

County of Sussex

COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE



Compiled by



Morris Land Conservancy
A nonprofit land trust

with



**Sussex County Agriculture
Development Board**

May 2008

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for

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MAY 2008

The County of Sussex Comprehensive Farmland Preservation Plan Update

Produced by:

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MAY 2008

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Cover photographs: Donna Traylor
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EXECUTIVE SUMMARY



Sussex County is home to some of New Jersey's most unique and productive agricultural resources. It has long been the hub of New Jersey's dairy industry, and many viable, productive operations still remain there today. The County also supports some of the State's most innovative farmers who have implemented various farming techniques and strategies in order to overcome daunting natural and economic conditions. These farmers are greatly assisted by the Sussex County government, which is unmatched in its support of local agriculture. Through its pioneering efforts and the ingenuity of its farmers, Sussex County has been able to preserve its agricultural landscape and way of life in the face of overwhelming challenges.

Sussex County is truly unique within the State of New Jersey. It is the only county in the State that falls primarily within the Ridge and Valley Physiographic Province, where rocky mountain ranges abut fertile valleys to form a breathtaking agricultural countryside. This landscape poses both obstacles and opportunities for agriculture. Rolling topography and rocky soils often limit the success of most field crops in Sussex County. However, these conditions are much more suitable to livestock, dairy, and hay, for which Sussex County is widely known. The unique scenic beauty of the County's agricultural lands helps to attract thousands of visitors each year as well. Sussex County's farmers have taken advantage of their scenic lands and proximity to New York City by cultivating active Agritourism attractions such as pick-your-own operations, farm-stands, hay rides, and farm markets.

Despite its successes, the agricultural industry in Sussex County continues to face many threats to its long-term sustainability. The dairy industry – long the cornerstone of Sussex County's farms – is experiencing an extended and steady decline. A growing number of dairy farmers must find other sources of revenue to supplement their agricultural activities. While many have adjusted their operations to produce different livestock products or crops, such as cattle and nursery goods, others find selling their lands to be a more attractive option. Consequently, the County's stock of cropland (38,000 acres) and pastureland (16,000 acres) has decreased by 16% and 27%, respectively, over the last twenty years. Increasing costs of farming compound this trend. Record-high land prices impose dramatically increasing property taxes on farmers. More farmers than ever are renting ground and young, prospective farmers are finding the costs of purchasing land to be prohibitively high. Farmers must also contend with the virtual absence of locally available support services. At present, they rely heavily on one another's expertise and on institutional agencies, such as the Natural Resource Conservation Service (NRCS) and the Rutgers Cooperative Research Extension (RCRE).

Farmers in Sussex County face challenges from outside the agricultural realm as well. Sussex County's population has increased by more than 10% in every decade since 1950 – one of only 124 counties nationwide to experience such growth. This has changed the political climate at the local level. Residents are less amenable to agriculture than in past years, and farmers' access to necessities such as groundwater rights and road usage has been negatively impacted. Unfortunately, municipal zoning schemes currently zone most of the land in Sussex County for development densities of one unit per three to seven acres – a development pattern that, if realized, will perpetuate farmers' hardships.

Land use planning efforts at the state and county levels have aimed to minimize the impact of new development on the agricultural industry. The *State Development and Redevelopment Plan* designates most of Sussex County as Rural and Environmentally-sensitive lands, and encourages the clustering of development within defined "centers" in order to preserve the County's rural environs. Sussex County's recently endorsed *Strategic Growth Study* also advocates development clustering, and identifies centers (11 of which benefit, in part, from existing sewer and water systems) where new development would be appropriate.

In addition to promoting development in its centers, Sussex County has aggressively pursued the preservation of its rural environs. The *2003 Comprehensive Farmland Preservation Plan for Sussex County* outlined the mission statement for the County Agriculture Development Board: "*the SCADB's mission in implementing the farmland preservation program in Sussex County is to preserve both farmland and farmers. In accomplishing these goals, the Board seeks to preserve farms that are highly productive due to soil types, proximity to other preserved farms, farm size, as well as the effort and efficiency of the farmer.*" The 2003 Plan also established the goal of preserving 2,522 acres of farmland annually and maintaining this pace over a ten-year period:

One year acreage target:	2,522 acres,
Five year acreage target:	12,610 acres, and
Ten year acreage target:	25,220 acres.

