Plan Update:

One-year target:	50 acres, 1 farm
Five-year target:	200 acres, 3 farms
Ten-year target:	500 acres, 7 farms

Public Meetings

The Township hosted two public meetings on the *Plan Update*. The purpose of these meetings is to share the draft *Plan Update* to provide an opportunity for residents and community stakeholders to listen and provide recommendations regarding farmland preservation. The first was hosted by the Township Committee at its October 20, 2021 meeting. The second was held by the Planning Board at its November 4, 2021 meeting. The Agricultural Advisory Committee was involved in the development of the *Plan Update* and will review and approve the *Update* prior to its adoption. Meeting materials are included in **Appendix A**.



Chapter 1. Agricultural Land Base

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

Chapters 1, 2 and 3 use the Farmland Tax Assessment dataset, provided by the State Agriculture Development Committee (SADC) 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

As recorded in the 2019 Tax Assessment dataset, Union Township has **3,468 acres** of farm assessed land devoted to agricultural or horticultural use, including cropland, pasture, woodland, and equine operations.^a (**Map 1**).

Due to the nature of the topography, slightly less than half of Union Township's farm-assessed acreage is woodland/wetland (**1,540 acres**); with **1,913 acres designated active agriculture** (cropland and pasture), and **15 acres** designated as equine.¹ (**Figure 1**) Preserved and public lands in Union Township are shown on **Map 2**.

Union Township lies within the Piedmont Plain and New Jersey Highlands physiographic provinces. The Piedmont Plain gently slopes towards the southeast with rolling hills separated by shallow valleys. The New Jersey Highlands consists of broad, rounded, or flat-topped ridges. These ridges run the northeast-southwest trend and are separated by narrow valleys. The Highlands are part of the larger Reading Prong province that extends into Pennsylvania.²

^a Farm assessed acreage from the 2019 and 2017 Tax Assessment dataset, provided by the State Agriculture Development Committee.

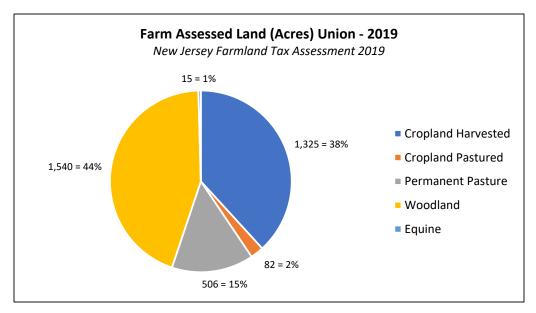


Figure 1. Farm Assessed Land in Union Township (2019 Tax Assessment)

According to 2015 Land Use/Land Cover (LU/LC) data from the New Jersey Department of Environmental Protection (NJDEP), **22%** (2,917 acres) of the municipality is dedicated to land in agricultural use, versus 28% county wide. Union Township has the same percentage of land in woodland (36%) and wetland (8%) as the rest of the county. (Figure 2, Figure 3, and Table 1)

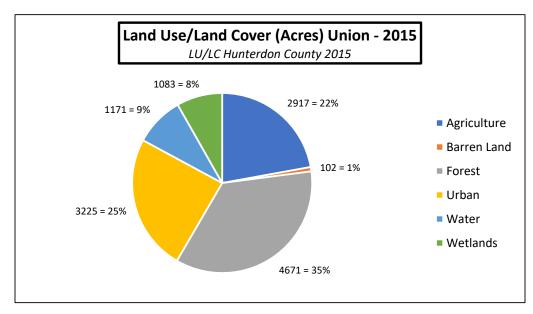


Figure 2. Land Use/Land Cover for Union Township (NJDEP)

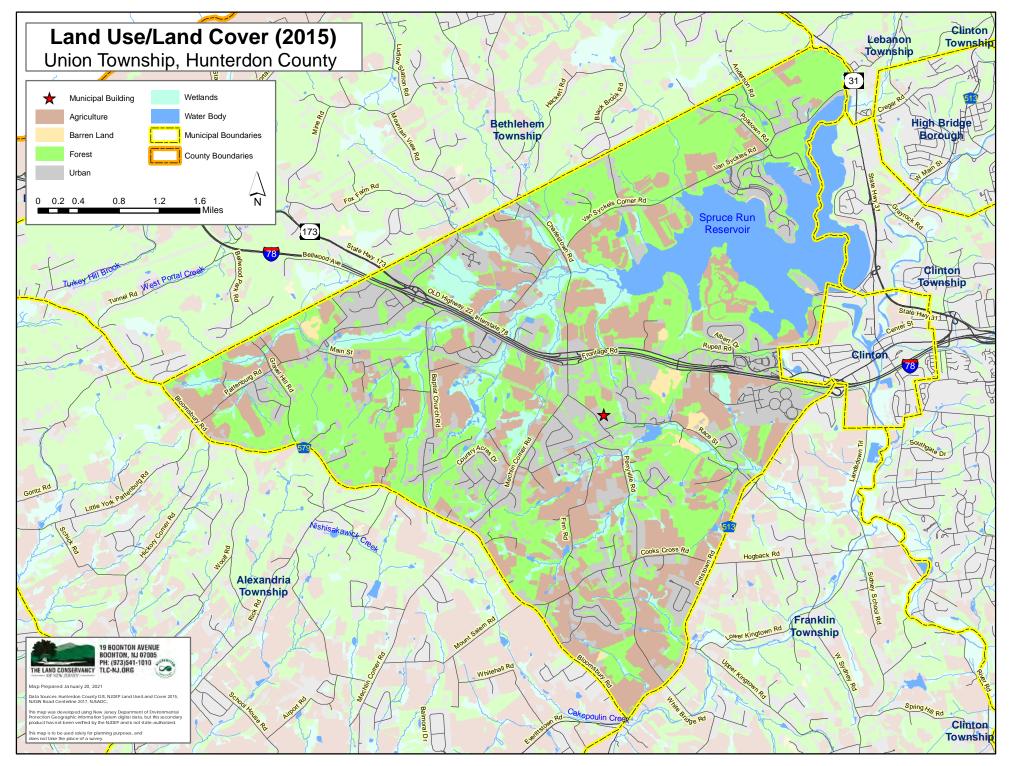
Union T	Union Township		on County
Acres	Percent	Acres	Percent
2,917.25	22.2%	77,454.67	27.7%
101.88	0.8%	888.27	0.3%
4,670.74	35.5%	100,003.38	35.7%
3,224.90	24.5%	70,626.98	25.2%
1,171.27	8.9%	7,101.32	2.5%
1,082.62	8.2%	23,810.59	8.5%
	Acres 2,917.25 101.88 4,670.74 3,224.90 1,171.27	Acres Percent 2,917.25 22.2% 101.88 0.8% 4,670.74 35.5% 3,224.90 24.5% 1,171.27 8.9%	Acres Percent Acres 2,917.25 22.2% 77,454.67 101.88 0.8% 888.27 4,670.74 35.5% 100,003.38 3,224.90 24.5% 70,626.98 1,171.27 8.9% 7,101.32

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.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 **4,521 acres of prime farmland soils** in Union Township, of which 1,474 are in active agricultural use. (**Table 2** and **Table 3**) Accounting for 34% of the total soils in the Township, the largest contributors to prime farmland are Pattenburg gravelly loam (PdtB and PdtmB) (1,400 acres) and Gladstone gravelly loam (GkaoB) (474 acres). These soils are used for hay, corn, and pasture.
- *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 **4,500 acres of soils of statewide importance** in Union Township, of which 1,332 acres are in agricultural use. Accounting for 34% of Union Township's soils, these soils have a slope greater than 6 percent. The major soil series identified in this category include the Berks channery loam (BegB, BegC2, and BegD2) totaling 1,434 acres and the Pattenburg gravelly loam (PdtC2) totaling 1,6233 acres.

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



- *Farmland soils of statewide importance, if drained* produce high crop yields when treated and managed according to acceptable farming methods, just as soils of statewide importance. There are **254 acres of soils of statewide importance**, if drained, of which 17 acres are in agricultural use. They make up 2% of Union Township's soils.
- *Unique soils* exhibit specific qualities that may be favorable to the production of specialized crops such as cranberries, fruits, and vegetables. There are no unique soils in Union Township.

Table 2 identifies the major soils in Union Township, grouped by the NRCS classifications for agricultural soils and **Map 3** illustrates their location. Of the total land in Union Township, 9,276 acres, or 70% of the town is identified as agricultural soil by the NRCS.

Table 2. Soil Categories – Union Township					
Abbr.	Name	Acres			
AnoB	Annandale gravelly loam, 3 to 8 percent slopes	153.88			
ANWTB	Annandale and Gladstone gravelly loams, 3 to 8 percent slopes	317.92			
BefB	Bedington channery silt loam, 2 to 6 percent slopes	172.74			
BhnB	Birdsboro silt loam, 2 to 6 percent slopes	92.37			
BucB	Bucks silt loam, 2 to 6 percent slopes	34.75			
CakB	Califon loam, 3 to 8 percent slopes	154.92			
DuffB	Duffield silt loam, 2 to 6 percent slopes	113.38			
GkaoB	Gladstone gravelly loam, 3 to 8 percent slopes	473.83			
MemB	Meckesville gravelly loam, 2 to 6 percent slopes	378.36			
NotB	Norton loam, 2 to 6 percent slopes	179.40			
PdtB	Pattenburg gravelly loam, 2 to 6 percent slopes	925.70			
PdtmB	Pattenburg gravelly loam, moderately wet, 2 to 6 percent slopes	476.64			
PeoB	Penn channery silt loam, 2 to 6 percent slopes	26.68			
QukB	Quakertown silt loam, 2 to 6 percent slopes	104.84			
RarAr	Raritan silt loam, 0 to 3 percent slopes, rarely flooded	17.37			
RarB	Raritan silt loam, 3 to 8 percent slopes	202.25			
RksB	Riverhead gravelly sand loam, 3 to 8 percent slopes	8.03			
TurB	Turbotville loam, 2 to 6 percent slopes	328.25			
WadB	Washington loam, 3 to 8 percent slopes	359.84			
	Prime Farmland Total	4,521.15			
AnoC2	Annandale gravelly loam, 8 to 15 percent slopes, eroded	81.00			
ANWTC	Annandale and Gladstone gravelly loams, 8 to 15 percent slopes	38.74			
BefC2	Bedington channery silt loam, 6 to 12 percent slopes, eroded	98.44			
BegB	Berks channery loam, 2 to 6 percent slopes	183.85			
BegC2	Berks channery loam, 6 to 12 percent slopes, eroded	727.28			
BegD2	Berks channery loam, 12 to 18 percent slopes, eroded	523.45			

Table 2. Soil Categories – Union Township					
Abbr.	Name	Acres			
BhnC2	Birdsboro silt loam, 6 to 12 percent slopes	15.03			
ChcB	Chalfont silt loam, 2 to 6 percent slopes	6.92			
DufC2	Duffield silt loam, 6 to 12 percent slopes	46.70			
GkaoC2	Gladstone gravelly loam, 8 to 15 percent slopes, eroded	467.68			
HydB	Hazleton channery loam, 2 to 6 percent	0.0013			
HdyC2	Hazelton channery loam, 6 to 12 percent slopes, eroded	6.78			
LbtB	Lansdowne silt loam, 2 to 6 percent slopes	55.68			
MemC2	Meckesville gravelly loam, 6 to 12 percent slopes, eroded	294.41			
NotC2	Norton loam, 6 to 12 percent slopes, eroded	164.86			
PdtC2	Pattenburg gravelly loam, 6 to 12 percent slopes, eroded	1,632.68			
PeoC2	Quakertown silt loam, 6 to 12 percent slopes, eroded	0.0166			
QukC2	Quakertown silt loam, 6 to 12 percent slopes, eroded	126.04			
WadC2	Washington loam, 8 to 15 percent slopes, eroded	25.91			
	Farmland of Statewide Importance Total	4,499.74			
BoyAt	Bowmansville silt loam, 0 to 2 percent slopes, frequently flooded	254.65			
•	Farmland of Statewide Importance, if drained Total	254.65			
CanBb	Califon gravelly loam, 0 to 8 percent slopes, very stony	177.48			
CoaA	Cokesbury loam, 0 to 3 percent slopes	88.52			
CoaB	Cokesbury loam, 0 to 8 percent slopes, very stony	70.63			
DugCg	Duffield silt loam, 0 to 12 percent slopes	122.36			
DugDh	Duffield silt loam, 12 to 18 percent slopes, very rocky	15.76			
GkaoD	Gladstone gravelly loam, 15 to 25 percent slopes	126.98			
GKAPCC	Gladstone and Parker soils, 8 to 15 % slopes, extremely stony	52.52			
HcuAt	Hatboro-Codorus complex, 0 to 3 % slopes, frequently flooded	277.79			
KkoC	Klinesville channery loam, 6 to 12 percent slopes	15.76			
NotD2	Norton loam, 12 to 18 percent slopes	15.18			
ParC	Parker cobbly loam, 3 to 15 percent slopes	69.48			
ParD	Parker cobbly loam, 15 to 25 percent slopes	291.39			
ParEe	Parker cobbly loam, 18 to 40 percent slopes, extremely stony	254.91			
PdtD	Pattenburg gravelly loam, 12 to 18 percent slopes	243.19			
PdtE	Pattenburg gravelly loam, 18 to 40 percent slopes	394.29			
PHG	Pits, sand, and gravel	151.58			
QukD2	Quakertown silt loam, 12 to 18 percent slopes, eroded	13.64			
RNGE	Rock outcrop-Gladstone complex, 15 to 45 percent slopes	4.29			
ROPF	Rough broken land, shale	224.17			
RorAt	Rowland silt loam, 0 to 2 percent slopes, frequently flooded	206.26			
UdrB	Udorthents, refuse substratum, 0 to 8 percent slopes	38.60			

	Table 2. Soil Categories – Union Township					
Abbr.	Name	Acres				
WATER	Water	1,126.62				
	Not prime farmland Total	3,890.67				
	Grand Total	13,166.21				
Source: NF	Source: NRCS Soil Data Access 2020; 2015 NJDEP Land Use/Land Cover data					

The total land in active agricultural use (3,019 acres) represents 23% of Union Township. Notably, most of these active agricultural acres in Union Township are prime farmland (49% of agricultural soils) (**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	4,521	1,474	49%
Soils with Statewide Importance	4,500	1,332	44%
Soils with Statewide Importance, if drained	254	17	0.6%
Not Prime Farmland	3,891	197	6.5%
Total:	13,166	3,019	23%

Almost half of Township land (**5,677 acres**) is located on slopes steeper than 6%.⁴ These soils tend to have a 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 Union Township.⁵ 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. However, the Township had only 14 acres of vegetables in 2017, with one of these acres in irrigation. In Union Township, 3 acres were used for irrigation, two of which were used for ornamental crops and the other for vegetables. In 2010, 47 acres were used for fruit, vegetable, and ornamental crop irrigation, and there were no acres used for irrigation in 2005.⁶

D. Farmland Trends & Statistics

The amount of farm assessed land in Union Township decreased 31% from 1983 (5,010 acres) to 2019 (3,468 acres). (**Figure 4**) Hunterdon County farm assessed land base decreased 15% in the same period, from 142,240 to 120,728 acres. The composition of the Township's farm assessed land has also changed during this time:

- Harvested cropland has dropped 47.2% (26% for the County).
- Pastured cropland decreased 64% (39% decline for the County).
- Permanent pasture declined 28% (23% for the County).
- Woodland decreased by 4% (12% increase for the County).

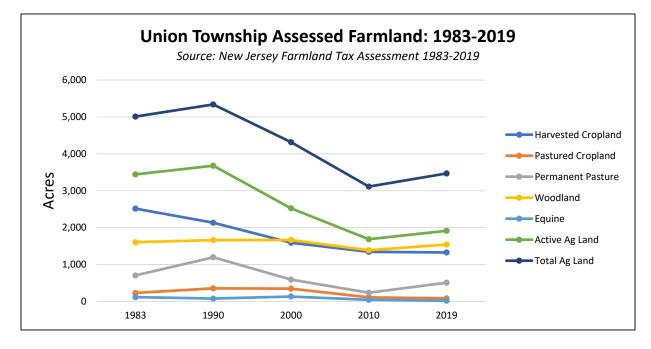


Figure 4. Assessed Farmland in Union Township

Between 1983 and 2019, harvested cropland, the largest category of active agricultural land in Union Township, has declined 47%, from 2,514 to 1,325 acres.^b Among the dominant crops in this category — hay, corn, and soybeans — the biggest losses occurred in corn, which declined 93% in the period 1983-2017 (the latest year for which data on individual crops is available), from 822 to 58 acres. This can most likely be explained by the loss of dairy farms in Union Township, with dairy cattle showing a steady drop in numbers from 703 head in 1983 before completely disappearing by 2017. Hay production increased slightly in the same period, from 811 acres to 930. Soybean acres increased 53% from 97 to 148 acres. Other crops such as barley, grass for silage and sorghum, have virtually disappeared from production in Union Township (605 acres in 1983). Fruit, vegetable, and nursery crops have stayed relatively steady from 1983 to 2017, and together represent 50 acres, or 1.4% of total harvested cropland.

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

Pastured cropland decreased by 64% and permanent pasture by 38% in the same period. This loss tracks with the decline in beef cattle and disappearance of dairy cattle operations, with the total cattle population down to 64. Sheep and goat operations also fell from 1983 to 2017, from 231 to 180, or a decrease of 22%. Inventory of equine and other livestock (including llamas) remains relatively steady.

Overall, the farmland assessed agricultural land base in Union Township has decreased by 31%, from 5,010 acres in 1983 to 3,468 acres in 2019. The farmland assessed base reached 5,339 acres in 1990 but declined by about 35% by 2019, reflecting losses in all categories except woodland, which held relatively steady (1,602 acres in 1983 to 1,540 acres in 2019).

Union Township has lost active agricultural land at a faster rate than County wide. Between 1983 and 2019, active agricultural land has decreased 44% in Union Township and 27% in the County. (**Table 4**)

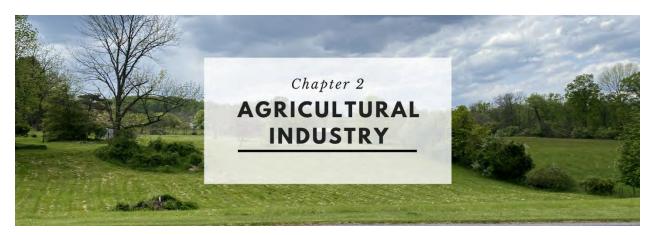
	Cropland Harvested		Cropland Pastured		Permanent Pasture		Total Active Agriculture	
	Union	Hunterdon	Union	Hunterdon	Union	Hunterdon	Union	Hunterdon
	Township	County	Township	County	Township	County	Township	County
1983	2,514	74,431	227	8,608	702	19,408	3,443	102,447
1990	2,131	74,006	352	9,015	1,195	20,216	3,678	103,237
2000	1,590	64,653	344	8,771	589	17,239	2,523	90,663
2010	1,342	57,572	109	7,223	234	16,248	1,685	81,043
2019	1,325	55,071	82	5,267	506	14,908	1,913	75,246
% Change	-47.3%	-26.0%	-63.9%	-38.8%	-27.9%	-23.2%	-44.4%	-26.6%

The trend towards smaller average and median farm sizes has been prominent throughout New Jersey and Hunterdon County over the past forty years. In contrast to a county wide 16% decrease in acreage since 1983, there has been a 36% increase in the number of farms, up from 1,180 to 1,604 in 2017. The average farm size dropped from 102 to 63 acres.^{7 8} The 2017 *Census of Agriculture* indicates that for ZIP code 08827, which encompasses Union Township, 53 of 59 farm operations were under 50 acres and six were 50 acres or greater. The ZIP code tabulations also indicated that of these 59 operations, 51 farmers operated only land they owned, 6 farmers worked both land they owned and land they rented from others, and 2 farmers were tenant farmers, operating only land rented from others or worked for shares.⁹

Union Township's 119 approved farmland assessment forms represent 3% of the county total of 3,601 in 2019. Average farm size, at 26 acres, is smaller than the county average of 63 acres. Median farm parcel size is 14 acres, with as many parcels below that number of acres as above. The largest farm parcel in Union Township is 165 acres. Despite the high number of farm parcels, because of the comparatively smaller size of these parcels, Union Township ranks fourteenth in the County in total acres devoted to agricultural or horticultural use, at 3,468 acres,

or 3%, versus number one ranked Delaware Township's 14,562 acres, or 12%. **Table 5** shows the breakdown of farm parcel sizes in Union Township based on the 2019 tax assessment data.

Table 5. Size of Individual Farm Parcels in Union Township				
Size	# of Farms			
Under 1 acre	0			
1-9 acres	53			
10-49 acres	68			
50-179 acres	21			
179+ acres	0			
Source: Union Township Tax Database (2019)				



Chapter 2. Agricultural Industry

A. Trends in Market Value of Agricultural Products Sold

Agriculture in Union Township is comprised of livestock and conventional field crops. Livestock sales in Hunterdon County produced \$13.3 million in sales in 2017, a 47% increase from \$9.0 million in 2007, and a 76% increase from 2002. Crop sales, including nursery and greenhouse products, rose 30% from \$60.6 million in 2007 to \$76.8 million in 2017. In total, agricultural sales increased 32% from \$69.7 million in 2007 to \$92.2 million in 2017.¹⁰ (**Figure 5**)

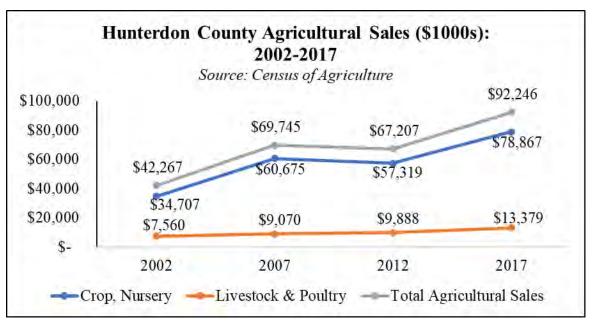


Figure 5. Agricultural Sales in Hunterdon County

As of 2017, Hunterdon County ranked seventh in the state in total agricultural sale revenues. (**Table 6**) Average sales per farm in Hunterdon County dropped 24% from 2012 to 2017, the fourth-fastest rate of decline in New Jersey. (**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 Agriculture, 2017					

Т	Table 7. Average Sales per Farm by County, 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:	Source: Census of Agriculture, 2012-2017							

In 2002, Hunterdon County had the largest concentration of dairy and livestock operations in New Jersey (311 farms). In 2017, with 251 farms in dairy and livestock, it remains first in the state.

Dairy sales have declined 10% in Hunterdon County from \$1.5 million in 2002 to \$1.4 million in 2017. This is accompanied by a 20% decrease in dairy farms, from 10 in 2002 to 8 in 2017.

As of 2017, cattle and calves (2,024) are the third most common livestock in Hunterdon County, with beef cows (1,655 head) more prominent than dairy cows (369 head). Sheep (3,177 head) represent the highest livestock animal, with meat chickens as second highest (842 count).

Crops in Hunterdon County sold for a total of \$92.2 million in 2017, a 37% increase from 2012. (**Figure 6** and **Table 8**) One crop subsector, nursery and greenhouse operations, continues to exceed other crop types in Hunterdon County. In 2017, Hunterdon County had 116,164 square feet of nursery stock crops, under glass or other protection.¹¹ Annual nursery sales comprised 54% of total agricultural revenue in 2007 (\$36.8 million) and increased to 53% of total revenue by 2017 (\$49.3 million).

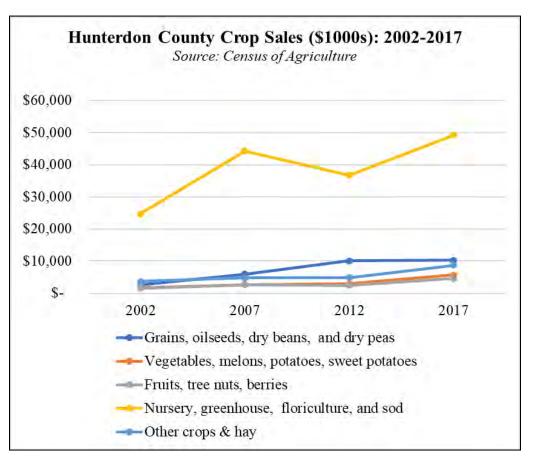


Figure 6. Hunterdon County Crop Sales

Table 8. Hunterdon County Crop Sales (\$1000s)						
	2002	2007	2012	2017		
Grains, oilseeds, dry beans, and dry peas	\$2,580	\$5,933	\$10,093	\$10,275		
Vegetables, melons, potatoes, sweet potatoes	\$1,718	\$2,649	\$2,918	\$5,695		
Fruits, tree nuts, berries	\$1,519	\$2,664	\$2,511	\$4,604		
Nursery, greenhouse, floriculture, and sod	\$24,798	\$44,347	\$36,800	\$49,309		
Other crops & hay	\$3,705	\$4,785	\$4,856	\$8,712		
Total	\$34,320	\$60,378	\$57,178	\$78,595		
Source: U.S. Census of Agriculture (2002-2017)						

Vegetables were the fourth highest-grossing crop in 2017, generating more than \$5.7 million in sales. Since 2002, vegetable sales have risen 231%.