Since the program's inception in 1983, the County Agriculture Development Board has preserved 9,468 acres of farmland with another 2,894 acres pending in 2007. At the end of 2007, the SCADB will have preserved a total of **12,362 acres** of farmland in Sussex County.

This *Comprehensive Farmland Preservation Plan Update* identifies ten Project Areas in which future farmland preservation efforts will be concentrated:

- Eastern Highlands 1 and Eastern Highlands 2
- Western Highlands 1 and Western Highlands 2
- Kittatinny Valley East
- Kittatinny Valley Central,
- Kittatinny Valley West 1 and Kittatinny Valley West 2
- Upper Delaware 1 and Upper Delaware 2 (see *Project Area* map in the *Appendix*).

Sussex County realizes the importance of preserving its farmers as well its farmland. In cooperation with local schools, organizations, and research institutions, the County has undertaken a number of initiatives that help to promote the economic well being of local farmers, including:

- “Commercial Kitchen” – a pilot program that allows farmers to use the certified kitchen at the Sussex County Vocational & Technical School in order to safely and legally produce “value-added” products, such as jellies and salsa;
- Goat Project – a Statewide research project facilitated by RCRE of Sussex County, which advises interested farmers on the production and marketing of goat products;
- Sussex County Dairy Project – a research and development effort aimed at implementing a viable, community-run dairy project in Sussex County where farmers will be able to produce value-added dairy products;
- Farmer’s Market – the Sussex County Division of Planning is working to expand upon the existing market at Olde Lafayette Village by establishing a permanent, three season farmers’ market at the New Jersey State Fairgrounds in Frankford Township; and
- Lusscroft Farm – 577 acres of preserved farmland in Wantage Township that is being developed as an agricultural education center and Agritourism destination for Sussex County.

In addition to these initiatives, Sussex County’s future efforts to promote the local agricultural industry will include:

- Partnering with government agencies to encourage participation in the various agricultural and natural resource conservation programs that are available;
- Encouraging municipalities to strengthen their existing Right-to-Farm ordinances, and helping municipalities without Right-to-Farm ordinances develop them;
- Ensuring the availability and humane treatment of farm laborers;
- Supporting young farmer and labor education programs;
- Continuing public outreach and education efforts;
- Assisting in the development of wildlife management strategies;
- Providing for adequate agricultural vehicle movement on County roads; and
- Advocating for regulatory flexibility of approved agricultural activities.

CHAPTER 1: AGRICULTURAL LAND BASE OF SUSSEX COUNTY



The agricultural land base of Sussex County comprises a significant portion of New Jersey's farmland. Sussex County supported 1,029 individual farms in 2002 (second in the State) on 75,496 acres (fifth in the State). Hay – the County's principal crop – was planted on 21,195 of these acres (second in the State). Sussex County also supports New Jersey's most notable concentration of dairy and livestock operations with 89 beef cow farms (third in the State) and 30 dairy farms (second in the State) that range over 15,974 acres (second in the State). (*2002 Census of Agriculture*)¹

Quantitative figures alone do not capture the full importance of Sussex County's farmland. Sussex County's agricultural lands bestow the County with a rich rural setting found nowhere else in New Jersey. Steep ridgelines abut fertile valleys offering spectacular agricultural viewsheds. Many farms in Sussex are also located near valuable natural resource and park lands. This combination creates an undeveloped, natural landscape that spans large swaths of the County. This landscape has been the living and working environment for generations of Sussex County residents, and to many, it means home.

Agricultural Landscape

Sussex County rests in two of New Jersey's four physiographic provinces – the Appalachian Ridge and Valley province and the Highlands province. The Ridge and Valley province in Sussex County is part of a large geologic formation that extends 1,200 miles between Alabama and the St. Lawrence Valley in eastern Canada. It encompasses all of the County's area north and west of the Sparta-Waywayanda-Pochuck (Highlands) Ridge, which ranges between Byram and Vernon Townships.

The Ridge and Valley Province in Sussex County is divided into two valleys by the Kittatinny Ridge, which ranges between Walpack and Montague Townships in the northern part of the County. The Kittatinny Ridge was formed when tectonic forces compressed and elevated sections of the Earth's crust and created the Appalachian Mountains. Glaciation, wind, and water have since eroded the quartzite and sandstone bedrock of the Kittatinny Ridge into its current shape and size. (*1975 Sussex County Soil Survey*)² Due to the intensity of these weathering forces and the exposed bedrock they left behind, much of the Kittatinny Ridge is unsuitable for agricultural production.

The Kittatinny Valley encompasses the broad swath of land between the Kittatinny and Highlands Ridgelines. This valley supports the County's principal concentration of agricultural operations. In the northeast, the rolling hills in Wantage, Frankford, and Lafayette Townships provide excellent areas for hay and livestock farms. In the southwestern Townships of Hampton, Stillwater, Fredon, and Green, the Valley becomes flatter and more suitable for farms that plant row crops such as vegetables and Christmas trees. The Kittatinny Valley is also home to the County seat – Newton – as well as the Boroughs of Sussex and Branchville where limited concentrations of agricultural businesses and support services are located.

Outside the Kittatinny Valley, farmland in Sussex County is sparse. Some pockets of agricultural land exist in two other areas of County – the Upper Delaware/Minisink Valley and the Highlands Ridgeline. Encompassing parts of Montague and Sandyston Townships, the Upper Delaware Valley rests between the Kittatinny Ridge to the east and the Delaware River to the west. The Upper Delaware Valley is primarily occupied by public open space lands, but it supports some orchards and equine operations as well. The Upper Delaware Valley is more rural than the Kittatinny Valley, and offers scenic views of almost entirely undeveloped, agricultural landscapes from the ridgelines that surround it.

The Highlands Physiographic Province is characterized by Precambrian mountains of granite and gneiss bedrock with adjoining limestone valleys. In Sussex County, the Highlands Province is comprised of a long ridgeline that includes Sparta Mountain, Wawayanda Mountain, Hamburg Mountain, and Pochuck Mountain, and runs between the eastern Townships of Byram and Vernon. Small pockets of agricultural land within the Highlands Ridge contain noteworthy agricultural operations including orchards, vegetable farms, and livestock farms. However, most areas in the Sussex County Highlands are thickly forested, developed, or covered by steeply sloping terrain.

Soils

More than one hundred individual soil types are found throughout Sussex County. Soil types are determined by the parent bedrock material from which they were formed, the drainage characteristics they have, and the steepness of the slopes on which they are found. Soil types are also grouped into larger categories called soil series based on their parent material, chemical composition, and profile, as well as soil associations that combine similar soil series. There are more than thirty soil series that comprise eleven soil associations in Sussex County. A complete listing of the County's soils can be found at the end of this chapter. (*2005 Sussex County Soil Survey*)³

The soils of Sussex County are direct reflections of the region's topography and the geological processes responsible for it. Areas that are most susceptible to the weathering influence of glacial, wind, and soil erosion – such as the County's steeply sloping ridgelines and mountainsides – have had most of their topsoil eroded to lower elevations. The County's valleys serve as repositories for much of this eroded soil and generally have deeper and higher quality soils. Even here, soils are generally located on gently to moderately sloping, rocky terrain. Up to 25% of the County's cultivated areas are affected

by soil erosion due to topography. Sussex County's rolling landscape also serves to concentrate surface water flows into many rivers, lakes, wetlands, and their surrounding farmlands. Up to 15% of the County's tillable areas have been historically impacted by flooding. (2005 Sussex County Soil Survey)

Despite the many soil limitations in Sussex County, local soils are adequate to sustain a viable agricultural industry. Farmers have successfully adapted traditional practices to fit the rolling and rocky terrain in the County. They also rely heavily on products that grow well in these soils including hay, corn, and livestock. In addition, more than 14% of the County (48,399 acres) is covered by Prime, Statewide or Unique agricultural soils (see *Agricultural Soils Chart* below). (Natural Resource Conservation Service, Soil Survey website)⁴ Many of these acres fall within public parklands (see *Soils Map*), but many are actively farmed (see *Candidate Qfarms Map*).