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

A small but significant portion of Hunterdon County's agricultural sales come from other crops, including hay. Sales revenue for this category increased by 135% between 2002 and 2017.

Hunterdon County is home to many fruit farms. Farm sales began growing rapidly during the mid-2000s, going from \$1.52 million in 2002 to \$4.6 million in 2017. Much of this revenue derives from peach and grape sales. Peach farms increased by over 23% in this period, despite acreage falling 10%.

B. Agricultural Production Trends

From 2005 to 2017, soybeans and meat chickens in Union Township rose dramatically.¹² (**Figure 7**) Meat chickens gained 85% from 2010 to 2017, with 111% growth from 2015 to 2017. Soybeans maintained 20 acres of land cover from 2005 to 2010 and grew to 148 acres from 2015 to 2017. At the same time, beef cattle dropped 36% from 2005 to 2017, as well as a 17% decline for hay during the same time. Corn for grain rose 214% from 2005 to 2015 and fell 47% by 2017. There have consistently been no heads of mature dairy since 2005. In 2017, field crops were among the most acre-dominant crops in Union Township. (**Table 9**)

Considering the historically low outputs of corn and hay in 2002, long-term trends have stabilized and steadily increased since 2002. (**Figure 8**) Hay has made a resurgence, increasing by 34% since 2012, despite being down 13% since 2002. (**Figure 9**) Soybean production maintained its upward trajectory through 2002, growing 140% from 2002 to 2017. (**Figure 10**)

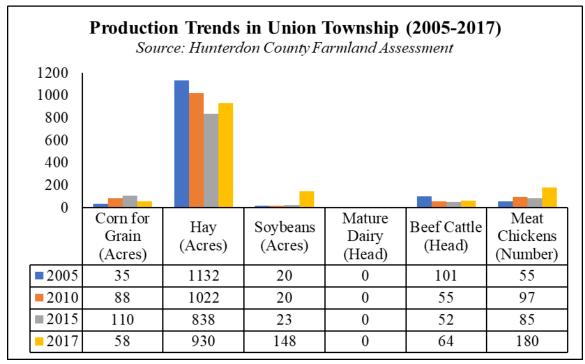
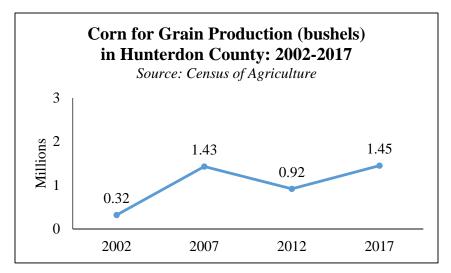


Figure 7. Production Trends in Union Township

Table 9. Dominant Crops in Union Township					
Top 10 Dominant Crops	2017	% Change			
Other Hay	668	-			
Alfalfa Hay	262	-60.78%			
Soybeans	148	-43.51%			
Corn for Grain	58	-60.81%			
Rye for Grain	38	-34.48%			
Wheat	28	-26.32%			
Christmas Trees	16	-42.86%			
Sorghum	15	-6.25%			
Trees & Shrubs	9	-40.00%			
Blackberries	8	-11.11%			
Total	1250	-			
		% of Total			
Field Crops	1217	97.36%			
Nursery Crops	25	2.00%			
Fruits and Berries	8	0.64%			
Vegetables	0	0.00%			
Source: Hunterdon County Farmland Assessment Data					





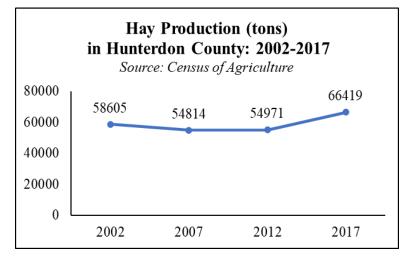
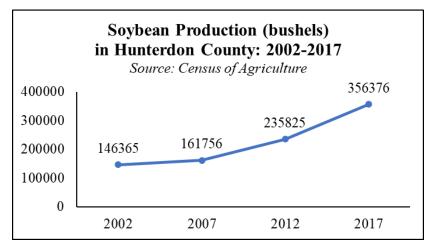
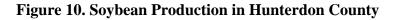


Figure 9. Hay Production in Hunterdon County





The variation in milk sales has contributed to a reduction in dairy output. From 2005 to 2017, mature dairy decreased by 11%, with an average five year-loss of 2.75%. The biggest drop occurred between 2010 and 2015, when dairy production fell by 12%.

Livestock production, including beef cattle and meat chickens, have either experienced growth or remained stable since 2005. Chicken production grew by 2% from 2005 to 2007 and rose an additional 74% by 2017. Beef cattle fell by 5% in 2010, then gained 4% by 2017, netting a -1% growth rate through the 2000s. (**Figure 11**)

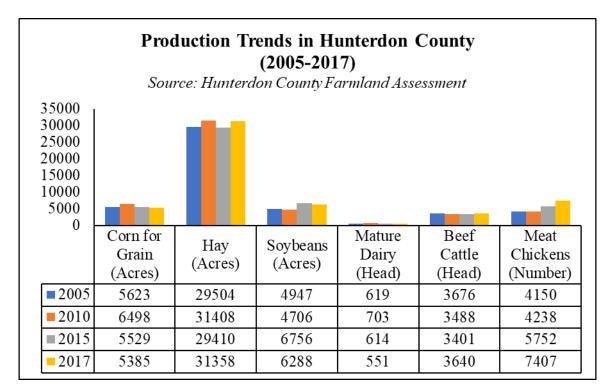


Figure 11. Production Trends in Hunterdon County

C. Agricultural Support Services and Related Industries

Agricultural support services in Hunterdon County and Union Township include tractor sales and supply stores, feed vendors, and hardware/equipment retailers. This includes Tractor Supply in Ringoes, Delaware Valley Feed and Farm Supply in Frenchtown, The Tack Room in Pittstown, and Schaefer Farms in Flemington. As of 2014, smaller suppliers have moved in to sell fifty-pound paper bags of animal feed in place of the former bulk deliveries of the operating feed mills.¹³ The varied feed and supply needs of their new customers give opportunity for lesser volume but higher margin sales by these smaller dealers. Also, local hardware and grocery stores throughout Hunterdon County serve as vendors for farming goods and supplies.

The Township's farmers also rely heavily upon mail order and out-of-state retailers for their agricultural supplies. Processing facilities such as creameries and lumber mills are now absent from the area, forcing 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 processing facilities impose transportation costs that cut deeply into their operations profitability, though mail order is often an option that minimizes transportation costs.

Despite the loss of many support businesses from the region, local farmers still benefit from the wide range of these services throughout Hunterdon County, northern New Jersey, and 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 Initiatives

A. State Development and Redevelopment Plan

The *State Development and Redevelopment Plan* outlines general policy objectives concerning land use and future development in the State.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 Union Township is included within the Rural Planning Area (PA4), the Rural Environmentally Sensitive Planning Area (PA4B) and the Environmentally Sensitive Planning Area (PA5): (**Figure 12**)

- Suburban Planning Areas (PA2): 1,710 acres (~13% of the municipality) located along the I-78 corridor.
- Rural Planning Areas (PA4): Less than one acre within Union Township.
- Rural-Environmentally Sensitive Planning Area (PA4B): 3,850 acres (~32% of the municipality) located in the southeast and southwest corners of Union Township that fall into this category.
- Environmentally Sensitive Planning Areas (PA5): 4,429 acres (~34% of the municipality) mostly in the north and west portions.
- Parks and Natural Areas: 2,093 acres (~16% of the municipality), located in State Park land.

Centers are defined by the 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." There are three identified hamlets in Union Township: Jutland, Pattenburg, and Norton. Hamlets are classified as having population between 25 and 250 and up to 100 dwelling units, a minimum gross housing density of two dwelling units per acre and are generally 10 to 50 acres in size.

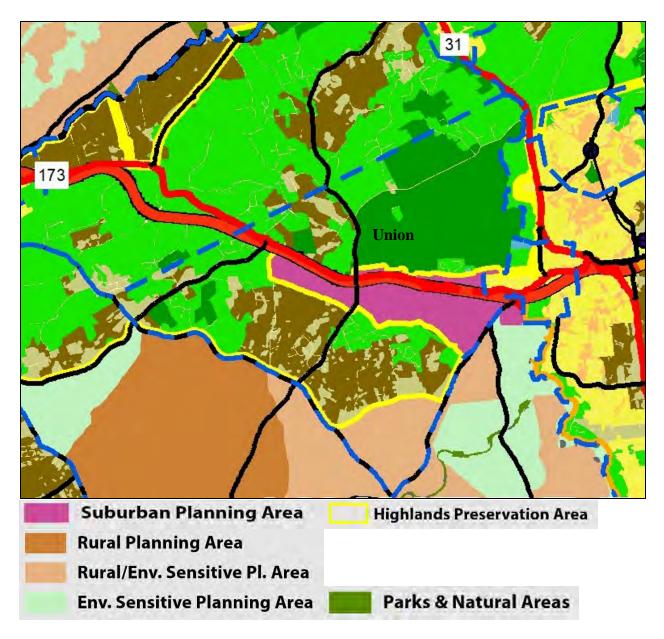


Figure 12. State Development and Redevelopment Plan: Union Township

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 Union Township's border with neighboring Franklin and Clinton Townships. The impact for Union Township is the advantage of containing areas defined as high priority for agriculture.

As defined by the HWPPA, all of Union Township is located within the Highlands Region. The Highlands encompasses 3,139 acres of the Township's total farmland (80%), with nearly 60% of

the total farmland falling into the Preservation Area. The remainder of the Township, in its southwestern portion near Pittstown, falls within the Planning Area.¹⁶ (**Figure 13**)

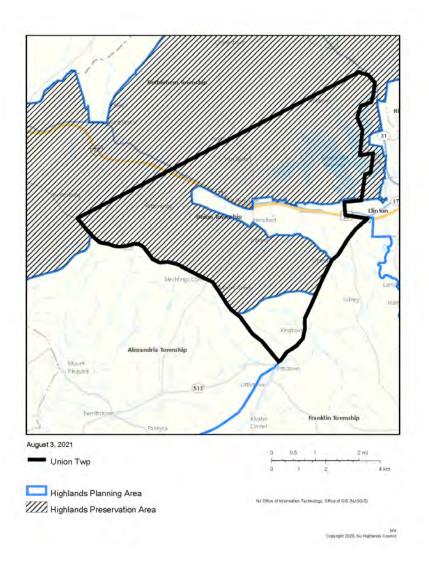


Figure 13. Highlands Preservation and Planning Area in Union Township

The New Jersey Highlands Council – the regional planning body charged with implementing the Highlands Act – has established the preservation of farmland and the industry of farming as one of its principal objectives. To this end, the *Regional Master Plan* identifies an Agricultural Resource Area that will receive much of the future funding and encompasses areas that contain contiguous farmbelts and quality agricultural soils. Virtually all of Union Township falls within the Agricultural Resource Area.¹⁷ (Figure 14)

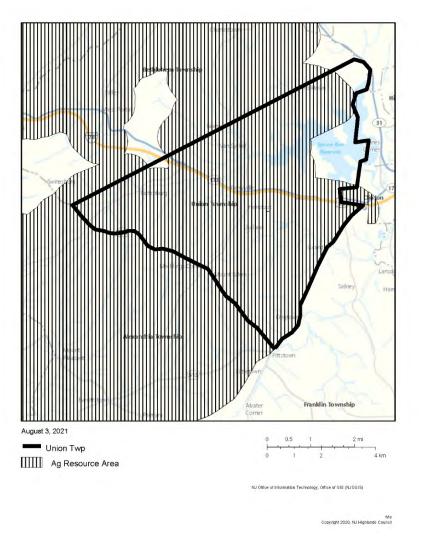


Figure 14. Agricultural Resource Areas in Union Township

The Highlands Council also identifies Agricultural Priority Areas – subsets of the larger Agricultural Resource Area that are particularly well-suited to agricultural production. Criteria used by the Highlands Council to delineate these areas include soil quality, tillable acreage, buffers, development potential, local commitment, contiguity with other farm parcels and size.¹⁸ Union Township contains land in High, Moderate, and Low Priority Agricultural Areas. Lands designated as High Priority Agricultural Areas are scattered throughout Union Township but are mainly concentrated in the southeast and southwest corners. (**Figure 15**)

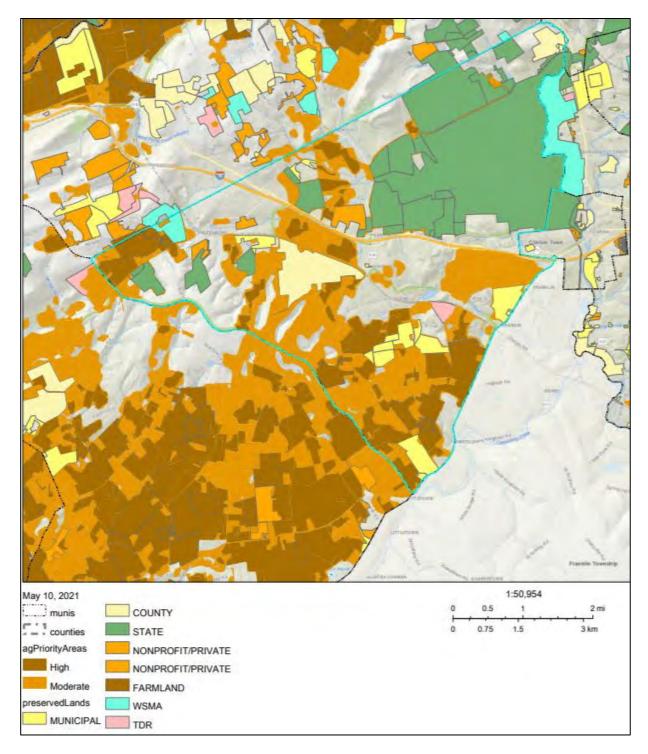


Figure 15. Agricultural Priority Areas in Union Township (Highlands Regional Master Plan)

C. Municipal Master Plan

The Township's Master Plan (1984, 1994, 1999, 2006, 2013¹⁹) includes the following statements:

- *"The Township continues to permanently preserve farmland generally in areas south of the Lehigh Railroad..."*
- "The Township continues to have a policy of low density in order to address the critical groundwater quality and quantity limitations of the soils and hydrology."
- The *Land Use Element* of the *Union Township Master Plan* states that preservation of farmland is an important goal and encourages practices that strongly support Union Township as an agricultural community. It includes the following strategies:²⁰
 - Assisting the agricultural community through positive municipal policies;
 - o Discouraging development pressures in prime agricultural areas; and,
 - Encouraging innovative measure to preserve farmland and rural landscape features.

D. Land Use Trends

The land use patterns of Union Township are a combination of large agricultural fields, residential development, a small commercial sector, and preserved open space and state parks. The town is home to Spruce Run Reservoir, which is surrounded by the Clinton Wildlife Management Area and the Spruce Run Recreation Area. Union Township's history is based in agriculture, its rich soils drawing farmers to settle there during the 17th and 18th centuries. The Union Furnace, from which the Township draws its name, was built in 1742. The historic communities of Pattenburg, Jutland, and Norton developed as the town's population grew.

According to the 2015 NJDEP Land Use/Land Cover data, forested areas make up the largest percent of Union Township's lands (47%), with agricultural uses and wetlands, second and third at 26% and 12% respectively. Union Township has seen a small decrease in agricultural lands since 1995, corresponding to an increase in urban land. (Figure 3 and Figure 16)

E. Public Infrastructure – Sewer and Water

Union Township relies primarily on private wells and septic systems, with Union Gap Village Condominiums as the only publicly supplied development in the Township.²¹ Union Gap Village is supplied directly by the Clinton Water Company. Several of the commercial and residential developments along I-78 utilize the Town of Clinton Wastewater Treatment Plant and public water supply. Based upon a GIS analysis, out of the 11.74 acres of what is proposed to be served by future wastewater service, 11.64 acres of active agricultural land fall within this area. These lands are located along I-78 and are not in conflict with agricultural preservation efforts as they fall outside of the identified farmland project areas.

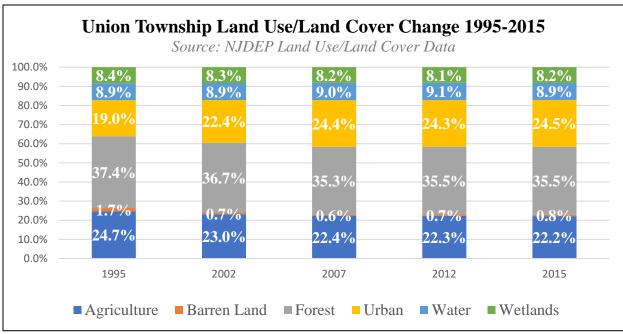


Figure 16. Union Township Land Cover from 1995-2015

F. Municipal Zoning

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

Four percent of the town is zoned as small lots (<1 acre/unit), 15% as medium lots (1-5 acres/unit), and 81% zoned as large lots (>5 acres/unit). (**Table 10** and **Figure 17**) The Zoning Map (**Figure 17**) in Union Township was updated in 2013 in accordance with the Master Plan Reexamination Report. There have been no changes to the land use zoning since 2013.²² All zones, other than the VC, OR, Q, U, and MFO zones, allow agricultural activities as principal permitted uses. The INS zone includes forestry as its only permitted agricultural use. As commercial and residential uses grow, the town will monitor its proximity to, and potential disturbance of, farmlands.

Table 10. Union Township Zoning Districts by Lot Size, Acres, and Share of Land					
Zone	Acres	% of Land	Min. Lot Area		
Agriculture included as a permitted use:					
AP-2: Agricultural Preservation District #2	2867.41	22.22%	8.3 acres		
AP-1: Agricultural Preservation District	475.71	3.69%	4 acres		
CM: Conservation Management District	2010.24	15.58%	8.3 acres		
CR: Country Residential District	1217.61	9.44%	2 acres		
WM: Watershed Management District	889.65	6.90%	9 acres		
P: Parkland District	832.98	6.46%	10 acres		
INS: Institutional District	3102.25	24.04%	25 acres		

Table 10. Union Township Zoning Districts by Lot Size, Acres, and Share of Land						
PC: Planned Commercial District	408.68	3.17%	10 acres			
VR: Village Residential District	285.46	2.21%	30000 sq ft			
RM: Multi-Family Residential District	120.4	0.93%	1.5 acres			
Does not have agriculture as a permitted use:						
OR: Office Research/Highway District	290.23	2.25%	10 acres			
MFO: Multi-Family Inclusionary Overlay District	167.76	1.30%	-			
U: Utilities District	95.79	0.74%	-			
VC: Village Commercial District	64.56	0.50%	2 acres			
Q: Quarry District	52.21	0.40%	25 acres			
PO: Professional Office	21.53	0.17%	2 acres			
Total	12,903					

2. Adopted Redevelopment Areas

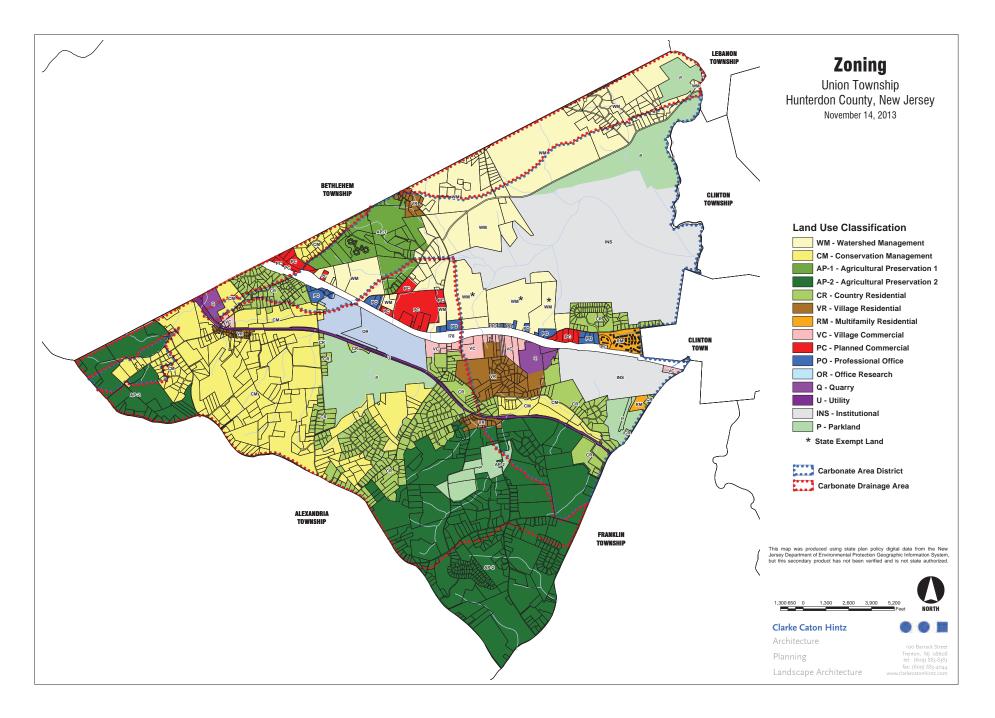
There are no adopted redevelopment areas in Union Township.

3. Innovative Planning Techniques

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

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

This option is often attractive to builders because there tends to be fewer infrastructure costs associated with roadway construction, power lines, and sewage connections in more compact developments. Clustering is attractive to residents and farmers because it retains some agricultural areas and the rural character they create. Additionally, the undeveloped portions of clustered developments are permanently deed restricted, which helps to ensure the permanence of local farming. Clustering has added effectiveness when open space set-asides on adjacent properties are linked in a coordinated fashion. This requires pre-planning on the part of the municipality. Cluster zoning is currently used for residential projects in Union Township, where there is minimal opportunity for new development in the higher density zones that accommodate residential development.



Lot size averaging is another planning tool that maintains the net allowable zoning density on a site but does not enforce uniform lot size requirements or setbacks. This allows for some development lots to be 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. To date, this program has not been utilized by Union Township to preserve farmland.

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

4. Buffer Requirements

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

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

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

water body to manage livestock, and constructing a pump or water intake for livestock, in otherwise regulated areas.

5. Development Pressure

The Township's population has decreased 9.7% since the 2000 Census, while New Jersey has grown by 5.6% and Hunterdon County has increased by 2.3%. The Township's population values include institutional populations from both the Edna Mahan Correctional Facility for Women and the Hunterdon Developmental Center. (**Table 11** and **Figure 18**)

In the period between 2009 and 2019, growth slowed, due to the 2008 economic recession. Both historically and up to 2019, building permits in Union Township were exclusively for single family homes, and represent about 0.3% of total county permits.²³ (**Figure 19**) The residential permits approved in 2019 was only 5% of the amount issued in 2001 (two permits versus 36 in 2001), when permit numbers peaked. Hunterdon County has experienced a similar trend only issuing 84% of permits in 2018 compared to its numbers in 2003.

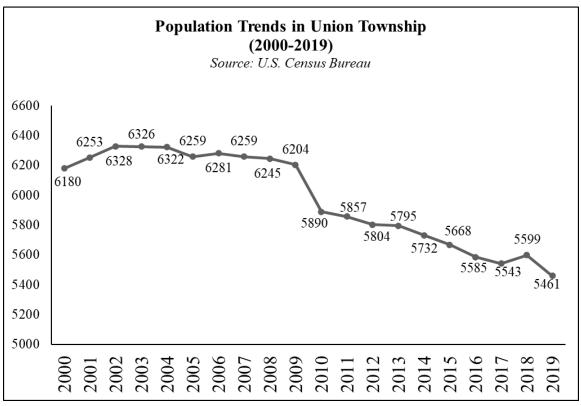


Figure 18. Population Trends in Union Township

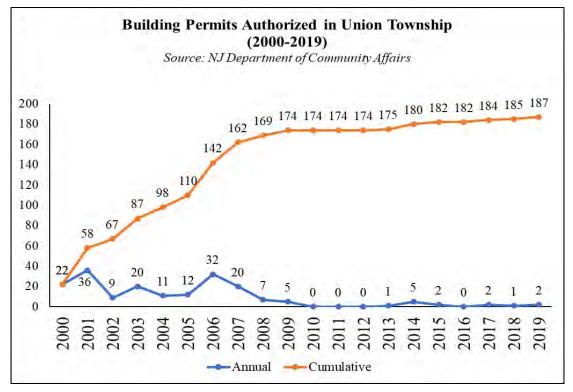


Figure 19. Building Permits Authorized in Union Township

Year	% Change	Population
2000	-	122,553
2001	1.72%	124,657
2002	1.24%	126,205
2003	0.90%	127,339
2004	0.65%	128,170
2005	0.44%	128,734
2006	0.48%	129,354
2007	0.23%	129,655
2008	0.12%	129,806
2009	0.18%	130,034
2010	-2.09%	127,322
2011	0.01%	127,330
2012	-0.58%	126,594
2013	-0.17%	126,376
2014	-0.43%	125,835
2015	-0.30%	125,452
016	-0.54%	124,775

Table 11. Population of Hunterdon County (2000-2019)				
Year	% Change	Population		
2017	-0.05%	124,712		
2018	0.08%	124,807		
2019	-0.35%	124,371		
Source: U.S. Bureau of Census				

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

G. Density Transfer Opportunities

One program Union Township 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. Union 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 Union Township, where there is minimal opportunity for new development in the higher density zones that accommodate residential development.