<i>Abbr</i>	<i>Soil Description</i>	<i>Quality</i>	<i>Erodability</i>	<i>Acres</i>
DefAr	Delaware fine sandy loam, 0 to 3 % slopes, rarely flooded	Prime	Potentially	401
DefBr	Delaware fine sandy loam, 3 to 8 % slopes, rarely flooded	Prime	Potentially	616
HdxAb	Hazen-Hoosic complex, 0 to 3 % slopes, very stony	Prime	Not high	8,150
HdxBb	Hazen-Hoosic complex, 3 to 8 % slopes, very stony	Prime	Potentially	22,394
LorB	Lordstown-Wallpack complex, 0 to 8 % slopes, forest & recreation	Prime	Potentially	55
PohA	Pompton sandy loam, 0 to 3 % slopes	Prime	Not high	555
RkrB	Riverhead sandy loam, 3 to 8 % slopes	Prime	Potentially	774
ScoA	Scio silt loam, 0 to 3 % slopes	Prime	Not high	154
UnfA	Unadilla silt loam, 0 to 3 % slopes	Prime	Potentially	73
WabBb	Wallpack fine sandy loam, aeolian mantle, 0 to 8 % slopes, very stony	Prime	Potentially	63
WacB	Wallpack silt loam, 3 to 8 % slopes	Prime	Potentially	97
CorA	Colonie loamy fine sand, 0 to 3 % slopes	Statewide	Potentially	42
CorB	Colonie loamy fine sand, 3 to 8 % slopes	Statewide	Potentially	742
HonCb	Hoosic-Hazen complex, 8 to 15 % slopes, very stony	Statewide	Potentially	1,575
LorC	Lordstown-Wallpack complex, 8 to 15 % slopes	Statewide	High	1,052
UnfB	Unadilla silt loam, 3 to 8 % slopes	Statewide	Potentially	365
WabCb	Wallpack fine sandy loam, aeolian mantle, 8 to 15% slopes, very stony	Statewide	High	776
WacC	Wallpack silt loam, 8 to 15 % slopes	Statewide	High	1,331
CatbA	Catden mucky peat, 0 to 2 % slopes	Unique	Not high	9,226
	TOTAL			48,399
	<i>Source: Natural Resource Conservation Service, Soil Survey website</i>			

Over 32,000 acres are covered by prime and statewide important soils of the Hazen-Hoosic Complex (2005 Sussex County Soil Survey). These soils originated from glacial outwash of slate, shale, and sandstone materials, and are generally very deep and stony. They are found primarily on mounds and slopes within the County's valleys. They exhibit moderate permeability and fertility with soils of the Hoosic series containing relatively low water capacity. Consequently, dry seasons significantly impact crop yields from these soils and many crops, especially vegetables and flowers, require extensive irrigation. Although these soils can support most crops, they are best suited for small grains, with slopes steeper than 8% appropriate only for pastures and woodlands.

Many of the County's other prime and statewide important soils, including soils of the Colonie, Delaware, Riverhead, and Unadilla Series, are found within the Kittatinny Valley and the Delaware Water Gap National Recreation Area. These soils tend to be deep with good drainage and water capacity, making them excellent for a variety of crops. Soils that are commonly found near the County's waterways, such as those of the Colonie and Unadilla Series, are typically fine-grained and contain higher levels of organic matter than other soils. These fine-grained soils are suitable for a wide range of agricultural products, including vegetables and nursery crops. Coarse-grained soils, such as those of the Delaware Series, tend to be located further away from water bodies, and are more commonly planted with corn and small grains. (*Natural Resource Conservation Service, Soil Survey website*)

The remainder of Sussex County's agricultural soils are located in areas that are not currently utilized for agriculture. Soils of the Pompton Series are found in flat plains near the Highlands Ridge that are primarily forest-covered, while soils of the Lordstown-Wallpack complex are most commonly found within the Delaware Water Gap National Recreation Area. These tend to exhibit a coarse-grained, rocky substrate with variable drainage qualities. Catden soils are associated with important natural areas within or adjacent to submerged lands. Consequently, they are poorly drained and deep with high levels of organic matter. Catden soils are primarily occupied by undeveloped wildlife conservation areas. (*Natural Resource Conservation Service, Soil Survey website*)

Irrigated Land & Water Sources

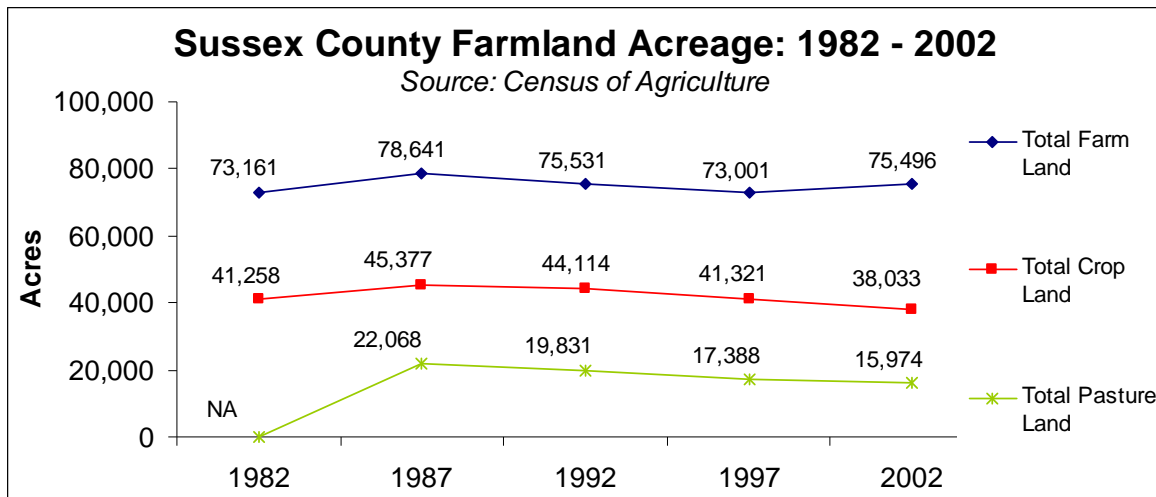
The amount of irrigated farmland in Sussex County is very small. Only 93 farms irrigated 642 acres during 2002, representing less than 10% of the County's farms and less than 1% of its farmland. (*2002 Census of Agriculture*) However, the irrigated acreage in Sussex County has nearly doubled since 1982 with more than three times as many farms utilizing irrigation. This trend is partly attributable to the increasing number of water-intensive agricultural operations, such as nurseries and vegetable farms, taking root in the County in areas where local soils require irrigation to support these products. Additionally, the 2002 Census year was abnormally dry, which may account for some of the irrigation increases that were observed.

Limited groundwater supplies are the only available sources of water for the limited amount of irrigation that occurs in Sussex County (642 acres). Towns in the Kittatinny Valley where most of the County's irrigated acres are found – Wantage, Lafayette, and Hampton Townships – contain aquifers of general poor productivity. (*2003 Sussex County Open Space Plan*)⁵ Competition for these limited groundwater resources between agriculture and other local land uses, including new residential and commercial developments, has been continually intensifying in these areas. There is a general concern that further development will limit the availability of water for agriculture in much of Sussex County.

There are only a handful of farms in the County that are located within the Highlands Preservation Area and the farms utilizing limited irrigation are not located in the Highlands. Three farms in Sussex County are enrolled in the Soil and Water Conservation (8-Year Farmland Preservation) program in the Sussex County and none of these farms are located in the Highlands. As mentioned, Sussex County is 525 square miles in size and, of this, only 642 acres is utilized for agricultural irrigation. The nature of Sussex County farming is predominantly livestock and hay, both of which do not require irrigation. Very few Sussex County farmers raise vegetables, which have higher water needs, as their primary product. It is highly unlikely that there will be a significant change in agricultural practices in Sussex County to warrant groundwater consumption concerns.