Union Township may benefit from participating in a TDR program, primarily as a Township with sending areas.



Chapter 4. Farmland Preservation Program

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.

There are **3,725 acres** of farm-assessed land in Union Township, including **3,019 acres** devoted to active agricultural use. (**Inventory Table 1 and Map 1**) Farms in the Township have been preserved using a variety of programs, and the town remains committed to farmland protection.

A. Hunterdon County Agricultural Development Areas (ADAs)

1. Statutory and County Criteria

The Hunterdon County Agriculture Development Board (CADB) developed the Hunterdon County Agricultural Development Area (ADA) in 1983 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.

- 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 2018, a large portion of the County had been designated as the ADA, with the largest portions in the south and west of the County. As part of the 2008 Comprehensive Farmland Preservation Plan²⁴, the CADB identified the ADA using the following criteria:

- The ADA must encompass an area of at least 250 contiguous acres.
- Prime soils and/or soils of statewide importance must constitute much of the land.
- The land should contain only minimal non-farm development.
- Public sewers should not be present in the area.
- The landowner must be notified prior to inclusion in the ADA.

The ADA established by Hunterdon County encompasses the southern portion of Union Township, concentrated in the southeast and southwest corners of the Township. The ADA does not include the northern part of the Township because most of this land is occupied by the Spruce Run Reservoir and preserved open space.

Utilizing the state's regulatory criteria for designating an ADA and existing farmland assessment data, the County identified the ADA that does not exceed 90% of the County's agricultural land base. In 2018, the Hunterdon County Planning and Land Use Department and the CADB amended the ADA. Following this amendment, the ADA in Union Township includes 3,316 acres (460 lots). The following changes were made to the County ADA in Union Township: ^c

- Addition of 28 acres (7 lots) of which 11 acres are farmland for the Linden Associates farm (Block 12, Lot 1.01)
- Removal of 764 acres (118 lots)

2. Agricultural Development Area – Union Township

Overall, there are **3,725 acres** of farm assessed parcels in Union Township. Of this, **1,847 acres** (50%) of farm assessed land in Union Township is included within the Hunterdon County ADA. The westernmost corner and a large part of the southern section of Union Township are included in the Hunterdon County ADA.

Map 1 and **Map 2** show the farm assessed lands in the Township, including all preserved farms. A map of the location of the County ADA in Union Township is included within **Map 4**. Although the County has updated the ADA, the Township has chosen to keep the boundaries of their existing municipal Project Areas. These include the Hampton-Spruce Run and Hoffman Project Areas (which are outside of the 2018 ADA) and the Pattenburg, and Pittstown Project Areas, which fall within the County ADA. These are shown on **Map 5**. Target farms are not eligible for County and State cost share participation if they are not within the County ADA.

^c According to GIS data for the ADA supplied by the SADC.

Table 12. Preserved Farms in Union Township								
Original Owner	Acres	Total Cost	State Cost	County Cost	Municipal Cost	Price/Acre	Program	Year
Bowers, J. & D.	101	\$408,684.00	\$286,079.00	\$61,303.00	\$61,302.60	\$ 4,006.71	Cty EP	1996
Delaney, J. & M.	87*	\$170,385.00	\$130,629.00	\$19,878.00	\$15,902.60	\$ 1,494.61	Cty EP	1997
Strasser, Rolland A. & Sally	23	-	-	-		-	Muni Deed Restricted	1998
Rossi, Patricia S.	28	-	-	-		-	Muni Deed Restricted	1998
Barrett	150	\$650,000.00	\$640,720.00	-		\$4,333.33	SADC Fee	2000
Manzione, Anita	42	\$240,840.00	-	-	\$240,840.00	\$5,734.29	Muni EP	2001
Geiler, D.	63	\$405,556.00	\$324,445.00	\$32,445.00	\$48,666.41	\$6,541.23	Cty EP	2002
Ravenburg	34	\$227,942.00	\$227,942.00	-		\$6,512.63	SADC EP	2002
Aldrich, John F.	44	-	-	-		-	Muni Deed Restricted	2003
Andino, Mindy Suzanne	17	-	-	-		-	Muni Deed Restricted	2003
Andino, Mindy Suzanne	12	-	-	-		-	Muni Deed Restricted	2003
Vayas, Dimitrios and Teri Ann	31	-	-	-		-	Muni Deed Restricted	2003
Kuchman, Edward, Joyce	18	-	-	-		-	Muni Deed Restricted	2005
Greaves, Peter and Christina	37	-	-	-		-	Muni Deed Restricted	2005
Gyuro-Sultzer	82	\$662,872.00	\$662,872.00	-		\$7,986.41	SADC EP	2008
Roerig	63	\$589,276.00	\$353,626.00	\$117,875.00	\$117,875.00	\$9,821.27	Cty EP	2011

Table 12. Preserved Farms in Union Township								
Original Owner	Acres	Total Cost	State Cost	County Cost	Municipal Cost	Price/Acre	Program	Year
Linden Associates	13	\$169,920.00	\$169,920.00	-		\$15,447.27	SADC EP	2014
Stothoff, David C. & Elizabeth	60	\$490,303.00	\$490,303.00	-		\$8,171.72	SADC EP	2015
Valentino, John & Angela	7	-	-	-		-	Muni Deed Restricted	
Natalizio, Anthony F. Jr.	36	-	-	-		-	Muni Deed Restricted	
Four Furlongs Farm LLC	99						Muni Deed Restricted	
Total:	1,047	\$4,015,778.00	\$3,286,536.00	\$231,501.00	\$484,586.61			
Percent Contribution:			82%	6%	12%			

Type of Acquisition: SADC EP – SADC Easement Purchase SADC Fee – State Agriculture Development Committee Fee Simple Cty EP – County Easement Purchase Muni EP – Municipal Easement Purchase Muni Deed Restricted – Municipal Deed Restricted

*The Delaney Farm is located in Union and Bethlehem Townships. Of the total preserved (114 acres), 87 acres are located in Union Township. The costs in **Table 12** are for the entire property (114 acres) and not pro-rated for Union Township.

B. Farmland Preserved to Date by Program

There are **21 farms**, totaling **1,047 acres** preserved in Union Township. (**Table 12**) Over the past few years the average price per acre has been approximately **\$8,600**.

Union Township, through local planning and subsequent deed restriction has preserved agricultural land in Municipal Farmland Conservation Areas and Farmettes ("Muni Deed Restricted" in **Table 12**).

Since the completion of the *2010 Farmland Plan*, **5 farms** have been preserved, protecting **176 acres** of agricultural land. Two were municipally deed restricted as Farmettes, two were preserved through the state's Easement Purchase program, the fifth was preserved through Hunterdon County's Easement Purchase program. The largest of these were the Roerig and Stothoff Farms (60 acres each).

The State of New Jersey, through the SADC, has spent \$3,386,536, or approximately 82% of the total cost share to preserve farms in Union Township. Hunterdon County has expended a total of \$231,501, or 6% of the total cost share. Union Township has contributed \$484,587, or 12% of the total cost share.

Four projects (30% of the total preserved farmland, or 314 acres) in Union Township are protected through the County Easement Purchase program. The SADC Direct Easement Purchase program supported four farms of 189 acres, representing 18% of Union Township's preserved farmland acres, while the SADC Fee Simple program preserved one farm of 150 acres (14%). The municipality purchased one farm of 42 acres (4%) through the Municipal Easement Purchase program, and eleven farms (352 acres, or 34%) are preserved through Union Township's unique Municipal Deed Restricted program.

There are no farms currently pending preservation. The Township Committee remains committed to protecting the agricultural legacy and rural character of the municipality.

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 Union Township, five farms have been preserved through the County Easement Purchase program, protecting 356 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. Hunterdon County completed their 2008 Comprehensive Farmland Preservation Plan to bring it into compliance for the County Planning Incentive Grant program. No farms in Union Township have been preserved through this program.

3. Municipal Planning Incentive Grants

Municipal Planning Incentive Grants (PIGs) are similar to the County PIGs in their goals, requirements, and implementation. Like the County PIGs, Municipal PIGs require a local financial commitment for preserving farmland. To qualify for this program, the municipality must have an agricultural advisory board, a source of funding for farmland preservation, a comprehensive farmland preservation plan, and a Right-to-Farm ordinance. Farms to be preserved through a municipal PIG need to be approved by the CADB if they are looking to cost share with the County. 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.

Union Township has previously enrolled in the Municipal Planning Incentive Grant program, though local farmers have not applied in recent years. No farms in Union Township have been preserved through this program.

4. Municipal Farmland Preservation Program

Union Township has been proactive in protecting its agricultural land base. There are eleven farms totaling 352 acres in Union Township that have been preserved at the municipal level through innovative zoning and subdivision. An additional farm of 42 acres has also been preserved using a Municipal Easement Purchase. (**Table 13**)

Table 13. Municipal Deed Restricted Farms in Union Township				
Farm	Acres	Year		
Strasser, Rolland A. & Sally	23	1998		
Rossi, Patricia S.	28	1998		
Aldrich, John F.	44	2003		
Andino, Mindy Suzanne	17	2003		
Andino, Mindy Suzanne	12	2003		
Kuchman, Edward J. and Joyce	18	2005		
Vayas, Dimitrio and Teri Ann	31	2003		
Greaves, Peter & Christina	37	2008		
Valentino, John & Angela R.	7			
Natalizio, Anthony F. Jr.	36			
Four Furlongs Farm LLC	99			
Total:	352			

5. 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 Union Township, four farms totaling 189 acres have been preserved through SADC Direct Easement Purchase.

6. 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. One farm of 150 acres in Union Township has been preserved through this program.

7. Non-profit Grant Program

Grants from the SADC to non-profit organization fund up to 50% of the fee simple or development easement values on farms. No farms in Union Township have been preserved through this program.

There is one farm owned by America's Grow-A-Row on Route 513 (150 acres) which is preserved through the state's farmland program but is owned by a non-profit organization. This farm in Union Township is its headquarters. America's Grow-A-Row operates out of five locations to donate fresh produce to food banks, soup kitchens, and food pantries in New Jersey, New York City, Philadelphia and eastern Pennsylvania, and, through the Mid-Atlantic Regional Cooperative, the greater northeast region from Maine to Virginia.²⁵

8. Transfer of Development Rights

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

9. Other Programs and Partnerships

The Highlands Development Credit Banks. The HWPPA charged the Highlands Council with developing a TDR program for the Highlands Region. The Highlands Council established the Highlands Development Credit Bank (HDC Bank) in June 2008 in support of the TDR Program. This program serves as one mechanism to address some of the equity concerns of property owners in the Preservation Area that have been affected by implementation of the Highlands Act. The Highlands TDR Program allocates credits called Highlands Development Credits or HDCs to sending zone property owners. HDCs may be sold to developers for use in appropriate voluntary receiving zones. Use of HDCs by developers in established receiving zones will permit developers to increase the density or intensity of proposed projects in those zones. Under the Highlands Act, participation as a receiving zone is voluntary. **Four properties (69 acres)** in Union Township have HDC conservation easements held by the state.²⁶ (**Table 14**)

Table 14. HDC Properties in Union Township						
HDC Certificate Number	Property Owner at time of HDC Purchase	Block	Lot(s)	HDC Easement Recorded	Acres	
2014-0002	Estate of Roberta Brush	15	1	1/15/2015		
2014-0003	Estate of Roberta Brush	15	1	1/15/2015	26.27	
2014-0004	Estate of Roberta Brush	15	1	1/15/2015		
2016-0001 Thomas Wagner 25 21 8/12/2016 43.2						
Total: 69.48						
Source: New Jersey	Highlands Council HDC Regist	try				

A summary of the land in Union Township, its preservation status, and its relationship to the County ADA is included in **Table 15**.

	Table 15. Project Area Summary in Union Township							
(acres)	Total Farm Assessed Properties	Unpreserved Farmland	Preserved Farm Parcels	Preserved Farm Assessed as Farmland	Farmette	Farmette Assessed as Farmland	HDC/ Easements	Active Agriculture
Union Twp.	3,724	2,724	808	660	236	214	126	3,020
ADA	1,845	873	808	660	214	214	99	1,344

C. Term Farmland Preservation Programs

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

In Union 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. Union Township has a municipal Open Space Trust Fund (OSTF), which is used to preserve farmland and open space. The Township also updated its *Open Space and Recreation Plan* in 2020.

E. Farmland Preservation Program Funding Expended to Date by Source

In November 1998, Union Township residents approved the recommendation that the establishment of the municipal OSTF in the amount of \$0.02 per \$100 of assessed valuation. The Township Committee adopted Ordinance No.99-4 establishing the Trust Fund. The Fund generates approximately **\$139,500 per year** and had a balance of **\$123,088** as of December 2020.²⁷

Table 16. V	Table 16. Union Twp. Open Space Trust Fund				
Year	Tax Rate	Amount Generated			
2015	\$0.020	\$136,166			
2016	\$0.020	\$139,612			
2017	\$0.020	\$139,835			
2018	\$0.020	\$139,531			
2019	\$0.020	\$139,740			
2020	\$0.020	\$139.500			

Table 16 details the amount generated per year for the past six years.

The Township has funded its farmland preservation to date partly as a direct payment from its OSTF and partially through bonding. The OSTF has been used to pay off Green Acres Low Interest Loans for two projects in the past.²⁸ Most of the OSTF was used for debt service on the Milligan farm. As a result, Union Township will be paying approximately \$80,000 per year from the Open Space Trust Fund to pay for the Milligan farm until 2026. After 2021, approximately \$50,000 per year will be available for new open space projects until the Milligan farm is completely paid off.²⁹

F. Monitoring of Preserved Farmland

Hunterdon County monitors the property to verify that compliance with the deed restrictions on the preserved property is taking place, and easements preserved through the SADC Direct Easement and Fee Simple programs are monitored by the SADC. Some non-profit organizations also monitor their own easements in Hunterdon County. The Township's AAC will notify the Hunterdon CADB if violations are suspected. A formal monitoring process has not been adopted by the CADB, but the Hunterdon County Soil Conservation District does perform inspections of the preserved farmland property for the Hunterdon CADB. The inspectors can perform the following activities:

- Walking the farm
- Interviewing the landowner
- Taking photographs of all buildings, property lines, and suspicious activities
- Examining the land and facilities for violations to the Deed of Easement³⁰

The CADB currently recommends photography for documenting and sharing conditions with the CADB for enforcement.

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, Union Township is not currently enrolled in or developing a TDR program.



Chapter 5. Future Farmland Preservation

A. Preservation Goals

Union Township is 20.6 square miles (13,184 acres) in size. Of this, **3,725 acres** are under farmland assessment, which includes croplands, woodlands, farm structures and wetlands / waterways that occur on an agricultural property.^{d31} Union Township has preserved **1,047 acres** of farmland. (**Table 12**) Based upon the State's Minimum Eligibility Criteria for productive soils and tillable land, **1,284 acres** are potentially eligible for farmland preservation. 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.

The Hunterdon CADB has a 40-acre minimum for applications seeking a county cost share; however, it also allows for applications that are less than 40 acres if they adjoin a preserved farm. This allows for larger blocks of preserved farms and infill of those areas, even if an application does not meet the 40-acre minimum. This flexibility in acreage is beneficial to Union Township as many of their targeted farms are located adjacent to preserved farms.

Union Township has identified 25 acres as the minimum size of the farm to be considered as a "target" farm for preservation through the municipal program. The farm can be located either within the municipal Project Area and/or the County ADA. Of the 1,284 acres which are potentially eligible for preservation, **629 acres or 11 farms** are targeted for preservation.

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 Union Township:

One-year target:	50 acres, 1 farm
Five-year target:	200 acres, 3 farms
Ten-year target:	500 acres, 7 farms

^d *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

As part of its 2008 Comprehensive Farmland Preservation Plan, the Hunterdon CADB identified seven project areas within the County's ADA for farmland preservation. The southern portion of Union Township falls within the West Project Area for Hunterdon County.

The Union Township AAC has identified four municipal project areas within the municipality focusing on agricultural lands which are productive, tillable, and enlarge existing preserved farm belts in the community. (**Map 5**) These include:

- <u>Pittstown Project Area</u>: Located in the southernmost corner of the Township, this project area contains 666 acres of preserved farmland. The project area extends north from Union Township's border with Franklin and Alexandria to the old Lehigh Valley Railroad tracks in the north and Main Street and Mechlin Corner Road in the west.
- <u>Hoffman Project Area</u>: This project area is centered around Hoffman Park and lies in between Williamson Lane and Mechlin Corner Road. This project area does not contain any preserved farms but does include a large tract of preserved open space.
- <u>Pattenburg Project Area</u>: This project area is bounded by Bethlehem and Alexandria Townships and is almost entirely west of Gravel Hill Road. This project area contains 131 acres of preserved farmland.
- <u>Hampton-Spruce Run Project Area</u>: This project area is located north of I-78 and west of the Clinton Wildlife Management Area. This project area includes one preserved farm (29 acres) and a large tract of preserved open space.

Union Township has identified the Hampton-Spruce Run and Hoffman Project Areas as area of local importance for farmland preservation in the Township. These project areas are not within the County's ADA. The Township pursues eligible farms within this project area only upon interest by the landowners and subsequent approval by the SADC and CADB of expansion of the County ADA to include this project area.

C. Minimum Eligibility Criteria

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

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

- 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
- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

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

The town may proceed without State funding on projects that do not meet these Minimum Eligibility Standards, but as a rule, the County and Union Township will not cost share on applications that do not meet SADC minimum standards. In all cases, the Union Township AAC will work closely with the Hunterdon CADB to review and process applications from landowners for farmland preservation. The Union Township AAC 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 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 Land Use/Land Cover data (including pastureland) is the second screen for soils capable of supporting agriculture with the following provisions:

- It is best to make determination of soils capable of supporting agriculture on a 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 LU/LC data.³² Farm parcels are sorted on size based upon the 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 Union Township 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.

Potentially eligible farms in Union Township that meet the minimum eligibility criteria are shown on **Map C** and listed in **Inventory Table 2.** In Union Township, 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
- \checkmark >40 acres: Hunterdon CADB will consider participation in the preservation project
- ✓ >25 acres: Locally important farm

Overall, there are **1,284 acres** of farm assessed land which meet the minimum eligibility criteria for the state's farmland preservation program. Union Township will target farms that meet these criteria and are over 25 acres. For those properties which fall outside of the County ADA, but meet the eligibility requirements, Union Township will request the County amends its ADA to include these properties when the County updates their Plan.³³ **Table 17** presents a summary of the analysis. In Union Township, there are **4 farm units** and **7 individual parcels** (lots which are not part of a farm unit) or **629 acres** which meet the criteria and are over 25 acres in size.

	Table 17. Target l	Farms – Union Township	
Farm Parcels	which have not been ide	ntified as part of a farm unit	
Block	Lot	Within County ADA	Acres
25	18.04	Yes	36.24
25	37	Yes	40.50
28	12	Yes	59.79
28	25	Yes	35.08
29	17	Yes	70.25
5	16.03	No	26.78
5	4.03	No	68.04
Total Farm Parcels not part of a Farm Unit (7 parcels):			336.69
Farm Units			
5	17, 17.03	No	51.88
16; 1	1; 2	Yes	67.93
14; 15	23; 9	No	89.08
19; 17	6, 6.01; 1.10, 1	No	83.47
		Total Farm Units (4 units):	292.37
	Tota	al Target Farms (12 Farms):	629.06

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:	50 acres, 1 farm
Five-year target:	200 acres, 3 farms
Ten-year target:	500 acres, 7 farms

A list of the potentially eligible farms is included in **Inventory Table 2**.

D. County and Municipal Ranking Criteria

Union Township does not have independent ranking criteria for prioritizing farmland applications. The Hunterdon CADB has used the state ranking criteria as the basis for calculating the rank of each farm. The CADB assesses the following for individual applicant farms:

- the quality of the local soils
- local buffers and boundaries
- soil conservation and farm management practices
- municipal commitment to agriculture
- other financial commitment to agriculture

Union Township's ranking criteria are consistent with the County and State Ranking Criteria. The Township's AAC and Township Committee is committed to preserving as much of the Township's agricultural land base as possible and supports 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

Union Township follows the policies established by Hunterdon County regarding housing opportunities, division of premises, and exception areas. These policies are documented in the *Hunterdon County Comprehensive Farmland Preservation Plan Update*. The Hunterdon CADB follows the SADC's policies regarding these issues. Below is a summary of the state policies for each issue.

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.³⁴ However, the SADC recognizes the need for this type of housing and does have guidelines that a landowner must refer to construct labor housing on preserved farms for work on the preserved farm.

The guidelines are:

- Agricultural labor housing must be permitted with approval of easement holder and the SADC.
- Must verify need for "production" aspects of farm.
- Must be full time employed on the premises (seasonal labor is permitted).
- Structure must be sized appropriately based on labor needs.
- Cannot be used for owner or any lineal descendent of owner.³⁵

These applications are reviewed by the SADC and the CADB. The Township works with the farmland owner to ensure that every preserved farm has a housing opportunity onsite. In Union Township, agricultural labor housing is not a major concern, as most farm workers are day laborers and have their own housing.

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

Residual dwelling site opportunity allocation: Residual Dwelling Site Opportunities (RDSOs) are lingering potential housing prospects located within a deed-restricted farm. By designating an 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."³⁶ 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 Union Township AAC and Hunterdon CADB. RDSO units must be requested at the time of application and approved by the CADB and SADC prior to closing according to SADC Policy P-31.

2. Division of the Premises

The goal of the SADC, supported by the Hunterdon CADB and Union Township AAC, is to preserve large tracts of farmland. The division of the premises by way of subdivision may significantly alter the potential use of the preserved land. Therefore, a division of the premises is not an encouraged practice; however, when division occurs it must be for agricultural purposes and must result in agriculturally viable land parcels. A landowner wishing to divide permanently preserved farmland must submit a written request for written approval by the SADC. If the CADB is the easement holder for the property, 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 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." ³⁷ Typically, there is "no requirement to subdivide a severable exception prior to or after the deed of easement is executed." The CADB recommends a lot subdivision for severable exceptions to prevent future zoning changes from rendering the exception area non-conforming with the associated loss of value.

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."³⁸

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 Hunterdon CADB generally discourages severable exceptions.

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

Hunterdon County voters approved the Open Space, Recreation, Farmland and Historic Preservation Trust Fund in November of 1999. The Open Space Trust Fund is financed by a property tax levy which has remained at 3 cents (\$.03) per \$100 of assessed property value since the fund's creation in 1999. County funding proportions are adopted annually. For 2021, funds were allocated as follows:³⁹

- 30% Farmland Preservation Grant Program
- 30% Open Space Acquisition Grant Program
- 25% County Open Space
- 10% Municipal Grant Program
- 3.5% Historic Preservation Grant Program
- 1.5% County Historic Preservation

In November 1998, Union Township residents approved the recommendation that the municipal Open Space Trust Fund be established in the amount of \$0.02 per \$100 of assessed valuation. The Township Committee adopted Ordinance No.99-4 establishing the Trust Fund. The Fund generates approximately \$139,500 per year and had a balance of \$123,088 as of December 2020.

2. Financial Policies - Cost-Share Requirements

Union Township works with Hunterdon County according to its current cost-share requirements for preserving farms. The Hunterdon 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.

Union 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 Hunterdon 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

From the perspective of land values, there has been a general upward trend in the per-acre easement values paid to preserved farms. (**Table 12**) Since 2008 four farms have been purchased and preserved in the municipality using state and county programs. Excluding the Linden Associates property (which has a per acre value nearly twice the remainder of the farms in the municipality) the average price per acre since 2008 is \$8,600.

The Township has funded its farmland preservation to date partly as a direct payment from its OSTF and partially through bonding. Most of the OSTF was used for debt service on the Milligan farm. After 2021, approximately \$50,000 per year will be available for new open space projects until the Milligan farm is completely paid off in 2026⁴⁰

The Township looks to leverage the municipal funds with county and state cost-share grants on farmland projects. It is anticipated that the municipal cost share will average 15% (at a minimum). The following assumptions can be made:

- The Trust Fund generates \$139,500 per year. As of 2021, \$50,000 will be available to purchase and preserve land in the municipality.
- Average price per acre is \$8,600.
- 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 AAC's goal of preservation seven farms (600 acres) in the next ten years, it is anticipated that the Township will have a total project cost of \$5,160,000 and contribute \$774,000 over the same time, if their percent contribution remains at 15%. This will require nearly the entire amount generated by the municipal trust fund over the ten-year period.

Utilizing the SADC sliding scale for cost-sharing, and the estimated per acre value of the purchase of a farmland easement in Union 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

Union Township has an AAC that meets as needed to discuss farmland projects and issues. The AAC developed the Township's initial Farmland Preservation Plan and administers the program for the municipality.

2. Legal support

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

3. Database Development

The AAC maintains the database of farmland in the municipality and works with Hunterdon County 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 Union Township for the *Comprehensive Farmland Preservation Plan Update*.

H. Factors Limiting Farmland Preservation Implementation

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



Chapter 6. Economic Development

A. Economic Development Plans and Initiatives

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

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

New Jersey offers Union Township farmers several support agencies and programs ranging from technical advice to farm loans. The NJDA *Smart Growth Tool Kit* provides information to support municipal and county government, businesses, non-profit groups, and local citizens in their efforts to achieve the goals and objectives outlined in the NJDA *Agricultural Smart Growth Plan for New Jersey, 2006.*^{41, 42} The Tool Kit embraces the five linked components that have been identified by NJDA as critical for the future of farming: Farmland Preservation, Innovative Conservation Planning, Economic Development, Agriculture Industry Sustainability, and Natural Resource Conservation. Additionally, the NJDA released a *2011 Economic Development Strategies* report to expand and strengthen various sectors of the agriculture industry in New Jersey, including strategies for produce, horticulture, dairy, livestock and poultry, field crops, organic, equine, and agritourism.

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

tougher. New Jersey...must continually work to rediscover its competitive advantages, improving access to nearby markets and strengthening consumer loyalty."⁴³

In 2017, 98 of Hunterdon County's 1,604 farms, or 6% of all farms, had sales of more than \$100,000, accounting for 86% of the total revenue. This leaves 94% of farms accounting for 14% 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, Hunterdon County farms had a net cash farm income of \$1,812,000 in 2017. The average farm market value of \$57,510, was lower than the statewide average of \$111,095.^{*f*} (Table 18)

Table 18. Hunterdon County Agricultural Economic Overview							
	2007	2017	% Change to 2017				
Market Value/Products Sold (\$1,000)	\$69,745	\$92,246	32%				
Average/Farm (\$)	\$42,973	\$57,510	34%				
Production Expenses (\$1,000)	\$75,140	\$105,833	41%				
Average/Farm (\$)	\$46,297	\$65,981	43%				
Net Income (\$1,000)	\$3,951	-\$1,812	-146%				
Average/Farm (\$)	\$2,435	-\$1,129	-146%				
Farms w/Net Gains	514	515	0.2%				
Average/Farms (\$)	39,201	42,107	7%				
% of All of Farms	32%	32%	0%				
Farms w/Net Losses	1,109	1,089	2%				
Average/Farm (\$)	14,606	21,576	48%				
% of All of Farms	68%	68%	0%				
Total Acres	100,027	101,290	1%				
All Farms	1,623	1,604	-1%				
Average Acres/Farm	62	63	2%				
Source: Census of Agriculture							

A look at market sectors in Hunterdon County shows that crop sales climbed slowly from \$12.8 million in 1987 to \$34.7 million in 2002, before jumping to \$60.7 million in 2007 and dropping slightly to \$57.3 million in 2012, then rising to \$78.9 million in 2017. Within the crop sector, nursery/greenhouse was the largest sub-sector in 2017 with 63% of the market share, more than the 55% market share in 2012. The grains sub-sector came in second, with 13%, and vegetables, fruits, hay, and Christmas trees all lagged, with 7%, 6%, 11%, and 0.3%, respectively.

^f Census of Agriculture data is available through the USDA NASS portal, accessed here:

https://www.nass.usda.gov/AgCensus/index.php or through specialized searches on the Quick Stats interface accessed here: https://quickstats.nass.usda.gov/. Citations throughout this document refer to information gathered from these sources for the indicated years.

Over this same 30-year period (1987-2017), livestock sales were \$14.7 million in 1987 before dropping to \$9.1 million in 2007 and rebounding to \$13.4 million in 2017.

Using recommendations outlined in the 2011 Economic Development Strategies report, Hunterdon County municipalities including Union 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. Union Township has 121 Farmland Assessment forms for Tax Year 2018.⁴⁴

Produce

Major efforts by the NJDA are directed at increasing the demand for New Jersey grown produce through branding, agritourism, farm direct sales programs, and farm markets. The NJDA 2011 *Economic Development Strategies* include all these activities. NJDA is committed to promoting agritourism through the *Jersey Fresh* website, the distribution of printed materials, and other forms of advertisement and promotion including collaborating with Rutgers University through 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. Union Township farms with appropriate activities benefit from such promotion.

The NJDA 2011 Economic Development Strategies for produce focused on the Jersey Fresh program and food safety. NJDA's Jersey Fresh labels program is promoted throughout the state. to strengthen the appeal of the Jersey Fresh brand to supermarket chains and other retailers. This has been largely successful, with major retailers such as Wegmans, ShopRite, Trader Joe's, Targets, ACME and Foodtown (among others) carrying and promoting produce from the Jersey Fresh program.⁴⁵

Produce, which includes vegetables and fruits, is a leading agricultural commodity in New Jersey. In 2017, Hunterdon County vegetable growers on 128 farms harvested 950 acres, with resulting sales of \$5,695,000. Fruit, tree nut and berry combined sales totaled \$4,604,000 in 2017, an increase of 84% from 2012. Total produce sales increased after 2007, from \$5,313,000 in 2007 to \$10,299,000 in 2017, a 94% increase.

Union Township had a total of 23 acres which were harvested for fruits and vegetables in 2017, a decrease from 81 acres in 2015. The most prominent crops in 2017 were peaches (7 acres), melons (7 acres), and pumpkins (3 acres). Grapes, which used one acre, is an exciting new crop to the area.⁴⁶ 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, and can benefit from economies of scale.

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

utilize other websites and regional events, to gain visibility. Opportunities for promoting produce (and, in many cases, numerous other agricultural products) include:^g

- NJDA *Jersey Fresh* website listings have recorded 16 farms in a 5 miles radius of Union Township, including 14 on-farm markets and pick-your-own farms.⁴⁷
- *Jersey Fresh* also offers community-supported agriculture (CSA), where residents can pledge to support a farm in advance of the growing season, where they receive shares of the total harvest in return. Union Township has four CSA farms: Comeback Farm, Asbury's Village Farm, Von Thun's Farm, and Central-Valley Farm.⁴⁸
- *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.⁴⁹
- A training website was also developed by the Rutgers Agritourism Team for farmers and can be found at http://agritourism.rutgers.edu/training/.
- *Natural Jersey* is a site promoting local natural health products and sustainable living. They highlight producers, such as farms, farm stands, and farmers markets throughout New Jersey which align with their mission and nearby farms and vineyards.⁵⁰
- *Hunterdon County 4-H and Agricultural Fair* is a four-day festival in nearby featuring many local farms offering products for sale, as well as 4-H youth shows, 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.⁵²
- *579 Trail* is a website that shows farm stands and markets along Route 579 in Hunterdon County.
- Other resources listing direct marketing opportunities for produce in Union Township include VisitNJfarms.org, NJ Farmers Direct Marketing Association (*http://njfarmmarkets.org/*), Northeast Organic Farming Association New Jersey (*http://nofanj.org*), LocalHarvest.org, EdibleJersey.com (pick-your-own listings), and Hunterdon579Trail.com.

Specific recommendations include:

- Utilize consistent, inclusive, and up to date accurate information from the state, county, and regional/association websites.
- Establish or reestablish community farmers markets with help from the CADB and the NJAES-RCE. and the Hunterdon County Planning, Economic Development, and Land Use Department.
- 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).

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

- 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 CSA and other retail options to capture consumer dollars to garner increase from profitability, as well as raise community awareness of local agriculture.

Nursery, Greenhouses, Floriculture, and Sod

The NJDA 2011 Economic Development Strategies focused on ensuring plant health, including inspections and research; increasing consumer awareness of the Jersey Grown brand; and working with government agencies to use New Jersey-produced products wherever possible. This was the highest-ranking category of agricultural commodities in Hunterdon County in both 2012 and 2017, bringing in \$36,800,000 and \$49,309,000, respectively. It accounted for 55% of total agricultural sales in 2012, and 53% in 2017, versus 40% and 45% statewide.⁵⁵ This subsector exhibited a jump in growth from \$5.7 million countywide in 1987 to \$24.8 million in 2002, before steadily rising to \$36.8 million in 2012, and rising to \$49.3 million in 2017. The county experienced a large increase in revenue from nursery/greenhouse products from 1987 to 2012, and a 34% 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.

Union Township had a total of 27 acres dedicated to nursery (including cultivated sod and floriculture) in 2017, down from 37 acres in 2015, and the 78 acres in 2005. There are 38 garden centers and nurseries certified to market the *Jersey Grown* branding in Hunterdon County, as listed on NJDA's *Jersey Grown* website.⁵⁶ However, none of these listings are in Union Township.

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 Hunterdon County for opportunities.
- Promote "drive up" operations where consumers can buy directly from the nursery or greenhouse.

Field and Forage Crops

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

In 2017, Hunterdon County reported total sales of grains, oilseeds, dry beans and dry peas to be \$10.3 million, a 2% increase since 2012 (\$10.1 million), with hay and other crops totaling \$8.7 million, a 79% increase since 2012 (\$4.9 million), together representing approximately 21% of total agricultural sales in Hunterdon County.

Corn In 2017, Hunterdon County ranked third in the state for corn, with a total of 10,192 harvested acres (9,042 for grain and 1,150 for silage) which brought in a total of \$8.9 million in sales. In 2012, Hunterdon County harvested 9,705 acres of corn (8,946 acres of corn for grain, and 759 acres of corn for silage), resulting in sales of \$6.2 million. Though the total monetary amount for corn sales is not released on a municipal level, Union Township farmers harvested a total of 58 acres of corn (all for grain) in 2017, a decrease from 2015 when a total of 117 acres of corn was harvested (110 acres of corn for grain, and 7 acres of corn for silage).

Hay Union Township harvested 930 acres of hay, including alfalfa hay in 2017, an increase from the 838 acres harvested in 2015. Hunterdon County on a whole harvested 29,282 acres of hay (including alfalfa hay, excluding haylage) in 2017, bringing in a total of 66,419 tons, an increase from 28,088 acres harvesting 54,971 tons in 2012.

Soybeans Hunterdon County ranked sixth in the state for soybeans in 2017, with 69 farms harvesting 7,987 acres of soybeans, bringing in a total of \$3.2 million in sales. The 2017 numbers show a strong increase from 5,405 acres harvested in 2012 totaling \$3.0 million in sales, and the 4,383 acres harvested in 2007 bringing in a total of only \$1.3 million. The acres of soybeans harvested and the total yield both increased from 2007-2017 by 82% and 120% respectively, and the increase in total sales grew by an incredible 146%. Union Township farmers harvested a total of 148 acres of soybeans in 2017, a dramatic increase from the 23 acres in 2015.

Field and forage crop strategies to consider include:

- Utilize improved management practices and ways to boost yield per acre.
- Capitalize on any available workshops on cropland and pasture management from the county or state.
- Diversify to row crops that meet newly emerging markets or markets with increasing demand (such as spelt as a dietary substitute for wheat or switchgrass for pelletized energy) and pursue to value-added marketing opportunities (such as sorghum for homemade jams and jellies that can be marketed from roadside stands, at community markets and over the Internet).
- According to NJAES-RCE "there are a number of profitable alternative world crops that can be grown in New Jersey to satisfy the demand for fresh produce by immigrant populations. These crops are suited to diversified small to mid-size farms where high returns per acre is required."⁵⁷ A website called World Crops, ⁵⁸ of which NJAES-RCE is a sponsor, can point farmers to crops that meet the needs of ethnic populations in the area.
- Transition to certified organic or naturally grown bean and grain crops to increase their value.
- Investigate and possibly invest in crop insurance to mitigate market risk.

• Utilize county assistance to investigate alternative crops for local production and new markets (such as hops, specialty small fruits, small-scale animal products).

Dairy

In 2017, Hunterdon County had 15 farms with milk cows, and eight farms that sold milk from cows, bringing in a total of \$1.3 million. As of 2017, Union Township had no head of dairy cattle compared to approximately 1 head in 2005, and approximately 703 head in 1983.

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 Union Township include cattle and calves, sheep and goats, hogs, bees, fur, and poultry and eggs. (Table 19)

Cattle and Calves Sheep and Goats Swine Bees Fur Animals Meat Ducks Egg Chickens Turkeys 2005 102 177 10 32 30 21 55 753 0 2010 55 69 13 35 0 1 97 646 15 2015 52 96 14 60 0 5 85 415 22 2017 64 180 10 101 0 22 180 852 22 % Change (2005- -37% 2% 0% 216% -100% 5% 227% 13% 100%	Table 19. Livestock and Poultry in Union Township									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		and	and	Swine	Bees		Ducks			Turkeys
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2005	102	177	10	32	30	21	55	753	0
2017 64 180 10 101 0 22 180 852 22 % Change -37% 2% 0% 216% -100% 5% 227% 13% 100%	2010	55	69	13	35	0	1	97	646	15
% Change -37% 2% 0% 216% -100% 5% 227% 13% 100%	2015	52	96	14	60	0	5	85	415	22
Change (2005- -37% 2% 0% 216% -100% 5% 227% 13% 100%	2017	64	180	10	101	0	22	180	852	22
2017)	Change (2005-	-37%	2%	0%	216%	-100%	5%	227%	13%	100%

Between the years 2005 and 2017, the cattle stock reduced by 37%, reflecting the end of dairy, and the reduction in beef cattle. Other livestock that shows downward trends in Union Township are fur animals, following national and state cultural shifts. The fastest growing animal industry is meat chickens, with a 227% growth between 2005 and 2017. Other substantially growing animal herds are bees (216% growth), egg chickens (13% growth), and turkeys (100%). These specialized products are easily sold directly to consumers.

While sheep and goat numbers increased only 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 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.^{59h} Goat and sheep herds bring the opportunity for value-added products such as cheeses made from sheep's milk. Goats are easier to manage and less costly to raise than many livestock, with a variety of end products: milk, cheeses, mohair or meat, depending on the type of goat. Growing populations of ethnic groups that favor goat meat spur

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

demand, and goat milk can be used to make artisan goat cheeses, soaps and other value-added products.

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

- Ensure animal health.
- Encourage USDA inspections in area farms to permit more direct sales of cuts of beef to consumers.
- 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 Hunterdon 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 sale of raw milk under certain conditions and establishes a raw milk permit program.
- Assist farmers with farming techniques, including continued and additional cooperation with the NJAES-RCE, NJDA and Natural Resources Conservation Service (NRCS).
- Promote the agritourism potential of livestock and livestock products in concentrated agricultural areas, including exotic animals and poultry, such as "looking" or "petting" zoos, on-farm sales of value-added products such as wool and cheeses, and educational school tours.

Organic Farming

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

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

"Natural" farming is a type of farming that seeks to emulate organic farming, but is not overseen by laws or regulations, as is organic farming. Natural farming is somewhat less costly and time consuming than "organic," and therefore may be a viable option for some farmers and their potential customers. Another alternative, for farmers transitioning to organic production, is the ability to market their products under the NJDA's "Transitional Sustainable" label, eliminating the need to wait 36-months to profit from this niche market. With its strong produce sector, Hunterdon 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.⁶⁰

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

Hunterdon County and Union Township can:

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

Equine

The NJDA 2011 Economic Development Strategies for the equine industry focused on horse health and promotion of the industry through the Jersey Bred brand, hosted events, the equine website, including youth programs. The 2017 Census of Agriculture indicates that New Jersey produced almost \$28 million in equine sales. Sales and farm sizes have varied since the category was created in 2002, where 141 farms in Hunterdon averaged \$19,553 in sales. 2007 saw a higher average sales figure, in part due to a dip in farm numbers to 125 farms, but largely due to a spike in total equine revenues, resulting in a \$24,600 sales average per farm. 2012 saw a high average sale of \$35,119 per farm, but 2017 experienced a surge to an average sale of \$70,545 per farm, a growth of 261%.

The New Jersey Equine Advisory Board does not report any equine facilities in Union Township, but it does report 11 equine facilities in Hunterdon County offering such services as training, driving, sales, breeding, boarding, turnouts, rehabilitation, shows/clinics, and lessons/instructions.⁶² Farms which have breeding services can make use of the *Jersey Bred* logo when marketing their animals.

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

- Ensure the health of equine animals.
- Educate farmers about the benefits of equine rules and seek guidance from Hunterdon County about the rights of equine farmers.
- Promote the industry at shows and festivals, such as the Hunterdon County 4-H and Agricultural Fair.
- Promote the industry through enhanced listings of Hunterdon County and Union Township equine events in state, regional and County website and print listings.
- Promote the agritourism aspect of the equine industry through farm tours, horse and pony rides, and boarding and riding lessons.

Wine

In recent years, the wine industry in the Garden State has gotten several boosts. In January 2012, Governor Christie signed into law in a bill permitting direct shipping by New Jersey wineries,⁶³ and on July 2, 2014, the Governor signed into law another bill that establishes a pilot program through March 1, 2018, to allow wineries on preserved farms to conduct special occasion events under certain conditions as defined by the appropriate CADB.⁶⁴ In February of 2020, A2773 was introduced which would "allow preserved farms to hold 14 special events per year"⁶⁵

According to the NJDA, the state has 50 licensed wineries versus 25 in 2007. Two Hunterdon County wineries are listed on the *Jersey Fresh* site and three on visitnj.org (the Official Tourism Website of New Jersey), though none in Union Township. In 2017, Union Township had one acre dedicated to growing grapes, an increase from zero acres in 2005. East Amwell had the highest number of acres for grapes in Hunterdon, at 38 acres in 2017. Hunterdon County had a total of 92 acres growing grapes in 2017, an increase of 26% from the 73 acres in 2005.

Union Township may consider:

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

Aquaculture

The NJDA 2011 Economic Development Strategies lists New Jersey as one of the country's largest and most culturally diverse consumer seafood markets. Hunterdon County aquaculture operations rank fourth in the state and include sport or game fish, other food fish, and other aquaculture products. The sale and revenue data are not available in 2017. To support a growing aquaculture and seafood economy, Hunterdon County and Union Township may consider:

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

Agritourism

Agritourism is one potential link in the long-term sustainability of the agriculture industry in Union Township and Hunterdon County. A successful example of agritourism is the four-day Hunterdon County 4-H and Agricultural Fair held annually. The Fair, which highlights the past and present agriculture heritage of Hunterdon County, has been operating as the Hunterdon County Fair since 2000 after the dissolution of the Flemington Fair in 1999, and is extremely popular, drawing thousands of visitors each year.

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

Participation of agritourism operations in the Tourist Oriented Destination Signage (TODS) program through the New Jersey Department of Transportation (NJDOT), gains a discounted agritourism rate and increases the maximum distance (set at three miles) an operation can be from a state road to be eligible for the signage promotion. The maximum distance for an agritourism operation is 10 miles, and the annual cost per sign is \$400 versus \$800 for other businesses. To be eligible, businesses must be open at least six hours a day, five days a week during its growing or operating season.⁶⁶

Visitnjfarms.org is sponsored by Rutgers, the New Jersey Farmers Direct Marketing Association, and the New Jersey Farm Bureau. Its focus is on agritourism activities provided on commercial farms in New Jersey, and farmers must self-register. It includes a "find farms" option, event listings and a chart showing what is in season, and a map of various agritourism destinations. In 2011, the Rutgers New Jersey Agricultural Experiment State reported that "…census data shows our state ranks first nationally in the percentage of farm revenue earned from agritourism" and that 1 in 5 New Jersey farms offer agritourism activities.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 Hunterdon County had \$9.2 million in direct sales, representing 10% of total agricultural sales for the County. This is an increase of 811% over 1997, even while the total number of farms increased by only 25%.⁶⁹ (**Table 20**)

Table 20. Direct Sales in Hunterdon County: 1997-2012									
1997 2002 2007 2012 2017 % Change '97-'17									
Farms	228	313	338	311	286	25%			
Sales (\$1,000) \$1,008 \$1,794 \$3,315 \$3,842 \$9,187 811%									
Source: Census of Agriculture									

For every dollar in agritourism sales generated on a New Jersey farm, \$0.58 of additional sales are generated in other businesses (e.g., restaurants, construction companies, insurance providers, etc.). This report also noted the importance of clarifying right to farm protections.⁷⁰ Among the series of recommendations included in this report are:

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

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

- Establishing additional permanent, three season community markets, which may assist local farmers in selling farm and value-added products, strengthening the business of agriculture within the County.
- Establishing event-specific cooperative farm stands at community events in the County, which would promote and benefit the Union Township farming industry and offer additional opportunities for product sales.

- Creating a regional harvest festival in the fall, a horticultural festival in the spring, or a farm itinerary tour of participating farms that could be listed on the Hunterdon County Tourism page.
- Establishing a working farm devoted to public education, similar to The Farm Institute⁷¹ 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.⁷²
- 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 Hunterdon County include:

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

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

General Strategies

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

- Farmland Assessment Updating documentation, supporting farmers in filling out applications, and supporting tax assessors in determining farmer eligibility.
- Crop Insurance Implementing an education initiative in partnership with the USDA Risk Management Agency and Rutgers Cooperative Extension to increase knowledge and skills among farmers and improve their financial health.
- Technical Assistance Offering assistance concerning the New Jersey Uniform Construction Code as it relates to farm buildings and the Real Property Appraisal Manual, Farm Building Section.
- Recycling and Food Increasing participation in agricultural plastics recycling programs and assisting food processing industry in finding markets for soon-to expire and expired foods.
- Motor Vehicle Requirements Providing information about regulations, license plates for farm vehicles, and other vehicle related provisions through a user-friendly website.
- Financing Providing information on federal, state, and commercial lending institutions financing for agricultural loans.

B. Agricultural Industry Retention, Expansion, and Recruitment Strategies

1. Institutional

Minimum wage impact on farm businesses – The State minimum wage was raised to \$10.30 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.⁷³ 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, 2020.⁷⁴ Pennsylvania, however, still has an exception for farm workers, particularly seasonal workers, giving it a competitive advantage in operations that are hired-labor intensive. Generally, the production of vegetables and fruits (produce) requires the highest amount of hired farm labor, mainly at harvest time, to pick and process the vegetables and fruits.

Farmer Support – A variety of resources exist at the state level, published on the NJDA and the SADC websites.⁷⁵ These include:

- Agriculture credit and finance.
- Business development for agriculture, food manufacturing and related industries.
- Farm building construction.
- Motor vehicle regulations for agriculture.
- Real property appraisal manual, farm building section.

- Recycling for agriculture.
- Risk management and crop insurance.
- Sales and use tax on farmers purchases.
- Trespass, vandalism, and liability on farms.

One program, *Farm Link*, serves as a resource and referral center for new farmers, farmers seeking access to land and farming opportunities, landowners seeking farmers, and farmers working on estate and farm transfer plans.⁷⁶ 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."⁷⁷

Resources specific to estate planning and retirement planning are available through the *Farm Link* Program's Farm Transfer, Succession, and Retirement Planning section.⁷⁸ Resources include workshops, Farm Succession Guidebook,⁷⁹ plans and planning information, workbooks and worksheets, and informational documents. Farm Link can also be used to facilitate succession when there is no next generation to take over the farm. Information is also available for the incoming generation of farmers through this Farm Link Program.

Another opportunity is the New Jersey Agricultural Society's New Jersey Agricultural Leadership Development Program (NJALDP), administrated by Burlington County College.⁸⁰ 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 Hunterdon County is the School Gardens initiative, funded by Team Nutrition Training mini-grants provided by the U.S. Department of Agriculture, the NJDA, and Grow Healthy – a program of the NJAES-RCE. This is a hands-on way to educate children about the importance of farming. Expanding this program to schools in Hunterdon County would be a great way to increase the awareness of both students and their parents about the benefits and value of the agricultural industry in the County.

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

- Help children eat more fruits and vegetables.
- Offer nutrition education, physical activity, gardening & agriculture programs to students, families and staff.
- Connect with local farms.
- Serve more local foods.
- Offer farm-to-school & nutrition trainings for foodservice staff.⁸¹

The Grow Healthy Initiative in Hunterdon County is run by Alexandra Grenci, Family & Community Health Sciences Educator II (phone: 908-788-1342; email: grenci@njaes.rutgers.edu).