Farmland Trends & Statistics

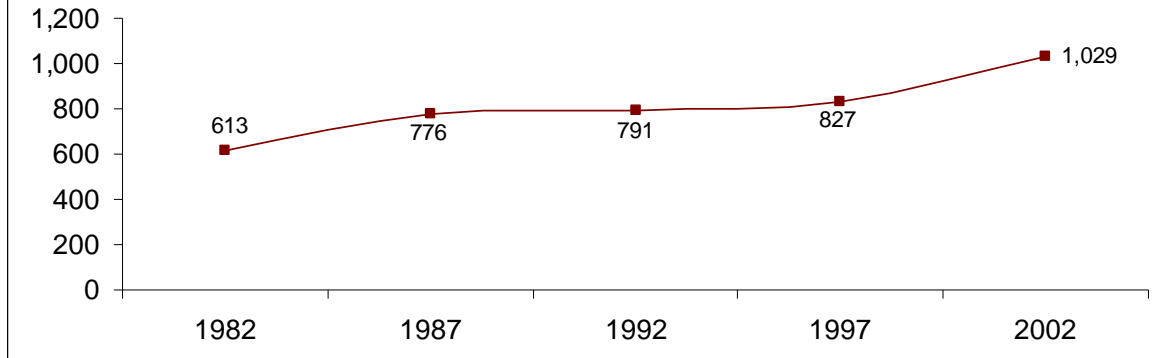
The size of the agricultural land base in Sussex County has remained relatively constant in recent years. The total amount of land in agricultural production (75,496 acres in 2002) has not significantly changed since 1982 (see *Farmland Acreage* chart below). However, the total acreage of both crop and pastureland has been steadily declining during the last twenty years. During this time, cropland has decreased by 16% while pasture land has decreased by 28%. (All statistical data was derived from the *2002 Census of Agriculture*)



There are a number of reasons that the overall agricultural land area has remained constant while the amounts of crop and pasturelands have decreased. Many of the farmland losses associated with development of farmland are offset when natural land in other parts of the County is cleared and tilled for agricultural use. Additionally, large residential properties often become eligible for farmland assessment status when landowners produce sufficient amounts of agricultural products. This trend has increased the number of individual farms in Sussex County (see *Farms* chart below), and resulted in a corresponding decrease in the average farm size (see *Average and Median Farms* chart below). Consequently, changes to the overall area of farmland in Sussex County have been small in recent years.

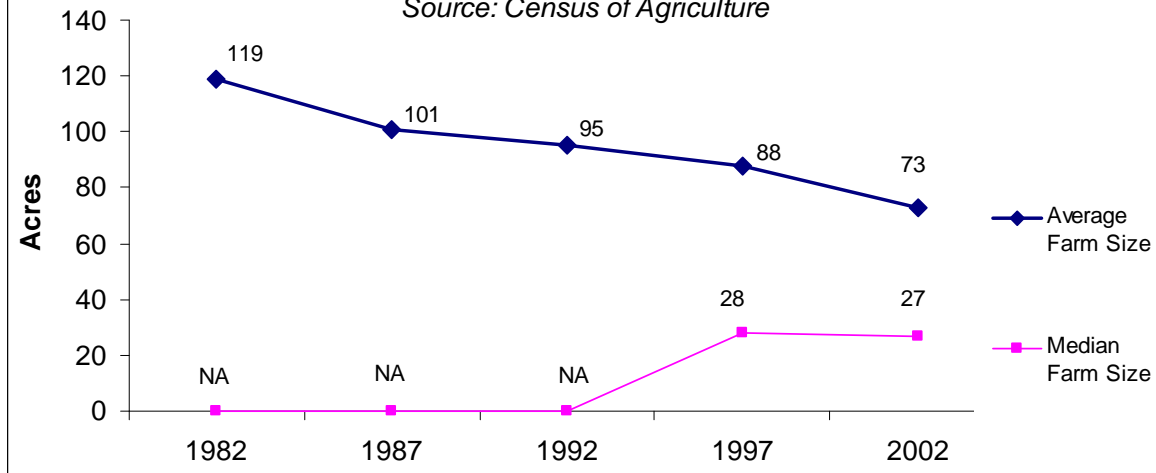
Number of Sussex County Farms: 1982 - 2002