Marketing, Advertising, Public Relations Support

Marketing and advertising are critical to profitability. A coordinated effort to "sell" agriculture as a way of life that is enduring and significant to the County and its economy, will ensure area residents are aware of the enduring benefits of farmland, and solidify public economic support for the agriculture industry. Signage on preserved farms and other outreach mechanisms, such as adult and youth farmer education, the Hunterdon County Farmers Fair, farmers markets, farm stands and pick-your-own operations, and Community Supported Agriculture will work to continue enhancing farming throughout the County.

The CADB, the NJAES-RCE, and the state are great resources for farmers to learn about the availability of various free promotional channels such as the *Jersey Fresh, Jersey Bred, Jersey Grown* and *Jersey Equine* websites, Visit NJ Farms website, and the Hunterdon 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*.⁸² Another website for Community Involved in Sustaining Agriculture (CISA),⁸³ a non-profit organization in Western Massachusetts, offers a Basic Marketing Practices manual.

Signage

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

For farmers who qualify for the *Jersey* 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.⁸⁴

Farmers Markets

In 2021, seven community farmers markets were operating in Hunterdon County.⁸⁵ It is suggested that the County consider establishing a three-season market:

• Hunterdon Land Trust Farmers Market, 111 Mine Street, Flemington (Historic Case-Dvoor Farmstead), Sundays 9 am – 1 pm, May 16 – November 21.

- Clinton Community Farmers Market, 65 Halstead St. Clinton, Sundays 9 am 1 pm.
- Stangl Factory Farmers Market, 50 Stangl Road, Flemington, Saturdays 9 am 3 pm.
- High Bridge Farmers Market, 20 Main Street, High Bridge, Wednesdays 4:30 pm 7 pm, June October.
- Holland Township Farmers Market, 971 Milford Warren Glen Road, Milford, Saturdays 9 am 1 pm.
- Juniper Hill Farmers Market, 73 Beaver Avenue, Annandale, Thursdays 4 pm 7 pm
- Stockton Market, 19 Bridge Street, Stockton, Wednesday Sunday, 8 am 3 pm.

Community Supported Agriculture (CSA)

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

- A community of individuals who pledge support to a farm operation so that the farmland becomes the community's farm. In such an arrangement, the growers and consumers provide mutual support, and share the risks and benefits of agriculture.
- Members or "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.⁸⁶

Agricultural Education and Market Research Coordination

Union Township may want to consider coordinating with Hunterdon County and the Rutgers Cooperative Extension of Hunterdon County to identify and integrate market research on agriculture and economic trends. The NJAES website offers a wealth of additional information relating to animal agriculture, farm management and safety, pest management, plant agriculture and other elements of interest to those involved in commercial agriculture. The Hunterdon 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. Union Township can support agricultural education and market research coordination include:

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

2. Businesses

Input Suppliers and Services

Without an adequate number of suppliers within reasonable driving distances of farms, the business of farming can become so expensive and time consuming to not be profitable. As agriculture in Hunterdon County becomes more "permanent" through increased preservation

efforts, former suppliers who have left the area may return if they sense that a profitable supply business can be operated in the area. The county agricultural community can pursue options, which may include tax incentives, to entice other suppliers to return to the area. The Township welcomes agriculture-related businesses within the confines of its existing zoning.

Equipment and supply stores in Hunterdon County include:

- Tractor Supply in Ringoes.
- Hunterdon Mill Supply in Lebanon.
- Everitt Equipment LLC in Ringoes.
- Dave's Equipment Sales in Ringoes.
- PowerCo in Union Township.

Seed and chemical supplies in the area include:

- Sergeantsville Grain and Feed in Stockton.
- Delaware Valley Feed and Farm Supply in Frenchtown.
- Nutrien Ag Solutions on Perryville Road in Union Township.

Product Distributors and Processors

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

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

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

3. Anticipated Agricultural Trends

Market Location

Union Township is located near the large population centers of New York City, and Philadelphia, with a direct route to New York City via Interstate-78. Union Township farmers can consider taking advantage of these large population centers, the growing ethnic diversity and dietary trends, and the growing agritourism sentiments, and adapt their farming as practicable for

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

potential increased profitability and viability. Maximizing the use of nearby highways can increase the number and type of consumer markets to be reached by Union Township farmers.

Product Demand

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

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.⁸⁷

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

4. Agricultural Support Needs

Agricultural Facilities and Infrastructure

An increase in permanent agricultural suppliers would work to guarantee the stability of the support services for farmers, and in turn, the agricultural industry. If those outside the farming

community see ways to make profits, then they will feel much more confident in setting up operations, whether they be cattle and equine veterinarians, feed and fertilizer suppliers, or machinery sales and repairs.

Flexible Land Use Regulations

State Level – Examples where regulatory flexibility is important are the NJDEP's "Freshwater Wetlands Protection Act Rules" (N.J.A.C. 7:13-et. seq.), which grants exemptions for agricultural activities, and the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13). The latter was adopted in 2007 and amended last in June 2019, with amendments for agriculture effective June 2016, including numerous agricultural permits.⁸⁸

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. Union Township farmers benefit from having a right to farm ordinance enacted in their town. Other areas where municipal sensitivity to the land use needs of agriculture can be helpful include consideration of the following issues when creating municipal regulations:

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

Agriculture Representation in Economic Development

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

5. Agricultural Support Implementation

The NJAES-RCE of Hunterdon County has always been a large source of support to local farmers, helping them adapt to new technologies, introducing new farming practices to improve

efficiency, and keeping farmers up to date with market trends. With the rise of online shopping, more people are choosing to order products, including agricultural products, from the comfort of their own homes. The NJAES-RCE can work with local farmers in expanding their presence to the web in addition to traditional advertising such as signage and roadside stands.

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

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

Federal agriculture support can be found through the USDA's Grants and Loans webpage⁸⁹ includes grant and loan programs ranging from farm loans, housing assistance, rural development loan and grant assistance, beginning farmers and ranchers, livestock insurance, specialty crop block grant program, the farmers market promotion program, and the organic cost share program.

Sustainable Agriculture Research and Education (SARE) is a USDA competitive grants program that helps build the future economic viability of agriculture in the United States.⁹⁰ 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.

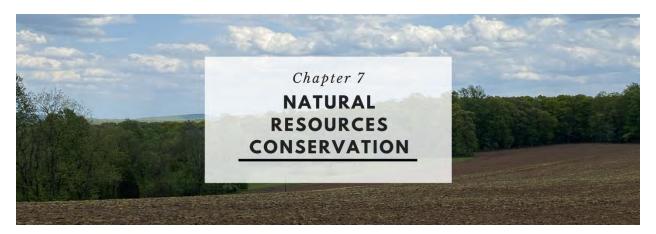
State agriculture support includes the 2020 Specialty Crop Block Grants, New Jersey Wine Industry Project Grants, Soil and Water Conservation Grants, New Jersey Risk Management and Crop Insurance Education, New Jersey Junior Breeder Loan Fund, Organic Cost Share, and Farm to School Mini Grants. More information can be found on the NJDA Grants webpage,⁹¹ accessed through the following link: *https://www.nj.gov/agriculture/grants/*.

Farmland Preservation Programs support include State Acquisition, County Planning Incentive Grants, Municipal Planning Incentive Grants, and Grants to Non-Profits. More information can be found through the SADC webpage,⁹² accessed through the following link: *https://www.nj.gov/agriculture/sadc/farmpreserve/programs/*.

New Jersey Farm Bureau (NJFB) is a private, non-profit membership organization that represents the agricultural producers and enterprises in New Jersey at all levels of government. The NJFB advocates for farmland preservation, environmental regulations, wildlife and water issues, and legislation relating to agricultural labor and the Right to Farm. Through grants, initiatives, and partnerships, the NJFB educates the public about the agricultural industry and participates in farmer training and education programs.⁹³

Future Farmer of America (FFA) and the Rutgers Cooperative Extension **4-H** Youth Development Program aid in fostering the future of agriculture within the County. These programs aid youth in developing important life skills that are important for career in agriculture. FFA is a national educational organization that helps prepare youth for careers and leadership in agriculture by aiding students in the development of agricultural skills.⁹⁴

The RCE 4-H Youth Development Program is run for youth in Kindergarten through a year after completing high school. The 4-H program is led by volunteers that teach about different areas of interest varying from animals, plants, agriculture, and leadership. Within Hunterdon County, all 4-H club members are active in county events such as the Hunterdon County Farmers Fair. ⁹⁵



Chapter 7: Natural Resource Conservation

A. Natural Resource Protection Coordination

1. Natural Resources Conservation Service

An important partner in support of natural resource conservation for the agricultural community is the USDA NRCS. The NRCS provides technical assistance regarding the natural resource issues that are specific to a farmer's needs, with opportunities for cost-shares and financial incentives.⁹⁶ NRCS also will reach out directly to landowners if they know of a farmer who needs technical assistance or could use the guidance of the NRCS staff.

The local NRCS office serving Hunterdon County is located at 687 Pittstown Road, Suite 2 in Frenchtown.⁹⁷ The staff can be reached at 908-782-4614, or by visiting the website at www.nj.nrcs.usda.gov. The local NRCS District Conservationist is Jill Ott, who can be reached at jill.ott@usda.gov.

Within one year of selling their development easement, owners of preserved farms are required to develop a Conservation Plan. This plan is also required to apply for natural resource conservation programs such as the Wildlife Habitat Incentive Program (WHIP), the Environmental Quality Incentive Program (EQIP), and the State Cost Share Program (Eight-Year Program). The local NRCS office administers these conservation program grants, which offer financial incentives to support conservation projects and will prepare these plans with the farmer at no cost.

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

- Providing a mechanism and staff to ensure that Conservation Plans are prepared and implemented will guarantee that the objectives of the program are put in place, and active stewardship practices are underway.
- While NRCS services are voluntary, farmers can benefit from conservation and there are opportunities to help farmers become eligible for NRCS and USDA funding.⁹⁸

An additional resource available from the NRCS is the "Field Office Technical Guide."⁹⁹ It contains technical information about the development and implementation of soil, water, air, flora, and fauna resource conservation practices, and is used to develop conservation and resource management plans. Conservation practices discussed in the Guide that are pertinent for Union Township include, but are not limited to:

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

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

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

Two new conservation practices which deal with wastewater treatment and wildlife habitat planning and another 18 conservation standards are currently being tested to establish and document natural resources benefits. This update addresses changes in technology and added criterion for soil health, water conservation, drought tolerance, and resiliency.¹⁰⁰

2. Hunterdon County 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.¹⁰¹

The SSCC coordinates and supports the work of the state's 14 local soil conservation districts (SCDs), one of which is the Hunterdon County SCD. The SSCC and its local districts are part of the New Jersey Conservation Partnership, which also includes the USDA NRCS and NJAES-RCE. The Hunterdon County 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 Hunterdon SCD works with the NRCS in providing survey assistance, engineering designs and plans. It also provides administrative support to Conservation Assistance Program (CAP) employees 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.

Union Township 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 Frenchtown for processing. The administration of the RFA includes preparation of a Conservation Plan and program contract. The Hunterdon County SCD is involved in review of Conservation Plans and program contracts and must give final approval to both.

The Hunterdon County SCD office serving Union Township:¹⁰²

Address: 687 Pittstown Road in Frenchtown Phone: 908-788-9466 District Manager: Michael DePalma, *Michael.hcscd@gmail.com* Staff: Kevin Milz, Agricultural Specialist; Dawn Schwenderman, Bookkeeper/Secretary; Jake Hendricks, Site Inspector

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

The NJAES-RCE of Hunterdon County provides both field and technical research that is focused on best management practices (BMPs) for farmers to ensure the long-term viability of both the agricultural economy and the natural resources upon which it is based. The NJAES-RCE of Hunterdon County is:¹⁰³

Address: 314 State Route 12, Building #2 in Flemington County Agent: Megan Muehlbauer, muehlbauer@njaes.rutgers.ecu Program Assistant: Sherrie Peterson, speterson@co.hunterdon.nj.us

New Jersey Department of Environmental Protection

The NJDEP Division of Parks and Forestry oversees the Private Lands Management Program for stewardship and management of private forest lands.¹⁰⁴ This includes the private woodlands currently under Farmland Assessment, which totaled 228,000 acres statewide in 2020.¹⁰⁵

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.¹⁰⁶ The NJDEP's Division of Parks and Forestry, Bureau of Forest Management (BFM), reviews farmland assessment applications that include WMPs prepared for farmers by private consultants.¹⁰⁷ Once a WMP is in place, a Woodland Data Form (WD-1) must be submitted with the farmland assessment application yearly to certify compliance with the WMP. The NJDEP/ BFM, also inspects each site once every three years to verify compliance.

Non-appurtenant woodlands are woodland acreage on a farm over and above total farmed acreage (tilled and pasture). If 50 acres of a farm are tilled or pastured, and there are 125 acres of woodlands on the farm, 75 acres of woodlands would be non-appurtenant (125 woodland acres minus 50 farmed acres). In Union Township for 2019, there were 1,103 acres of non-appurtenant (or unattached) woodland acres in farmland assessment.¹⁰⁸ The total of non-appurtenant woodland acres in 2019 was up from 2010 when there were 840 acres. The 2019 non-appurtenant acres are down from 2000 when there were 978 acres, but up from 1990 when there were 650 acres in farmland assessment in Union Township.¹⁰⁹

Appurtenant woodlands are woodland acreage on a farm, less than or equal to, farmed acreage. So, in the preceding example, 50 of the 125 woodland acres would be appurtenant. Appurtenant woodland acres do not require a WMP to qualify for farmland assessment. In Union Township for 2019, there were 436 acres of appurtenant (or attached) woodland acres in farmland assessment, down from 2000 when there were 685 acres. In 1990, there were 1,011 appurtenant acres in farmland assessment in Union Township.

The NJDEP's Nongame and Endangered Species Program, since 2005, administered the Landowner Incentive Program (LIP). This program worked to improve habitat management and protection for threatened and endangered species on private lands, some of which were agricultural lands. Since 2014, there is no expectation of congressional reapproval of LIP. While LIP is no longer available, other incentive programs through NJDEP are listed on the NJDEP, Division of Fish and Wildlife website.¹¹⁰

USDA, Forest Service's Forest Stewardship Program

The United States Forest Service (USFS) sponsors the Forest Stewardship Program (FSP), administered locally by the NJDEP's State Forestry Service BFM. In the summer of 2017, the Forest Stewardship Program transitioned to a new program that eliminated income requirements to qualify for the program and enhanced monitoring and management of enrolled acres.¹¹¹ As of April 2021, 454 properties covering 11,662 acres in Hunterdon County are enrolled in FSP.¹¹² In 2020, Union Township contained 409 acres of farmland on 10 different properties enrolled in the Forest Stewardship Program.¹¹³ This program, when fully funded, offers landowners cost-share initiatives of up to 75% of the cost of a new or revised FSP to allow the landowners to fully follow the guidelines in their plan.¹¹⁴

For more about the NJDEP FSP, Union Township farmers can reach out to the New Jersey Forest Service Northern Region office at 204 Main Street (Route 206 N), Andover, NJ 07821, call 973-786-5035, or visit

https://www.state.nj.us/dep/parksandforests/forest/stw_inc_prog.html.¹¹⁵

North Jersey Resource Conservation and Development Council

The North Jersey Resource Conservation and Development (NJRC&D) works with communities to deliver agricultural sustainability, water resource protection, and community development. Among other programs, the NJRC&D offers a River-Friendly Farm Certification, which is a voluntary certification program designed to provide technical assistance and recognize farms that protect our shared natural resources through responsible management. Since its inception in the

early-2000s, the certification program concentrated its efforts in the Raritan River Basin. The program has expanded with the certification of 33 farms in the vicinity of Hunterdon County.¹¹⁶

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

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

Private non-profit groups and private citizens

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

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

B. Natural Resource Protection Programs

1. SADC Soil and Water Conservation Grants

The types of soil and water conservation projects funded by SADC include soil erosion and sediment control systems (terrace systems), control of farmland pollution (stream protection; sediment retention, erosion or water control systems; animal waste control facilities; and 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.¹¹⁷

These grants fund soil and water conservation projects approved by the Hunterdon County SCD, with the program administered by both the SCD and the local NRCS office. Once the District deems the conservation project necessary and feasible, applications are forwarded to the New Jersey State SCC, which recommends projects to the SADC for funding approvals. A permanent source of funding needs to be put in place to ensure that farmers can continue to participate in these beneficial programs.

2. SADC Deer Fencing Grant Program

Farmers can apply to the SADC at any time for cost-sharing grants for the installation of hightensile 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 \$20,000.¹¹⁸

SADC: David Clapp or David Kimmel Phone, Email: 609-984-2504, sadc@ag.nj.gov

3. Federal Conservation Programs

Farm Bill Programs

The Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) was landmark legislation, with much of its focus on conservation funding and environmental issues. Since 2002, the legislature has drafted and instituted new Farm Bill programs in 2008, 2014, and 2018. Voluntary programs relevant to New Jersey, and Hunterdon 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).¹¹⁹ 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).¹²⁰ The 2018 Farm Bill will be active until 2023. As in the past, these programs are administered by the local NRCS office and Hunterdon County 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.¹²¹ 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."¹²² Since a significant acreage of field crops are grown in Union Township, and are also covered commodities under these programs, such a revenue support system may well have a positive effect since it would help specialty crops and niche markets receive their fair share of payment support.

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

- Increasing mandatory funding for conservation programs by about 2% from 2019-2023.
- Increasing Conservation Reserve Program (CRP) acreage cap from 24 million acres to 27 million acres by 2023.
- Continuing the Conservation Stewardship Program (CSP), but at a reduced funding level, and replacing an acreage cap with a funding cap.
- Increasing funding for EQIP, the Agricultural Conservation Easement Program (ACEP), and direct funding for the Regional Conservation Partnership Program (RCPP).¹²³

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."¹²⁴

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.¹²⁵

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.¹²⁶ Opportunities include:

- Funding opportunities for beginning farmers.
- Financial assistance to help agricultural producers and forest owners address specific natural resource concerns.
- Financial assistance to install high tunnels (similar to hoop houses) to protect high-value crops.
- Soil health initiative to provide technical and financial assistance for soil conservation practices.¹²⁷

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

Across all NRCS programs in Hunterdon County, there were 1,706 contracted acres, with 35 contracts in 2020. These contracts totaled \$917,230.10 (amount available, not paid out). While some farms in Union Township may be assisted through EQIP, the number of farms enrolled is not tracked on a municipal level.¹²⁸

Conservation Innovation Grants (CIG)

Funded by EQIP, the aim of the CIG is to stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production. Funds are awarded as competitive 50-50 matching grants to non-governmental organizations, tribes, or individuals for projects with a one- to three-year duration. Each year, the NRCS announces a new round of competitive grants; North Jersey RC&D was the most recent recipient of such a

grant was in 2019 worth \$74,995 to assess the use of short season variety corn and soybeans to facilitate adoption of multi-species cover crop.¹²⁹

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.¹³⁰

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. Union Township is situated in focal areas for one out of three target species in New Jersey, the American Black Duck. The township's placement within this focal area provides an advantage to Union Township's WLFW applicants who will receive high consideration.¹³¹

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).¹³²

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.¹³³ Union Township may want to consider ALE funding to pursue properties that do not meet the County cost-share requirements.

Regional Conservation Partnership Program (RCPP)

RCPP was introduced in the 2014 Farm Bill, and significant changes were made in the 2018 Farm Bill. This program encourages partnerships to implement solutions to conservation challenges. Partnerships can be formed by agricultural producer associations, farmer

cooperatives, municipal entities, and non-government organizations. Significant changes that were made in 2018 to RCPP are:

- RCPP is now a standalone program with its own funding of \$300 million annually. Moving forward, landowners and ag producers will enter RCPP contracts and RCPP easements.
- Enhanced Alternative Funding Arrangement provision NRCS may award up to 15 AFA projects, which are more grant-like and rely more on partner capacity to implement conservation activities.
- Three funding pools reduced to two the National pool was eliminated. Partners must apply to either the Critical Conservation Area (CCA) or State/Multistate funding pool.
- Emphasis on project outcomes all RCPP projects must now develop and report on their environmental outcomes.¹³⁴

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) (NJ does not fall within one of these eight areas), state/multi-state. To apply for state funding, the project must address at least one of the national or state priorities of soil erosion, soil quality, water quality, and wildlife habitat. In April 2020, the NRCS announced investment in 48 projects totaling \$206 million; none of these projects reside in New Jersey. The most recent deadline for project proposals was May 29, 2020. 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.¹³⁵

C. Water Resources

1. Supply Characteristics

The Spruce Run area (reservoir and open space) occupies nearly a quarter of Union Township. It is a Category 1 body of water, meaning it is protected by state antidegradation policies to ensure good water quality¹³⁶ While the water from Spruce Run supplies many other municipalities in New Jersey, Union Township residents rely on groundwater to fulfill their water needs, including water required for agriculture.¹³⁷

2. Agricultural Demand & Supply Limitations

Agricultural lands according to the *New Jersey Farmland Assessment* include cropland harvested, cropland pastured, woodland, equine, and permanent pasture. The most recent assessment (2019) identifies 3,468 acres of agricultural land in the municipality. About 38% of

this total is harvested cropland, land that requires the most amount of water for production. This comprises about 2.4% of Hunterdon County's total harvested acres.

Hay and soybeans comprise over 89% of the field crops grown in the Township. However, because of the region's climate, none of the town's field crops are irrigated.¹³⁸

Both population increases and agricultural irrigation can affect Union Township's water supply. In 2015, no acres of farmland in Union Township were irrigated, and in 2017, only 3 acres were irrigated. This suggests that irrigation pressures on water sources are very low. In terms of population pressures, data indicates that the rate of building permits is increasing in Union Township. Increased pressure from development and the concomitant demands on water supplies may be felt by Union Township farmers. Increased development exacerbates water supply concerns, not only by increased water usage from occupants of the units, but also by creating more impervious surface, causing more stormwater runoff (which often washes pollutants into waterways) and less opportunity for aquifer recharge. Lack of sufficient water recharge areas can compromise soil conditions and means less water stays in the area and flows away to other areas, such as the river, the bay, and the ocean. Disturbing the balance of water distribution can adversely impact the region and all other areas that may be disturbed by the fluctuations in natural water distribution.

3. Water Conservation and Allocation Strategies

An adequate water supply is integral to successful agriculture operations in Union Township. Droughts in recent years have highlighted the precarious nature of the agriculture (and general) water supply, and the need for water conservation systems and regimens. Historically, from 2008 to 2018, dry conditions occurred with greater frequencies than in years prior. ¹³⁹

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

Seasonal differences in water demand combined with such occurrences as drought, changes in land cover and other natural or manmade circumstances can influence water supply from which an ecosystem cannot easily recover. Union Township falls in the scope of the *Highlands Regional Master Plan* and has access to water resource analyses completed by the Highlands Council. Union Township can also benefit from being aware of the analyses done for neighboring communities within the Highlands, such as Bethlehem and Alexandria, and the use of monitoring stream base flows as a measure of water sustainability, using the severity and duration of low flow to understand impacts of water use on ecosystem and water supply, as well as the need to protect ground water recharge areas, which are susceptible to variations in soil, land cover and precipitation.¹⁴⁰

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

The Office of the New Jersey Climatologist at Rutgers University, School of Environmental and Biological Sciences, operates the NJ Weather and Climate Network of weather monitoring stations. Farmers can use the information from stations near them to assist with irrigation scheduling, as well as pest management and other conservation issues, temperature, precipitation, wind speed and gusts. Other stations measure barometric pressure and New Brunswick measures soil temperatures as well. Farmers can set favorite locales and view charts and tabular data.¹⁴¹

D. Waste Management Planning

Livestock farmers in Union Township may opt to participate in SCD/NRCS conservation programs that cost share the creation of animal waste facilities on their farms. By building temporary holding tanks, usually concrete, the farmer prevents the waste from mixing with runoff and polluting streams and other water bodies and providing a ready source of manure or fertilizer for farm fields. When convenient, farmers can remove the waste from the temporary storage facilities and apply it to the fields, following BMPs.¹⁴²

Animal Waste

Increasing trends in Union Township for equine and pasture from 2010 to 2019 reflect a corresponding need for making animal waste management a continuous focal point of conservation practice in the Township.¹⁴³

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.¹⁴⁴

Many farmers have "Nutrient Management Plans" to manage the manure generated on their farms. Nutrient Management Plans contain information on crop requirements, nutrient availability, proper timing and amounts of application, and environmental considerations. Such plans require farmers to have a good understanding of crop requirements, soil types and sensitive areas on/near the farm (such as wetlands and shallow aquifers); nutrient management incorporates this knowledge with site-specific sets on management practices.¹⁴⁵

Union Township farmers typically use all livestock waste on their agricultural fields.¹⁴⁶ For commercial livestock waste disposal services, Ag Choice LLC in Andover, Sussex County, picks up, accepts, and composts food and livestock waste on a commercial scale. It is then available as bulk pickup, sold to landscapers and garden centers, or bagged and sold at retail outlets. This

type of operation not only helps control the problem of livestock waste on farms but is also a good revenue source for the owners.