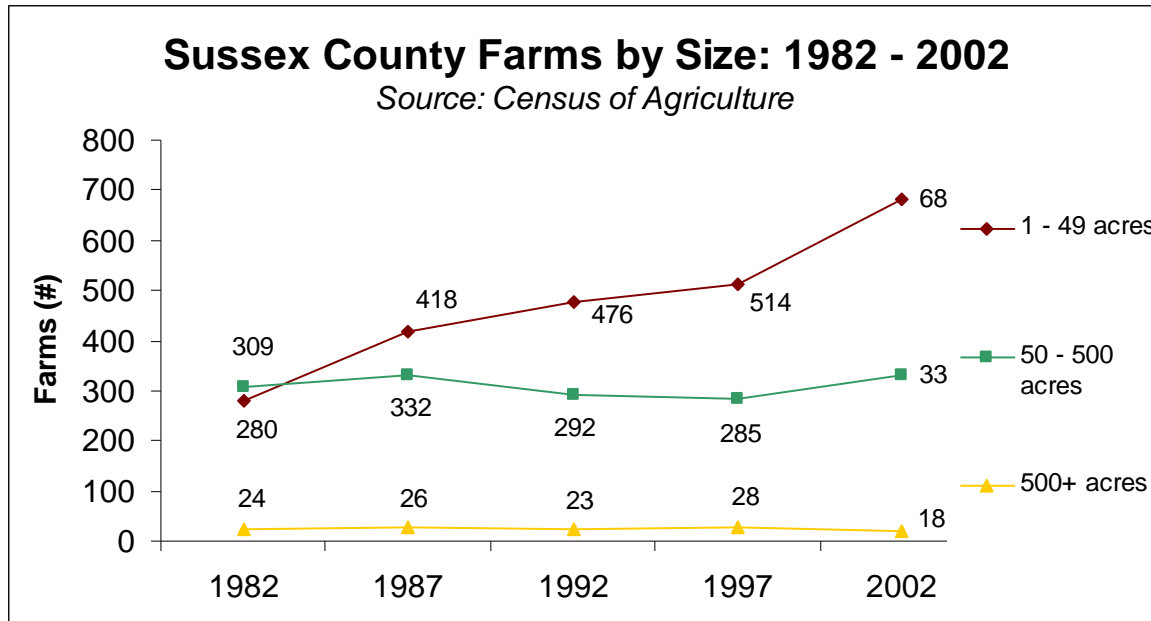
Source: Census of Agriculture



Average & Median Farm Size in Sussex County: 1982 - 2002

Source: Census of Agriculture



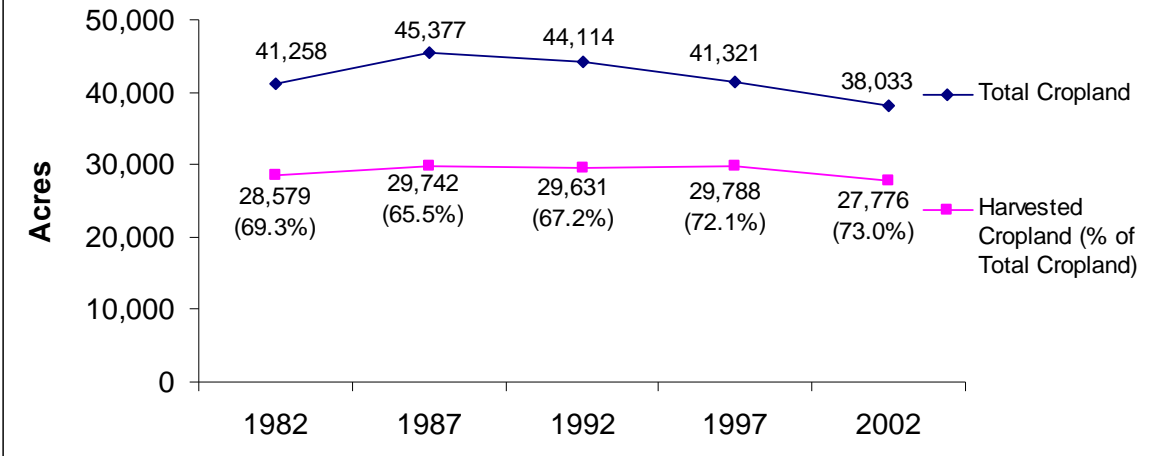


Simultaneously, former crop and livestock acreage is being transferred to “other” agricultural uses. Nurseries, floriculture operations, and equestrian facilities have become more lucrative and popular in the region and are replacing many crop and livestock farms. The overall amount of agricultural land does not change when this occurs, but the amount of crop and pasturelands declines. Increases in acreage devoted to these “other” agricultural uses are helping to compensate for losses in crop and livestock lands keeping the overall agricultural acreage constant.