Animal Feeding Operations

Animal feeding operations (AFOs) have the potential to cause water pollution since mismanagement of the animal waste can lead to soil and groundwater contamination via introduction of organic matter, nitrogen, phosphorus, and bacterial pathogens into nearby surface waters.¹⁴⁷ The Criteria and Standards for Animal Waste Management (N.J.A.C. 2:91), which went into effect on March 16, 2009, set forth requirements for the development and implementation of self-certified Animal Waste Management Plans (AWMPs), high-density AWMPs and Comprehensive Nutrient Management Plans (CNMPs) for farms that generate, handle, or receive animal waste.

In general, self-certified waste management plans will be coordinated through the NJAES-RCE, which continues to aid farmers who have not yet completed AWMPs or implemented environmental BMPs on their farms. Farmers can apply for funding through Environmental Quality 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).¹⁴⁸

Recycling

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

- Hunterdon County Solid Waste and Recycling Services Route 12 County Complex, Building #1, 2nd Floor, Flemington, 908-788-1351 – This facility coordinates waste and recycling services for Hunterdon municipalities and serves as the countywide resource.¹⁴⁹
- Hunterdon County Transfer Station and Recycling Depot 11 Petticoat Lane, Annandale, 908-236-9088 – This facility accepts bulky residential waste, such as refrigerators, air conditioners, and dehumidifiers. The rates are \$22 per car and \$32 per truck, with an additional \$10 charge for vehicles with trailers.¹⁵⁰

Though there is no local or county tire recycling program available at this time, local automotive service stations may have a free tire recycling program or offer to recycle tires for a fee.

For other farm-oriented recyclables, the NJDA website lists resources for agricultural recycling. Programs listed include options for nursery and greenhouse film, pesticide containers, nursery pots, plug trays, flats, mulch film and irrigation tape. Some of these services are free, and others come at a cost to the farmers.¹⁵¹

E. Energy Conservation Planning

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

In January 2010 P.L. 2009, c.213 was enacted to allow for the construction, installation, and operation of biomass, solar, or wind energy generation facilities, structures, and equipment on commercial farms, including preserved farms, with certain caveats regarding interference with agricultural productivity, valuation for farmland assessment, and amount of farm acreage that can be devoted to such facilities.¹⁵²

In 2019, Governor Phil Murphy signed the Updated Global Warming Response Act seeking to reduce greenhouse emissions 80% by 2050. Green energy policy is also echoed in Governor Murphy's Energy Master Plan, in which, the state seeks to transition to 100% clean energy by 2050.¹⁵³ Union Township farmers can take advantage of this initiative by applying for the financial incentives to implement energy efficient improvements to their farms and operations. One example of these financial incentives is the Rural Energy for America Program (REAP) which funds grant and loan guarantees to agricultural producers for assistance in purchasing renewable energy systems. Renewable energy systems include generation from the following ways: biomass, geothermal, hydropower, hydrogen, wind, and solar.¹⁵⁴

The NRCS has the authority to use EQIP to implement Agricultural Energy Management Plans (AgEMP) to address concerns of energy conservation. As a part of the EQIP On-Farm Energy Initiative, these plans are designed to evaluate energy use and efficiency within farming operations. These energy audits can qualify a farmer for financial assistance to implement recommendations of the process if the audit meets the proper time and standard requirements. This plan is implemented to assist the landowner's goals of achieving cheaper and more efficient energy consumption.¹⁵⁵

The EQIP natural resource conservation program pays for some energy production programs, such as replacement of older, dirty polluting working diesel engines, with newer, more efficient, cleaner burning diesel engines that will meet EPA Tier requirements for the program year. Farmers should check the NRCS website regarding this program since requirements may change from year to year.¹⁵⁶ The New Jersey Board of Public Utilities (NJBPU) offers rebates for solar electric, wind, and sustainable biomass systems if funding is available.

Solar Energy

The SADC does allow solar generating facilities on preserved farms, and rules for these installations are contained in Subchapter 24 of Chapter 76.¹⁵⁷ Solar generating facilities are also allowed on unpreserved farms and the SADC has provided AMP (agricultural management practices) for these facilities.¹⁵⁸ A summary of the policies aligned by both the subchapter and the AMP is given below:

• Solar panels (solar energy general facilities) are allowed on commercial farms (preserved and unpreserved).

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

EQIP provides cost-share funding for solar livestock watering facility as part of a grazing system. Special rates are available to qualified farmers. In 2018, two contracts were planned and applied, but in 2019 no contracts were developed. Union Township farmers interested in using this alternate energy source can contact the local NRCS office in Frenchtown for more information.¹⁵⁹

Wind Energy

According to the NJDA, the northwest part of New Jersey, which includes Hunterdon County, has ample and consistent enough wind power to make turbine energy feasible. New Jersey and Union Township farmers might take advantage of a distributed or "small" wind system, which uses turbines of 100 kilowatts or smaller to directly power a home, farm, or small business. New Jersey's Clean Energy Program provides a model small wind ordinance for municipal adoption. Although this is a first step toward encouraging wind energy, New Jersey's Clean Energy Program incentives for wind energy installations have been on hold since 2011.¹⁶⁰

In Union Township, a wind turbine would be deemed an accessory or conditional use under current zoning regulations and thus would require a height variance. A zoning permit and site plan are required for an application to be deemed complete.¹⁶¹ These requirements, along with other detailed conditions, indicate Union Township's willingness to consider alternative energy source.

Biopower

Starting in 2017, biopower projects are incentivized through the Combined Heat and Power Program (CHP). Program participants are eligible to receive financial incentives for CHP installations to further enhance energy efficiency in their buildings through on-site power generation and using distributed generation to provide reliability solutions for New Jersey while supporting the state's Energy Master Plan. Union Township farmers can find the program eligibility requirements and the program's financial incentives in the CHP-FC Program Guide.¹⁶²

Ethanol and Pelletized Switchgrass

Corn, the third most dominant field crop in Union Township, could position the Township's farmers to financially capitalize on the spreading movement towards ethanol-blended fuels. In

addition, interest has been shown in utilizing switchgrass to make energy producing pellets. This could add another market for Union Township farmers.¹⁶³

Biodiesel

Biodiesel, made from the oils of soybeans, is an alternative to petroleum diesel. The Environmental Protection Agency reported 2.1 billion gallons of biofuel were consumed in 2015. Countywide, soybean production has increased 51% since 2012, from 235,825 bushels to 356,376 bushels in 2015. Union Township, based on 2017 totals, falls in the lower half of soybean producers in Hunterdon County. While no bio-diesel producers are available nearby, several retailers operate within the region, including:

- Dixon Energy 99 Cobb Street, Rockaway, 973-334-1000
- Taylor Oil Co., Inc 77 Second Street, Somerville, 908-725-7737
- Quarles 1046 North Godfrey Street, Allentown, PA, 877-444-3835¹⁶⁴

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.¹⁶⁵

Renewable Energy Grant Programs

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

Renewable Energy Incentive Program (REIP): This program previously offered funding assistance for solar, wind, and sustainable biomass installations. Currently, this program is on hold for wind systems. Since the Spring of 2020, those who seek to register solar projects do so through the Transition Incentive Program (TI).¹⁶⁶

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.¹⁶⁷

New Jersey Smart Start Buildings: Operated by the NJBPU, this program is a statewide energy efficiency program available to qualified commercial, industrial, institutional, governmental, or agricultural customers that seek to change their electric or gas equipment.¹⁶⁸

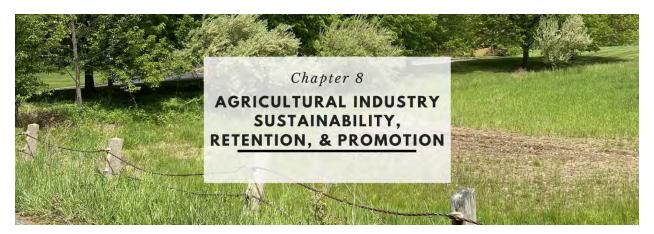
USDA Rural Energy for America Program (REAP): Reauthorized under the Agricultural Improvement Act of 2018 (2018 Farm Bill), the REAP program provides guaranteed loan financing to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements.¹⁶⁹ For agricultural producers, a guaranteed loan and grant program can provide financial assistance with the installation of renewable energy systems.

Advanced Biofuel Payment Program: This program is to increase the production of advance biofuels. Quarterly payments are distributed to participants for actual quantity of eligible advance biofuel production. An advanced biofuel is a fuel that is derived from renewable biomass, other than corn kernel starch. Biofuels that may be specific to Union Township farmers are those derived from waste material such as crop and animal wastes.¹⁷⁰

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.¹⁷¹

F. Outreach and Incentives

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



Chapter 8: Agricultural Industry Sustainability, Retention And Promotion

A. Existing Agricultural Industry Support

1. Right to Farm

In 1983 the State Legislature enacted the Right to Farm Act (RFA) and amended it in 1998, ensuring that farmers can continue accepted agricultural operations. Another critical piece of legislation in support of agriculture was the 1983 Agriculture Retention and Development Act. This Act created the SADC, and authorized counties to create CADBs.¹⁷²

The SADC works to maximize protection for commercial farmers under the RFA by developing AMPs (agricultural management practices), tracking right-to-farm cases, offering a conflict resolution process, and reviewing rules proposed by other state agencies for the impact they may have on agriculture. To qualify for right-to-farm protection a farm must meet the definition of a "commercial farm" in the RFA; be operated in conformance with federal and state law; and comply with AMPs recommended by the SADC, or site-specific AMPs developed by the Hunterdon County CADB at the request of a commercial farmer.¹⁷³

As of 2021, the SADC had 12 AMPs in place, the latest, an AMP for On-Farm Direct Marketing Facilities, Activities and Events, adopted April 7, 2014. The SADC lists 12 site-specific AMPs for Hunterdon County, all of which the Hunterdon CADB decided on or resolved.¹⁷⁴

All right to farm complaints or issues that are brought before the Hunterdon 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 Hunterdon 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 Hunterdon CADB may be appealed to the SADC, and

final SADC determinations may be appealed to the New Jersey Superior Court, Appellate Division.¹⁷⁵

There is some inconsistency in the guidelines for mediation between the Union Township Right to Farm (RTF) Ordinance and the State's procedures for conflict resolution. The municipal RTF Ordinance calls for mediation by the Township's Agricultural Protection Committee, after which the issue is referred to the state. The SADC calls for formal complaints to be issued with the CADB before being handled by the State.

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

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

RTF ordinances are a necessary item for municipalities that wish to enter the Farmland Preservation Program. Union Township established its RTF Ordinance in 1987, only a few years after the state enacted Right to Farm in 1983. (**Appendix C**)

The Ordinance states that its purpose is to "conserve, protect and encourage the development and improvement of agricultural lands within the Township for the production of food and other agricultural products and the preservation of open space; to protect and encourage the viability of the agricultural industry by establishing a positive business climate" and to "help reduce the loss of agricultural land… by protecting commercial farms."¹⁷⁶

According to the ordinance, "agricultural uses and common farmsite activities" include:

- "Production, harvesting, storage, grading, packaging and processing of farm products.
- Wholesale and retail marketing of crops, plants, animals and other related commodities.
- The use and application of techniques and methods of soil preparation and management.
- Fertilization.
- Weed, disease and pest control.
- Disposal of farm waste.
- Irrigation, drainage, and water management.
- Grazing"

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

• Housing and employment of farm laborers

- Erection of essential agricultural buildings
- Construction of fences
- Conduction of agriculture-related education and recreation activities
- Farm-market and pick-your-own signage
- Clearing of woodlands using open burning and other techniques; installation and maintenance of vegetative and terrain alterations for water and soil conservation and surface water control in wetland areas
- Operation and transportation of large, slow moving farm equipment over municipal roads
- Installation of wells, ponds, and other water resources
- Engage in renewable energy (biomass, solar, wind) ¹⁷⁷

It does not mention the Agricultural Mediation Program, which is a process where an impartial mediator can help disputing parties solve issues. This program was established by the SADC as a voluntary process to examine mutual problems, identify and consider options, and come to a solution.

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

2. Farmland Assessment

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

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

• The property owner must represent that the land will continue in agricultural or horticultural use to the end of the tax year.¹⁷⁸

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

There are 13,166 acres of land in the municipality, of which **3,468 acres** are devoted to agricultural and horticultural usage. This is slightly more than one quarter of the land in the Township itself. 1,913 acres are used as either cropland or pasture, and the remaining 1,555 acres are woodland/wetland areas or equine boarding rehabilitation or training operations.¹⁷⁹ According to New Jersey Farmland Assessment data from 2009 to 2019, general trends indicate:

- From 2009 to 2019 total farmland assessed acreage increased 7.7% from 3,220 acres to 3,468 acres.
- Harvested cropland increased about 1% from 2009 (1,315 acres) to 2019 (1,325 acres).
- Pastured cropland decreased about 37% from 2009 (130 acres) to 2019 (82 acres).
- Permanent pasture increased about 45% from 2009 (350 acres) to 2019 (506 acres).
- Total acreage in active agricultural use (cropland harvested, cropland pastured, and permanent pasture) increased about 7% in 2009 (1,795 acres) to 2019 (1,913 acres).
- Woodland/wetland acreage increased about 11% from 2009 (1,385 acres) to 2019 (1,540 acres).
- Equine acreage decreased about 63% from 2009 (40 acres) to 2019 (15 acres).

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

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

1. Permit Streamlining

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

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

• *Positive and supportive public policy*: This includes legal protection (right to farm), priority in decisions on taxation (farmland assessment), regulation exemptions, and financial incentives (planning incentive grants).

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

2. Agriculture Vehicle Movement

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

3. Agricultural Labor Housing/Training

An adequate labor supply is integral to harvesting vegetables, fruits, and berries. Measured in farmed acreage, Union Township has a relatively small industry for these products compared with field crops such as hay, corn, and soybean. As of 2017, only 39 acres in Union Township were devoted to fruits, berries, and vegetables. Most of Union Township's agricultural output comes from its field crops (1,217 acres). Since the overall acreage of labor-intensive farming is small in Union Township, farm labor housing, is for the most part not an issue of high concern.

Hunterdon County has a high cost of living, which affects both farmers and laborers. Attracting farm labor to live and work in Hunterdon is difficult, as is attracting the next generation of farmers.¹⁸⁰ In addition, the minimum wage for agricultural employers as of January 1, 2021 is \$10.44/hr. and is expected to increase to \$15.00/hr. by 2027.¹⁸¹ The cost of labor in New Jersey is a significant issue for some farming sectors such as produce. Though a farmer may wish to raise their prices to cover increased production costs, this is often not feasible, due to competition from neighboring states with lower labor and other production costs.

In 2018, the New Jersey State Board of Agriculture published an official position on the New Jersey minimum wage increases. The Board's position lauds the awareness of the State Senate and Assembly to the vulnerability of farmers but continues to encourage further legislative considerations and protections. Most of the Board's concerns stem from the ripple effects of wage increases that may occur without the necessary protections for farmers.¹⁸²

Agricultural Labor Housing

Labor intensive acreage in Union Township is small, and, as a result, the demand for agricultural labor housing is low. The 2017 Hunterdon County Farmland Assessment states that there are no seasonal labor housing structures in the Township.

Farmer Education

During the growing season, NJAES-RCE of Hunterdon County provides one-on-one, on-site consultations with farmers to assist with control of insect infestations and plant diseases for fruits, vegetables, greenhouse nurseries and ornamentals, and for field crops. Similar farm animal consultation is provided on a year-round basis. They also provide soil test recommendations, water allocation certification application assistance, and continuing education classes required to maintain licensing for commercial pesticide application. During the growing season, NJAES of Hunterdon County conducts "twilight meetings" for fruits and vegetables at local farms to discuss a wide range of issues relative to these agricultural products.¹⁸³

In the winter months, regional and local classes are conducted by NJAES of Warren, Hunterdon, and Morris Counties on a diverse set of agricultural topics. The Snyder Farm in Hunterdon County serves as a research facility where Cooperative Extensions conduct studies and host demonstrations with regional farmers. Classes are also conducted with the North Jersey Vegetable and Fruit Growers Association.

NJAES of Hunterdon County also provides practical assistance to farmers. Examples are assistance in obtaining pesticide application licenses (necessary to buy and apply pesticides), and to obtain water certification and registration permits from the NJDEP, for groundwater and/or surface water allocations. The programs and assistance offer an individual farm operator the opportunity to gain the latest information on numerous and pertinent agriculture topics, which are important to agricultural sustainability.

Raritan Valley Community College - While no agriculture-related degrees are currently offered, Raritan Valley Community College (RVCC) does offer several introductory such as Biology, Environmental Studies, General Chemistry, Geology, and Plants, Humans, & the Environment.¹⁸⁴ The Hunterdon CADB can inquire among Hunterdon County farmers and coordinate with CADBs from neighboring counties on the interest level for agricultural college and continuing education courses. If enough interest is found, the CADB can contact RVCC to discuss agriculture education opportunities that may be developed.

The Northeast Organic Farming Association (NOFA) offers educational programs for farmers, including a Beginning Farmer Program. Other educational programming includes organic gardening, permaculture design certification, business courses, technical assistance, and farm-to-table workshops.¹⁸⁵ The NOFA-NJ office is located at 386 Rock Road East, Lambertville, and can be reached at (908) 371-1111.

NJDA through its Division of Agriculture and Natural Resources, Natural Resource Conservation Program, the NJDA offers technical, financial, and regulatory assistance, and provides educational outreach to landowners throughout the state.¹⁸⁶ 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.¹⁸⁷

New Jersey Farm Bureau hosts educational meetings and provides information for farmers about legislative issues, farmland preservation, and labor resources on its website.¹⁸⁸

Youth Farmer Education Programs

According to the Census of Agriculture, the farmer population in Hunterdon County is getting older, with an increase of 1.6 years of an average age of 59.2 in 2017 versus 57.6 in 2007.¹⁸⁹ The nationwide average age of operators in 2017 was 58.6, a little over half year difference compared to Hunterdon County.¹⁹⁰ In 2017, there were 111 farmers (4.2%) out of 2,642 farmers in Hunterdon County who were under the age of 35.¹⁹¹

Nationwide, the average age of operators on new farms is lower than for all farms (48 versus 60.6). Additionally, the *Census*' new "Young Producers" section shows that there are 124 farms with about 170 young producers in Hunterdon County. This is significantly higher than the average for New Jersey counties, made even more impressive due to Hunterdon's smaller size and population.¹⁹² Educational programs in agriculture offered as an optional and viable opportunity for the youth of Union Township will assist those who are interested in pursuing such careers.

At the post-secondary level, neither Centenary University in Hackettstown nor RVCC offer agriculture education degrees, but Centenary University does offer programs in Equine Sciences and Equine Studies.¹⁹³ 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 Union Township farms.¹⁹⁴

Programs that address the broader nature of agriculture education can be found at Hunterdon County Polytech. Perhaps most applicable to Hunterdon farmers is the Animal Science program which focuses on "general husbandry and safety, preventative care, proper handling and restraint, and understanding individual industries."¹⁹⁵

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

- 15 miles Lafayette College, 730 High St., Easton, PA,
- 25 miles Northampton Community College, 3835 Green Pond Road, Bethlehem, PA.
- 31 miles Rutgers University, 57 US Highway 1, New Brunswick.
- 38 miles Mercer County Community College, 1200 Old Trenton Road, West Windsor Township.
- 38 miles County College of Morris, 214 Center Grove Road, Randolph.

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.¹⁹⁶

Future Farmers of America (FFA) was founded in 1928, has 8,739 chapters and 760,113 members aged 12-21 in all 50 states.¹⁹⁷ In 2020, there were 36 chapters in New Jersey with more than 2,400 members.¹⁹⁸ South Hunterdon Regional High School provides youth agriculture education where students can participate in local, state, and national FFA activities. The school also holds articulation agreements with Delaware Valley University, SUNY College of Agriculture and Technology, and Rutgers State University so that students can earn college level credits through high school agricultural courses.¹⁹⁹ There are three FFA chapters in Hunterdon: the Hunterdon County ESEA FFA, the Hunterdon Polytech Central Campus FFA, and the South Hunterdon Middle FFA. Erin Noble is the state FFA representative and can be contacted at erin.noble@ag.nj.gov for further information.

Programs that address the broader nature of agriculture education can be found at Hunterdon County Polytech. Perhaps most applicable to Hunterdon farmers is the Animal Science program which focuses on "general husbandry and safety, preventative care, proper handling and restraint, and understanding individual industries."²⁰⁰

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 Hunterdon County NJAES-RCE.²⁰¹

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

- New farmers looking for opportunities to gain experience
- New farmers looking for land to get started
- Established farmers looking for land to expand
- Farm owners looking to lease, sell, or make land available for farming
- Retiring farmers who would like to ensure their land stays in agricultural production but have no family members who want to continue to farm
- Farmers looking to hire farm managers, fill apprenticeship positions, or mentor a new farmer
- Non-profits, municipalities, and counties looking for farmers for farmland they own or manage
- Farmers and landowners working on farm transfer plans

Farmers interested in land or partnership/job opportunities, as well as those wanting to advertise available land and opportunities, can sign up and create and manage their own listings through the interactive NJ Land Link website. As of March 2021, there are 29 farmland listings in Hunterdon County.²⁰²

4. Wildlife Management Strategies

Crop damage from wildlife leads to economic loss for the farmer and/or landowner and is a serious problem throughout Hunterdon County. At present, hunting is about the only method

available to farmers. Although many farmers are avid hunters and do apply for depredation permits that allow them to hunt out of season, even hunting is becoming a less viable solution. The development that takes away territory from these animals also limits the farmers ability to hunt. As farms become smaller and more developments are built adjacent to farms, areas can no longer be hunted, even by the farmers who own the land, because they would be hunting too close to a neighborhood dwelling. Special hunting options include:

- License exemptions for farm families
- Special farmer black bear permit
- Farmer Depredation Permit
- Deer Management Assistance Program²⁰³

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.²⁰⁴

Hunterdon 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 2018.²⁰⁵

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.²⁰⁶ The Division's Gypsy Moth Suppression Program is a voluntary cooperative program involving local governments, county and state agencies, as well as the USDA Forest Service. Aerial spray treatments of *Bacillus thuringiensis* are utilized when gypsy moth cycles are at a peak and natural controls are not sufficient to control defoliation.

The gypsy moth was reported as a "moderate problem" in Union Township in 2009 but disappeared from the aerial defoliation surveys until 2013 when Union Township was identified to have a "heavy problem." Union Township was not included in the 2014 survey but was reported as a "heavy problem" in 2015. This same pattern of one year with no reporting and one year of "heavy problem" continued in 2016 and 2017. In 2018, Union Township reported a "moderate problem" and then disappeared again in 2019 and 2020, showing that the invasion has improved through the years, though it is still present in Hunterdon County.²⁰⁷

5. Agricultural Education and Promotion

The USDA has an array of loans and grants, known as the **Rural Development Program**, to assist residents in rural areas of the country to support essential public facilities and services such as water and sewer systems, housing, health clinics, emergency service facilities, and electric and

telephone service. The Agricultural Act of 2018 (Farm Bill) updates the Rural Development Program in several ways, including:

- Amends the definition of rural to exclude from population thresholds individuals incarcerated on a long-term or regional basis and excludes the first 1,500 individuals residing in on-base military housing.
- Increases annual appropriated funding for broadband deployment from \$25 million in FY2019 to \$350 million in FY2023.
- The 2018 Farm Bill redirects program funds of existing rural development programs to target a range of rural health issues.
- The 2018 Farm Bill also includes other provisions to reauthorize and/or amend loan and grant programs that help with rural water and wastewater infrastructure, business development and retention, and community and regional development.²⁰⁸

Grants and loans are available in three key areas: Business-Cooperative, Housing and Community Facilities (including farm labor housing), and Utilities (including Broadband). ²⁰⁹ To qualify for some of the program's loans and grants, municipalities must have less than 10,000 residents, other program thresholds have increased. At a population of approximately 5,461 as of 2019,²¹⁰ Union Township may qualify for these loans and grants.

The U.S. Taxpayer Relief Act of 1997, administered by the U.S. Department of Treasury's Internal Revenue Service, is meant to smooth out economic disparities that farmers experience from year to year due to the cyclical nature of agriculture. Known as **Farm Income Averaging**, qualified farmers can average all or part of their current year farm income over the previous three years. Substantial tax dollars can be saved by income averaging.²¹¹

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

The New Jersey FSA has both **Direct and Guaranteed Farm Ownership** loans available for farmers, including those in Hunterdon 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 \$300,015.²¹²

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.²¹³

Maps

Map 1. Farmland

- Map 2. Preserved and Public Lands
- Map 3. Agricultural Soil Categories
- Map 4. Hunterdon County Agricultural Development Area (2018)

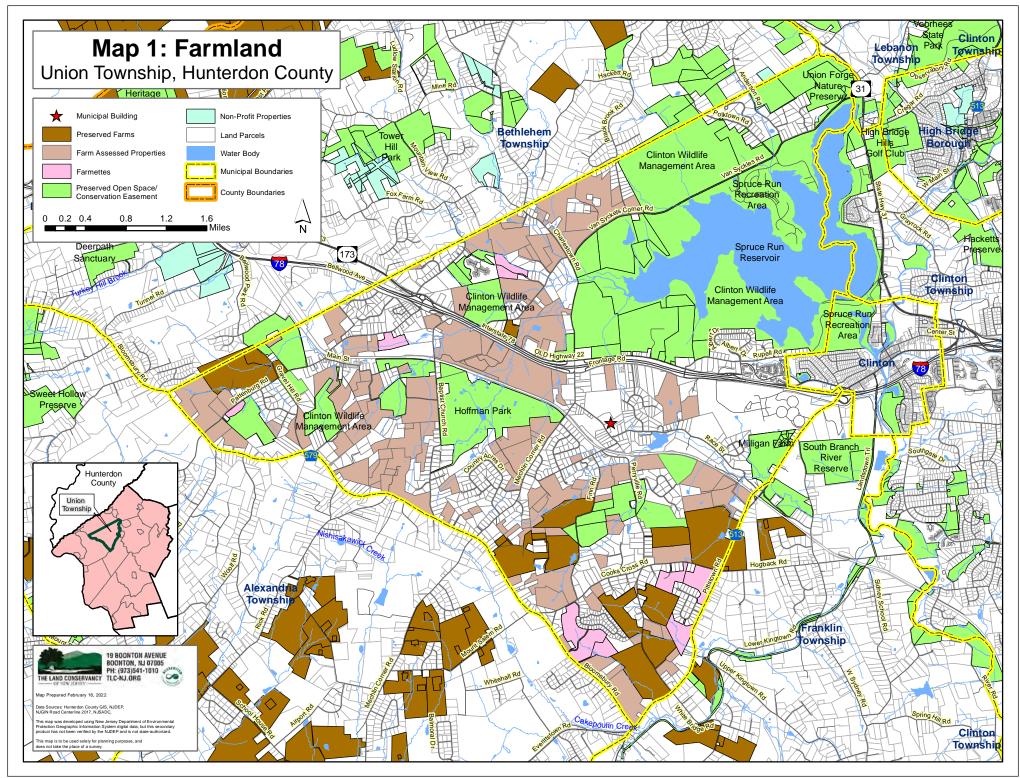
Map 5. Municipal Project Areas (2018 County ADA)

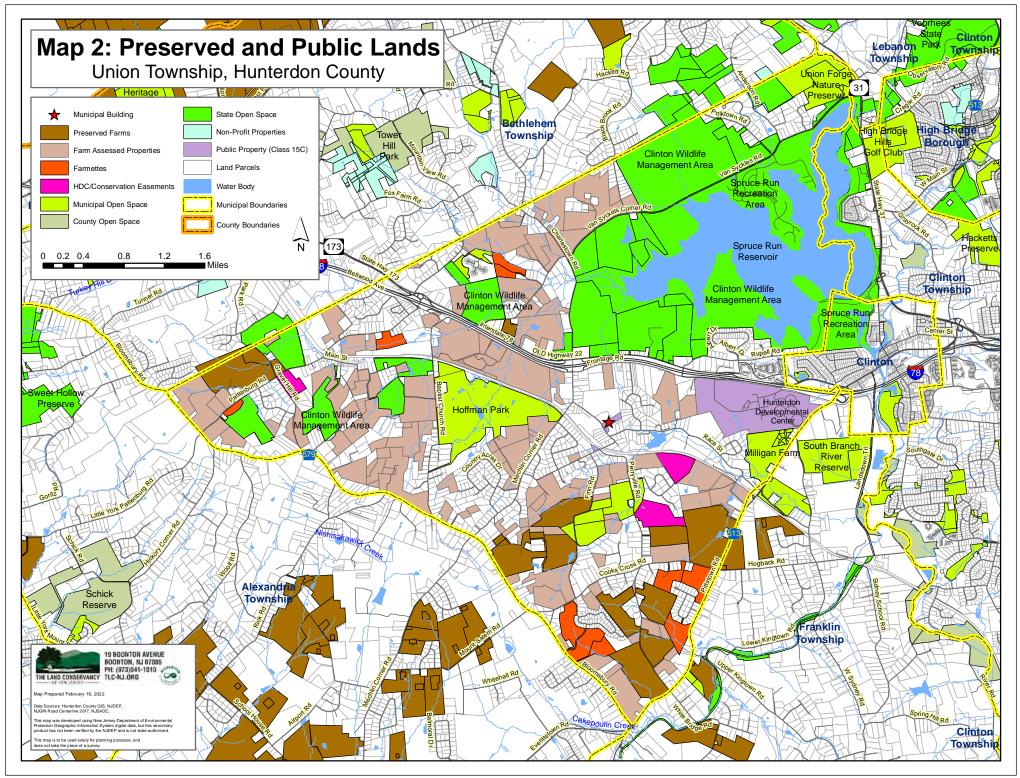
Target Farm Analysis Maps:

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

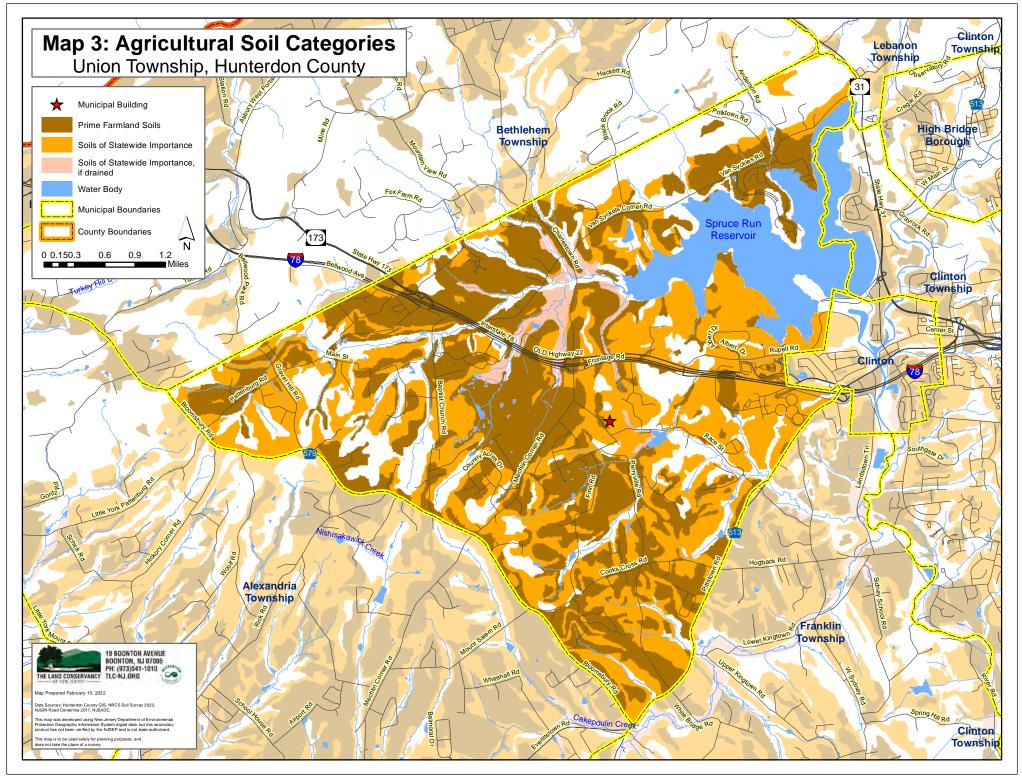
Map B. Farm Parcels & Units that meet the SADC Minimum Eligibility Criteria for Agricultural Soils

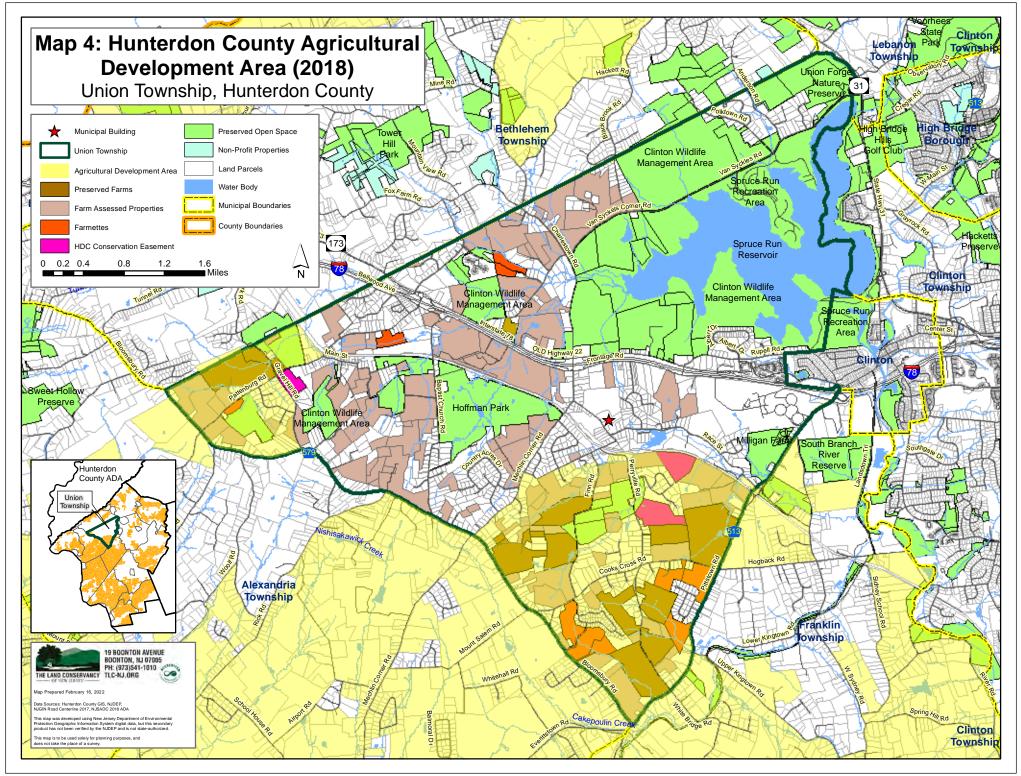
Map C. Target Farms: Potentially Eligible Farm Parcels & Units that meet SADC criteria for Agricultural Soils and Tillable Land



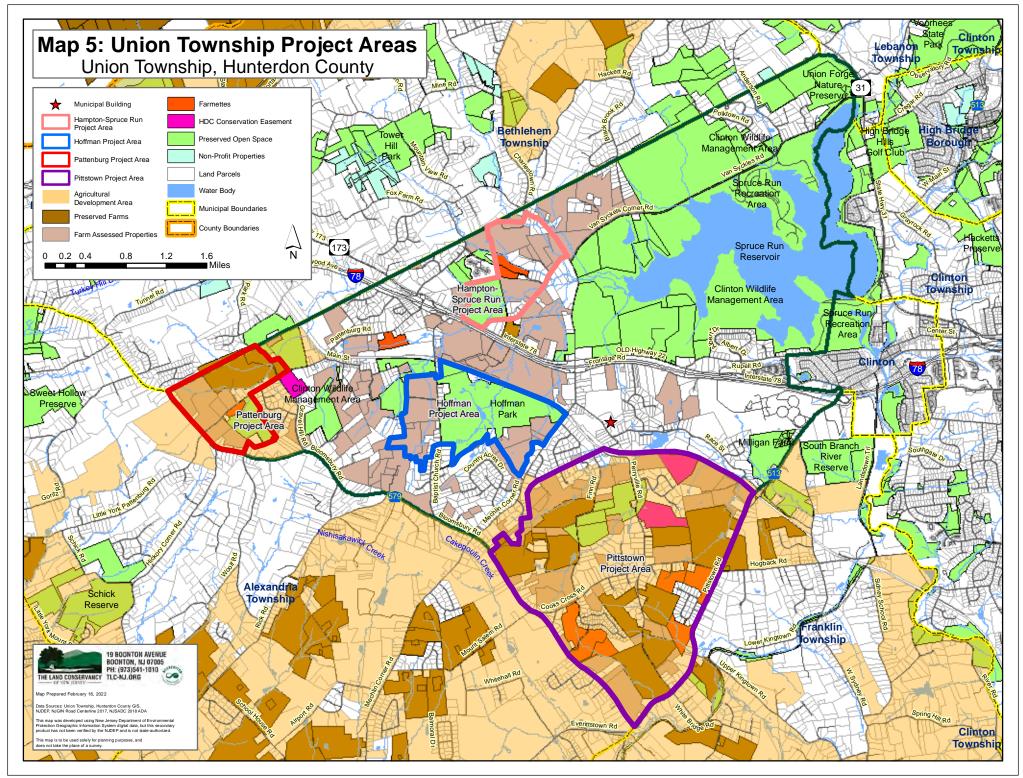


Union Township Comprehensive Farmland Preservation Plan Update

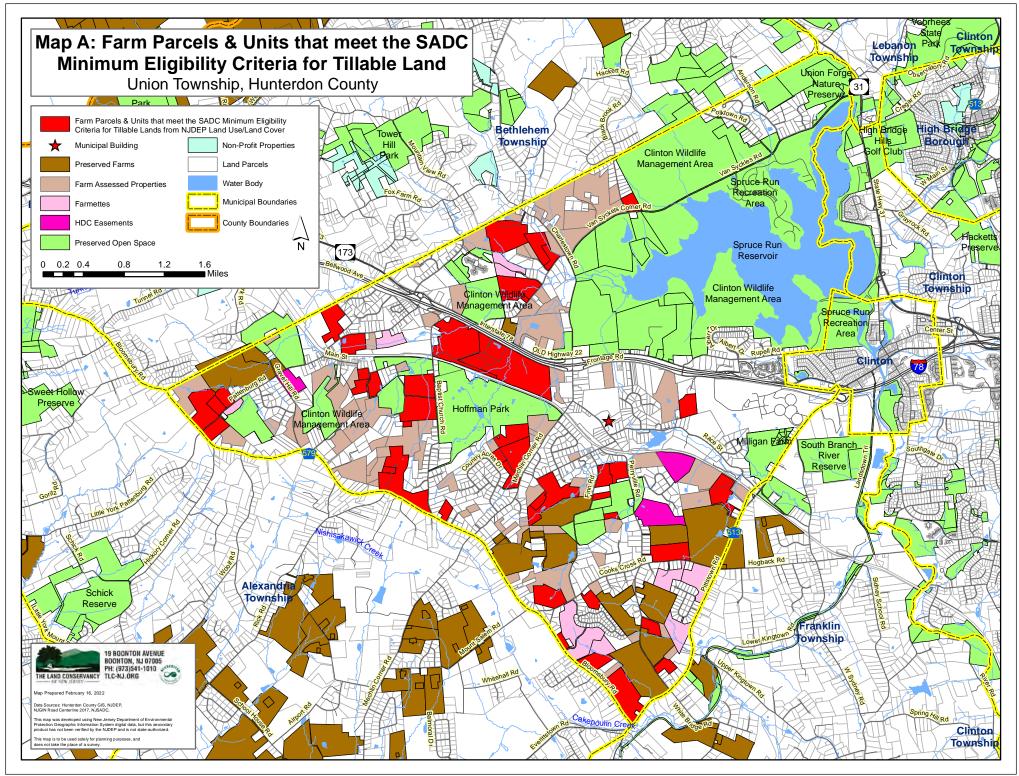


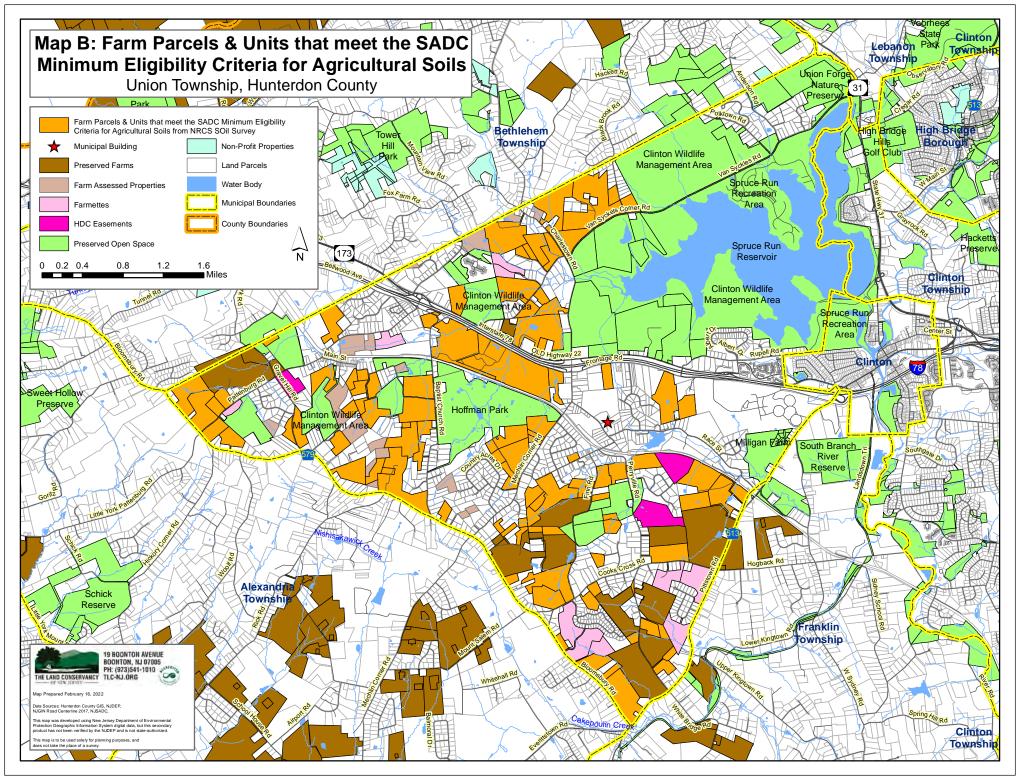


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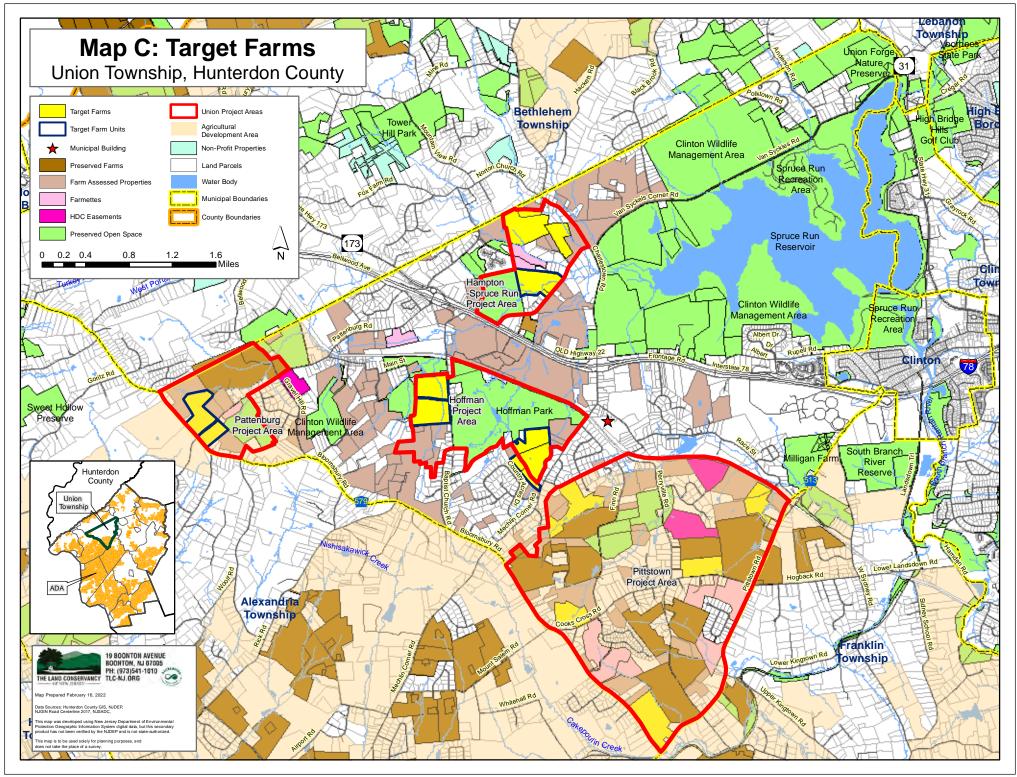


Union Township Comprehensive Farmland Preservation Plan Update





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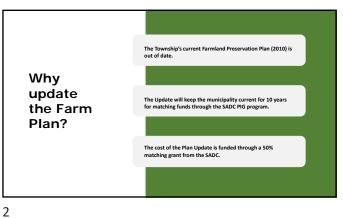
Appendix

Appendix A. Public Meeting Materials

Appendix B. Agricultural Support Services

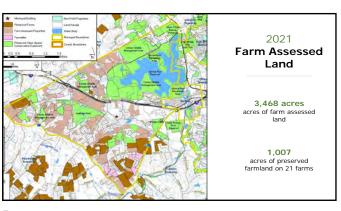
Appendix C. Union Township Right to Farm Ordinance (1987)

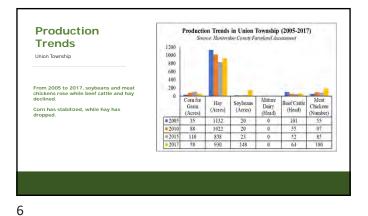


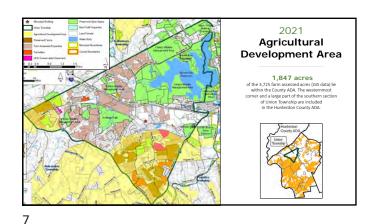


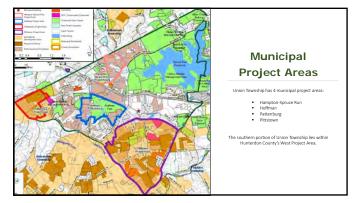
DECEMBER 2020	2	MAY 11 2021		OCTOBER 20 2021
TLC-NJ Kickof Meeting with Town		Site Visit		First Public Meeting (Township Committee)
	JANUARY 20 2021		AUGUST 10 & OCTOBER 11	NOVEMBER 4 2021
	Kickoff Meeting with SADC		2021 Draft Farm Plan sent to Township	Second Public Meeting (Planning Board)

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

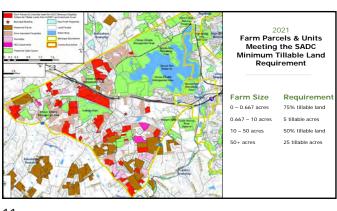


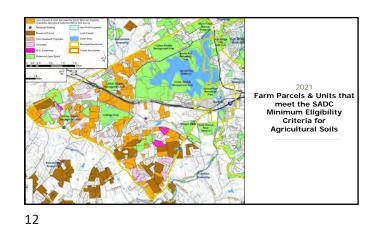






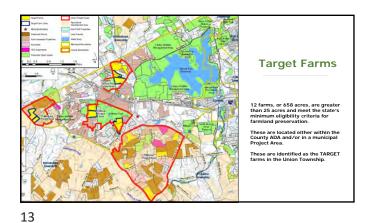


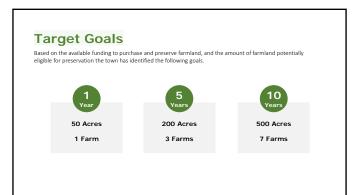






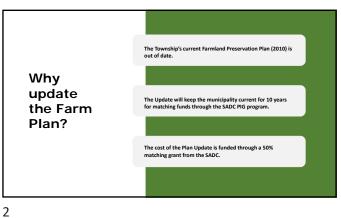
Union Township Comprehensive Farmland Preservation Plan Update











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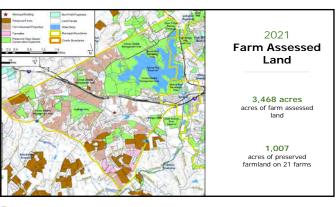
 TLC-NI Kickoff Meeting with Town
 Site Visit
 First Public Meeting (Township Committee)

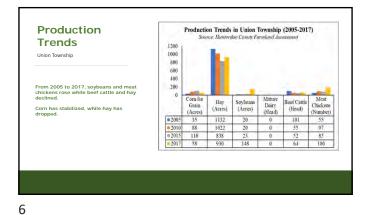
 JANUARY 20 2021
 JANUARY 20 2021
 AUGUST 10 & OCTOBER 11 2021
 NOVEMBER 4 2021

 Kickoff Meeting with SADC
 Draft Farm Plan sent to Township
 NOVEMBER 4 2021
 Second Public Meeting (Planning Board)

	n Update rerview		
ı.	Agricultural Land Base	v	Future Farmland Preservation Program
п	Agricultural Industry	VI	Economic Development
ш	Land Use Planning	VII	Natural Resource Conservation
ıv	Farmland Preservation Program	VIII	Sustainability, Retention, and Promotion

4



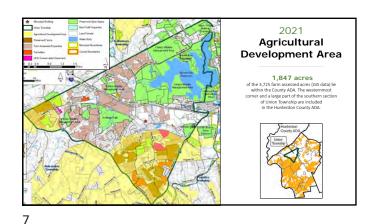


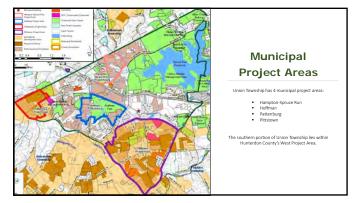
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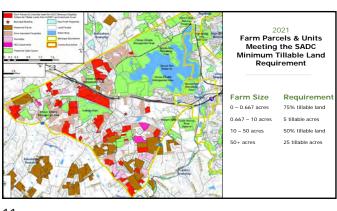
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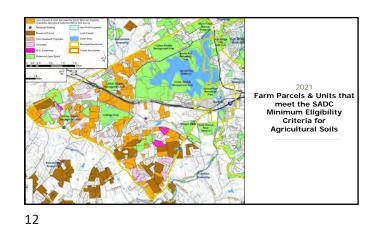
Union Township Comprehensive Farmland Preservation Plan Update





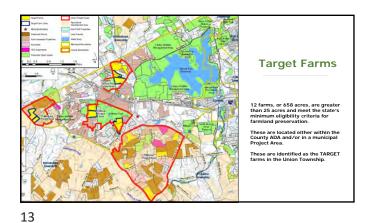


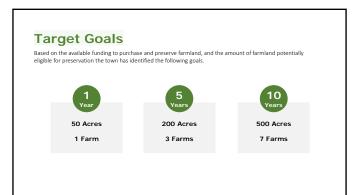






Union Township Comprehensive Farmland Preservation Plan Update







Agricultural Businesses Servicing Hunterdon County and Union 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

Appendix B. Agricultural Support Services

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

Hunterdon Soil Conservation District 687 Pittstown Rd. Ste 1 Frenchtown, NJ 08825 (908) 788-9466 https://hcscd.weebly.com/

NJ County Agricultural Development Boards

Hunterdon County Agricultural Development Board PO Box 2900 Flemington, NJ 08822 (908) 788-1490 CADB@co.hunterdon.nj.us https://www.co.hunterdon.nj.us/cadb/staff.htm/

Rutgers

Cooperative Extension of Hunterdon County 314 State Route 12, Bldg. 2, PO Box 2900 Flemington, NJ 08822 (908) 788-1339 https://www.co.hunterdon.nj.us/rutgers.htm

United States Department of Agriculture

(USDA) – Farm Service Agency (FSA) Frenchtown Service Center 687 Pittstown Rd, Suite 2 Frenchtown, NJ 08825 (908) 782-4614 https://www.fsa.usda.gov/state-offices/New-Jersey/index

USDA – Natural Resources Conservation Service (NRCS)

Frenchtown Service Center 687 Pittstown Rd, Suite 2 Frenchtown, NJ 08825 (908) 782-4614 ext. 3 https://www.nrcs.usda.gov/wps/portal/nrcs/site/n j/home/

USDA Rural Development

Frenchtown Service Center 687 Pittstown Rd, Suite 2 Frenchtown, NJ 08825 (908) 782-4614 ext. 4 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 Appendix C. Union Right to Farm Ordinance (1987)

NOTICE

PLEASE TAKE NOTICE that the following ordinance was adopted on first reading by the Township Committee of the Township of Union, County of Hunterdon, State of New Jersey, at a meeting held on the 18th day of February, 1987. The ordinance was then ordered to be published according to law. Notice is hereby given that the said ordinance will be considered for final passage at a public hearing to be held on the 18th day of March, 1987, at 7:30 p.m., or as soon thereafter as the matter may be reached, at the Municipal Building, Perryville Road, Jutland, New Jersey, at which time all interested parties will be heard.

KLARA E. TARSI,

MUNICIPAL CLERK

AN ORDINANCE AMENDING THE LAND USE CODE OF THE TOWNSHIP OF UNION, ESTABLISHING THE RIGHT TO FARM IN UNION TOWNSHIP (AMENDMENT NO. 6)

BE IT ORDAINED by the Township Committee of the Township of Union, in the County of Hunterdon, and the State of New Jersey, as follows:

I. Article XI, Administration, is hereby amended to add the following:

Section 1113 Protection of the Right to Farm

A. <u>Purpose</u>

The purpose of this ordinance in keeping with the policy of the New Jersey legislature as expressed in the Right to Farm Act, N.J.S.A. 4:1C-1 et seq. is to conserve, protect and encourage the development and improvement of agricultural lands within the Township for the production of food and other agricultural products and the preservation of open space; to protect and encourage the viability of the agricultural industry by establishing a positive agricultural business climate in order to promote

ONDINANCE NO. 87-2

Township of Union Comprehensive Farmland Preservation Plan Update

A-16

agricultural production to serve the interests of all citizens of Union Township. It is the purpose of this ordinance to help reduce the loss of agricultural land in Union Township by protecting commercial farms operated in accordance with acceptable methods and techniques of agricultural production from nuisance actions, while at the same time acknowledging the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in the State of New Jersey.

B. Definitions

1. Acceptable Management Practices -Agricultural Management Practices recommended or endorsed by the State Agricultural Development Committee and all relevant Federal or State statutes or rules and regulations adopted pursuant thereto.

2. <u>Commercial Farm</u> - Any operation producing with the expectation of sale agricultural or horicultural products worth \$2,500.00 or more annually and which meet the eligibility requirements for differential property taxation pursuant to the "Farmland Assessment Act of 1964", N.J.S.A. 54:4-23.1 et seq.

3. <u>Nuisance</u> - Any private action which unreasonably interferes with the comfortable enjoyment of another's property, which may be enjoined or abated, and for which the injured or affected property owner may recover damages.

C. <u>Protections</u>

1. In all relevant actions filed subsequent to the adoption of this ordinance, it shall be presumed that a commercial farm or agricultural use, structure or activity in connection therewith which is conducted or located within Union Township and which conforms to acceptable agricultural management pratices and which does not pose a direct threat to public health and safety, shall not constitute a public or private nuisance, nor shall any such use, activity, or structure be deemed to otherwise invade or interfere with the use and enjoyment of any other land or property or pose an unusual or unreasonable threat to persons.

2. Any agricultural use or common farmsite activity which conforms to acceptable agricultural management practices when reasonable and necessary for the operation of the commercial farm may occur on holidays, Sundays, and weekdays, at night and in the day, subject to the restrictions and regulations of the Township's zoning ordinance, State and Township health and sanitary codes, and State and Federal environmental regulations.

3. Agricultural uses and common farmsite activities specifically protected by this ordinance include but are not limited to production, harvesting, storage, grading, packaging and processing of farm products, wholesale and retail marketing of crops, plants, animals,

ORDINANCE NO. 87-2

and other related commodities; the use and applications of techniques and methods of soil preparation and management; fertilization; weed, disease and pest control; disposal of farm waste; irrigation, drainage, and water management; and grazing.

D. Mediation

1. When the Township is in receipt of a complaint alleging that an agricultural use, structure or activity in connection with a commercial farm operation constitutes a nuisance or is not in conformance with acceptable management practices as defined herein, the Township Committee may refer the complaint to the duly appointed Agricultural Protection Committee for mediation.

2. Upon referral of such a complaint by the Township Committee to the Agricultural Protection Committee, the Committee shall invite the affected parties to discuss the nature of the complaint, its reasonableness or unreasonableness in light of acceptable management practices, and any solution or remedy which will satisfy the aggrieved party without interferring with or discouraging the operation of the commercial farm against which the complaint was registered. Determination of whether the farm is following acceptable management practices shall be made by the State Agricultural Development Committee. The results of the meeting shall be non-binding upon either party and shall not abridge the right of either party to take legal action concerning the complaint.

E. <u>Composition of the Agricultural Protection</u> <u>Committee</u>

1. The Agricultural Protection Committee shall consist of five (5) members.

2. The members of the Agricultural Protection Committee shall serve for a term of two (2) years. If a member dies or retires from the Committee before the term is up, the member who takes his or her place shall serve the unexpired term.

F. Deed Notice

Whenever (1) a "commercial farm", as that term is defined in Section 3.3, is subdivided, or (2) a new major or minor subdivision abutts a "commercial farm", or (3) a new major or minor subdivision contains space which were not owned by individual homeowners or a homeowner's association, and said space is at least five (5) acres in size, then the following language shall be inserted in the deed of all lots:

> Grantee is hereby noticed there is, or may in the future be, farm use near the described premises from which may emanate noise, odors, dust, and fumes associated with agricultural practices permitted

ORDINANCE NO. 87-2

Township of Union Comprehensive Farmland Preservation Plan Update

Appendix C. Union Right to Farm Ordinance (1987)

under the "Right to Farm" section of the Union Township Zoning Ordinance.

II. All Ordinances or parts of Ordinances inconsistent herewith are hereby amended as to such inconsistency only.

III. If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by any court of competent jurisdiction, such order or judgment shall not effect or invalidate the remainder of any such article, section, subsection, paragraph or clause, and, to this end, the provisions of this Ordinance are hereby declared to be severable.

IV. This Ordinance shall take effect immediately upon final passage and publication according to law.

V. Short Title. The short title of this Ordinance shall be "Amendment No. 6 to the Union Township Land Use Code".

J. W. THATCHER, MAYOR

ATTEST:

lara _____

First Reading:	2/18/87
Publication:	3/4/87
Second Reading:	3/18/87
Published by Title Only:	3/25/87

I, Klara E. Tarsi hereby certify that the above to be a true and correct copy of an ordinance passed by the Township Committee of Union Township, County of Hunterdon, State of New Jersey at a Township Committee meeting held on March 18, 1987.

Klara E. Tarsi Township Clerk

ORDINANCE NO. 87-2

Inventory Tables

Inventory Table 1. Farm Assessed Property in Union Township

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

				Farm P	arcel*	Farm Unit**
Dieek	Lat	Class		Acres	Acres	
Block	Lot	Class		(Tax Data)	(GIS)	Acres (GIS)
6	9	3B	VAN SYCKELS ROAD	126.07	121.66	183.78
6	4	3B	ROUTE 635	64.87	62.12	
5	17	3A	214 VAN SYCKELS RD	1.38	49.57	51.88
5	17.03	3B	220 VAN SYCKELS RD	2.12	2.31	
28	35	3B	619 ROUTE 579	6.66	6.68	11.58
28	36	3B	ROUTE 579	3.46	4.90	
12	14	3B	88 ROUTE 173 W	70.00	81.86	90.48
12	11	3B	82 ROUTE 173 W	5.00	8.61	00110
13	6	3B	ROUTE 173 E	104.00	165.07	266.23
13	7	3B	ROUTE 173 E	56.78	101.16	200.20
17	11	3B	583 ROUTE 579	2.87	4.60	9.26
17	11.01	3B	ROUTE 579	3.95	4.66	9.20
16	1	3B	ROUTE 614	21.67	20.54	67.93
1	2	3B	ROUTE 614	49.41	47.39	07.93
22	30	3B	5 FRONTAGE ROAD	23.60	54.06	75.96
22	28	3B	FRONTAGE ROAD	22.03	21.90	/ 5.90
15	13	3B	5 TRAVIS HILL RD	84.24	84.82	
15	23	3B	TRAVIS HILL ROAD	3.74	4.86	89.68
26	12.02	3B	PERRYVILLE RD	4.77	5.42	40.00
27	1.01	3B	79 PERRYVILLE RD	12.30	13.47	18.89
15	6	3B	636 MAIN ST PATTENBURG	15.14	16.40	
15	8.02	3B	STONE HAVEN LANE	11.86	11.54	27.93
14	23	3B	683 MAIN ST PATTENBURG	38.00	40.08	
15	9	3B	BAPTIST CHURCH RD	45.50	49.00	89.08
6	5	3B	198 VAN SYCKELS RD	34.33	36.87	
5	14	3B	200 VAN SYCKELS RD	12.48	12.78	49.65
- 15	38	3B	GRAVEL HILL RD	22.00	22.01	
16	5	3B	GRAVEL HILL ROAD	13.20	10.38	32.39
15	11	3B	22 WILLIAMSON LANE	23.29	24.53	1
15	10	3B	WILLIAMSON LANE	49.30	41.44	
15	52	3B	WILLIAMSON LANE	3.00	3.06	92.33
15	24	3B	WILLIAMSON LANE	8.02	8.30	02.00
15	24	3B	WILLIAMSON LANE	13.02	15.01	
19	3	3B	ROUTE 625	5.67	4.75	
19	2	3B 3B	747 ROUTE 625	24.10	26.07	35.34
19	14	3B	ROUTE 625	4.48	4.52	55.34
19	14	SD	NUUTE 020	4.40	4.32	

				Farm P	arcel*	Farm Unit**
Block	Lot	Class	Location	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
19	6	3B	115 DRIFTWAY EAST	58.59	37.73	
17	1.10	3B	116 DRIFTWAY EAST	8.00	8.62	02.47
17	1	3B	16 DRIFTWAY EAST	5.85	7.03	83.47
19	6.01	3B	121 DRIFTWAY EAST	7.88	30.10	
28	46.01	3B	OFF ROUTE 625	4.88	5.00	10.04
28	47	3B	50 BEECHWOOD HOLLOW	2.50	5.04	10.04
3	1	3B	BAPTIST CHURCH ROAD	0.86	1.19	10.64
14	16	3B	69 BAPTIST CHURCH RD	11.60	11.45	12.64
26	10	3B	99 PERRYVILLE ROAD	18.00	18.99	
25	18.06	3B	19 RACE STREET	47.75	50.17	
25	27	3B	104 PERRYVILLE ROAD	26.95	26.43	
25	18.03	3B	106 ROUTE 513	11.00	13.07	
5	16.07	3B	11 COACHMAN DR	5.77	6.68	
29	6	3B	49 COOKS CROSS RD	6.93	7.70	
17	4.02	3B	731 ROUTE 625	6.74	8.56	
12	2.01	3B	221 VAN SYCKELS ROAD	7.10	14.36	
4	3.10	3B	20 WHITE OAK DRIVE	3.80	3.82	
5	15	3B	202 VAN SYCKELS ROAD	10.74	12.36	
1	4	3A	429 ROUTE 614	1.00	14.62	
26	16	3B	42 FINN ROAD	18.62	18.71	
4	6	3B	STROTZ ROAD	1.00	1.10	
28	12	3B	210 MAIN ST JUTLAND	58.10	59.79	
17	7	3B	567 ROUTE 579	8.95	10.95	
25	37	3B	22 COOKS CROSS ROAD	40.87	40.50	
13	11	3B	45 FRONTAGE ROAD	17.33	19.44	
6	4.01	3B	30 ROUTE 635	5.72	6.38	
29	4	3B	55 COOKS CROSS RD	12.20	13.17	
30	7.01	3B	12 PERRYVILLE ROAD	6.46	6.93	
15	4	3B	620 MAIN ST PATTENBURG	5.69	9.12	
14	22.02	3B	645 MAIN ST PATTENBURG	5.50	6.21	
12	2	3B	215 VAN SYCKELS ROAD	9.62	9.42	
15	3.06	3B	50 SPRINGHOUSE LANE	10.50	10.09	
5	16.08	3B	4 COACHMAN DR	5.77	6.40	
28	21.01	3B	19 FINN ROAD	10.00	10.07	
22	5	3B	35 FRONTAGE ROAD	14.30	15.05	
15	53	3B	535 ROUTE 579	3.53	3.39	
15	21	3B	ROUTE 579	8.07	5.65	
27	3.08	3A	3 STIRLING PLACE	1.07	8.30	

Union Township Comprehensive Farmland Preservation Plan Update

				Farm Pa	Farm Parcel*		
Block	Lot	Class	Location	Acres (Tax Data)	Acres (GIS)		
1.08	15	3B	475 ROUTE 614	4.90	6.49		
29	17	3B	340 ROUTE 513	70.00	70.25		
14	3	3B	534 ROUTE 614	29.00	27.14		
15	8.01	3B	20 STONE HAVEN LANE	8.66	7.46		
5	16.03	3B	2 COACHMAN DRIVE	25.97	26.78		
12	6	3B	9 ROUTE 635	22.49	19.28		
25	18.04	3B	ROUTE 513	36.29	36.24		
21	28	3B	213 MAIN ST JUTLAND	5.00	4.96		
28	45	3B	21 FINN RD	5.45	5.15		
5	4.03	3B	STROTZ ROAD	67.80	68.04		
16	4.21	3A	8 HILLTOP CT	1.00	9.48		
5	3.03	3B	352 STROTZ ROAD	27.36	28.59		
30	7.02	3B	32 PERRYVILLE ROAD	6.00	7.70		
28	11	3B	208 MAIN ST JUTLAND	8.05	8.91		
15	20	3A	517 ROUTE 579	1.00	35.36		
30	7.03	3B	28 PERRYVILLE ROAD	13.63	14.12		
29	25.01	3B	715 ROUTE 579	5.40	6.86		
29	23	3B	731 ROUTE 579	22.82	23.56		
28	20	3B	37 FINN ROAD	15.98	15.33		
15	3	3B	586 MAIN ST PATTENBURG	28.45	28.47		
5	4	3B	35 ROUTE 635	8.84	8.53		
1	3	3B	419 ROUTE 614	10.23	12.35		
1.08	23	3B	ROUTE 614	30.96	35.46		
7	2	3B	110 VAN SYCKELS ROAD	15.27	14.93		
16	9.03	3B	439 ROUTE 579	20.81	20.69		
29	29	3B	43 PERRYVILLE RD	2.13	1.83		
29	11	3B	23 PERRYVILLE ROAD	5.92	6.01		
25	18.01	3B	HILLTOP LANE	27.98	30.98		
15	8	3B	25 STONE HAVEN LANE	15.09	31.73		
28	31	3B	ROUTE 579	5.82	7.05		
15	25	3B	ROUTE 579	10.00	9.59		
17	4.37	3B	19 ROSE HILL CT	14.37	14.10		
15	3.03	3B	489 ROUTE 579	25.30	22.84		
6	10	3B	VAN SYCKELS ROAD	9.52	10.15		
17	3	3B	124 DRIFTWAY EAST	5.00	6.08		
14	5.01	3B	546 ROUTE 614	6.20	9.15		
15	3.01	3B	20 SPRINGHOUSE LANE	33.32	33.07		
29	18	3B	771 ROUTE 579	9.60	9.80		

				Farm Parcel*		Farm Unit**
Block	Lot	Class	Location	Acres (Tax Data)	Acres (GIS)	Acres (GIS)
5	20	3B	130 ROUTE 173 W	23.12	26.13	
28	10	3B	206 MAIN ST JUTLAND	14.74	15.05	
28	24	3B	3 FINN RD	53.35	58.22	
1	1	3B	413 ROUTE 579	43.04	44.85	
15	5	3B	626 MAIN ST PATTENBURG	5.40	7.21	
28	25	3B	64 COOKS CROSS RD	30.79	35.08	
26	15.01	3B	38 FINN RD	5.78	6.68	
15	28.01	3B	ROUTE 579 OFF	17.00	18.09	
30	6.01	3B	10 PERRYVILLE ROAD	12.54	13.10	
			Total (Unpreserved Farmland):	2,348.92	2,694.87	1,298.54
			Total (Preserved Farmland):	794.39	807.52	
			Total Farm Assessed Land:	3,336.13	3,724.52	
			Total (Unpreserved Farm Units):	1,298.54	acres	
			Number of Farm Units	19	units	

				Acres	
Block	Lot	Class	Location	(Tax Data)	Acres (GIS)
Farms	Preserv	ed through	n the Farmland Preservation Program:		
12	1.01	3B	237 VAN SYCKELS ROAD	12.53	10.89
25	35	15D	150 ROUTE 513	149.77	147.07
1	12	3B	10 CASE LANE	87.15	95.91
28	21	3B	23 FINN ROAD	62.60	62.77
28	33	3B	647 ROUTE 579	72.25	78.35
28	37	3B	ROUTE 579	5.03	4.33
28	44	3B	ROUTE 579	5.00	5.43
30	8	3B	42 PERRYVILLE ROAD	62.83	62.30
1	11	3B	465 ROUTE 614	7.25	6.61
1.08	25	3B	60 GRAVEL HILL RD	9.22	9.09
1	13	3B	79 GRAVEL HILL RD	17.48	19.46
29	10	3B	PERRYVILLE ROAD	57.24	57.31
30	7	3B	14 PERRYVILLE ROAD	43.93	45.46
28	23	3B	15 FINN ROAD	60.47	59.39
25	37.09	3B	72 PERRYVILLE ROAD	42.28	44.25
29	13	3B	304 ROUTE 513	99.36	98.91
			Preserved Farmland:	794.39	807.52
			Preserved Farmland Assessed as Farm (Class 3):	644.62	660.45
Farms	Preserv	ed through	n the Municipal Farmland Program as Farmettes:		
5	16.10		DAVID REYNOLDS ROAD	17.19	17.53
5	16.14	3B	DAVID REYNOLDS ROAD	11.80	11.93
30	11	3B	210 ROUTE 513	44.29	45.79
29.02	1	3B	2 STIRES WAY	36.62	39.09
14	5	2	564 ROUTE 614	22.58	22.03
29	27	3B	727 ROUTE 579	18.00	20.18
29.03	18	3B	6 GROOM ROAD	35.96	36.74
30	1	3B	20 RED JACKET LANE	27.96	29.29
16	3	3B	430 ROUTE 614	6.80	8.97
30	12	3B	32 GROVE FARM RD	31.24	34.03
			Preserved Farmland - Farmettes:	252.44	265.58
			Farmettes Assessed as Farm (Class 3):	229.86	243.55
	Prese	rved Farm	land through the Municipal, County and State Farmland Programs:	1,046.83	1,073.10
			Preserved Farmland Assessed as Farm (Class 3):	874.48	904.00

Inventory Table 1B. Preserved Farmland (Class 2, 3B, 15D)

				Acres	
Block	Lot	Class	Location	(Tax Data)	Acres (GIS)
Farmlaı	nd Pres	served with a Hig	ghlands Development Credit Easement:		
15	1	3B	50 GRAVEL HILL RD	16.70	26.27
25	21	3B	26 HILL & DALE DRIVE	42.22	43.14
25	32	3B	86 PERRYVILLE ROAD	53.81	56.24
			Farmland - Highlands Development Credit:	112.73	125.65

Inventory Table 1B. Preserved Farmland (Class 2, 3B, 15D)

Farm Parcels not identified as part of a Farm Unit **Project Area** Block Lot Location Acres (GIS) ADA Acres Pittstown 25 18.04 ROUTE 513 ADA 36.29 36.24 37 22 COOKS CROSS ROAD 40.50 25 40.87 Pittstown ADA 28 12 210 MAIN ST JUTLAND 58.10 59.79 Pittstown ADA 28 25 Pittstown ADA 64 COOKS CROSS RD 30.79 35.08 29 340 ROUTE 513 Pittstown ADA 17 70.00 70.25 2 COACHMAN DRIVE 25.97 Hampton-Spruce Run Not in ADA 5 16.03 26.78 5 4.03 STROTZ ROAD 67.80 68.04 Hampton-Spruce Run Not in ADA Total Farm Parcels over 25 acres within the ADA and/or Project Area: 336.69 7 parcels Farm Units Farm Parcel Farm Unit Acres Acres (GIS) **Project Area** Block Lot Location (Tax Data) Acres (GIS) ADA 17 214 VAN SYCKELS RD Hampton-1.38 49.57 5 51.88 Not in ADA Spruce Run 5 17.03 220 VAN SYCKELS RD 2.12 2.31 16 ROUTE 614 21.67 20.54 1 67.93 Pattenburg ADA 2 ROUTE 614 47.39 49.41 23 14 683 MAIN ST PATTENBURG 38.00 40.08 Hoffman Not in ADA 89.08 9 49.00 15 **BAPTIST CHURCH RD** 45.50 19 6 **115 DRIFTWAY EAST** 58.59 37.73 Hoffman 6.01 **121 DRIFTWAY EAST** 30.10 19 7.88 83.47 Not in ADA Not in Project 17 1.10 **116 DRIFTWAY EAST** 8.00 8.62 **16 DRIFTWAY EAST** 5.85 7.03 17 Area 1 Total Farm Units over 25 acres within the ADA and/or Project Area: 292.37 4 Units Total Target Farms within the ADA and/or Project Areas: 629.06 acres 11 farms

Inventory Table 2. Target Farms over 25 acres within the ADA and/or Project Areas

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