There is a general concern among farmers that an increasing amount of formerly productive farmland is being abandoned. This land remains part of the County’s total agricultural land, but it is not used for pasture or crop land. Land left fallow and unmanaged promotes the spread of invasive plant species and often serves as habitat for wildlife that damages crops in nearby fields. More abandoned land also means that Sussex County farmers must increase the percentage of still active farmland that they harvest each year in order to maintain current levels of productivity. Sussex County farmers harvested crops on 27,776 in 2002. This represents a slight decrease in the total harvested acreage from previous years, but an increase in the percentage of still active cropland that was harvested (see *Cropland Harvested* chart below).

Sussex County Cropland Harvested: 1982 - 2002

Source: Census of Agriculture



Acreage and Proportionate Extent of the Soils

Sussex County, New Jersey

Map symbol	Map unit name	Acres	Percent
AhbBc	Alden silt loam, 0 to 8 percent slopes, extremely stony	2,156	0.6
AhcBc	Alden mucky silt loam, gneiss till substratum, 0 to 8 percent slopes, extremely stony	3,336	1.0
AruCh	Arnot-Lordstown complex, 0 to 15 percent slopes, very rocky	3,490	1.0
ArvD	Arnot-Lordstown-Rock outcrop complex, 15 to 35 percent slopes	7,447	2.2
ArvE	Arnot-Lordstown-Rock outcrop complex, 35 to 60 percent slopes	4,560	1.3
AtcA	Atherton mucky silt loam, 0 to 3 percent slopes	41	*
CatbA	Catden mucky peat, 0 to 2 percent slopes	9,226	2.7
ChkC	Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes	9,351	2.7
ChkE	Chatfield-Hollis-Rock outcrop complex, 35 to 60 percent slopes	13,963	4.1
ChwBc	Chippewa silt loam, 0 to 8 percent slopes, extremely stony	565	0.2
CorA	Colonie loamy fine sand, 0 to 3 percent slopes	42	*
CorB	Colonie loamy fine sand, 3 to 8 percent slopes	742	0.2
DefAr	Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded	401	0.1
DefBr	Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded	616	0.2
FaxC	Farmington-Rock outcrop complex, 0 to 15 percent slopes	3,918	1.1
FdwB	Farmington-Wassaic-Rock outcrop complex, 0 to 8 percent slopes	2,450	0.7
FmhAs	Fluvaquents, loamy, 0 to 3 percent slopes, occasionally flooded	1,256	0.4
FrdAb	Fredon-Halsey complex, 0 to 3 percent slopes, very stony	10,545	3.1
GawEh	Galway loam, 35 to 60 percent slopes, very rocky	538	0.2
HdxAb	Hazen-Hoosic complex, 0 to 3 percent slopes, very stony	8,150	2.4
HdxBb	Hazen-Hoosic complex, 3 to 8 percent slopes, very stony	22,394	6.5
HhmBc	Hibernia loam, 0 to 8 percent slopes, extremely stony	3,135	0.9
HkrgBb	Hinckley loamy coarse sand, 0 to 8 percent slopes, very stony	180	*
HkrgCb	Hinckley loamy coarse sand, 8 to 15 percent slopes, very stony	625	0.2
HncD	Hollis-Rock outcrop-Chatfield complex, 15 to 35 percent slopes	16,442	4.8
HonCb	Hoosic-Hazen complex, 8 to 15 percent slopes, very stony	1,575	0.5
HopEb	Hoosic-Otisville complex, 25 to 60 percent slopes, very stony	14,985	4.4
LacBc	Lackawanna cobbly fine sandy loam, 0 to 8 percent slopes, extremely stony	34	*
LacCc	Lackawanna cobbly fine sandy loam, 8 to 15 percent slopes, extremely stony	447	0.1
LacDc	Lackawanna cobbly fine sandy loam, 15 to 35 percent slopes, extremely stony	371	0.1
LorB	Lordstown-Wallpack complex, 0 to 8 percent slopes	55	*
LorC	Lordstown-Wallpack complex, 8 to 15 percent slopes	1,052	0.3
LorCh	Lordstown-Wallpack complex, 8 to 15 percent slopes, very rocky	1,599	0.5
LorD	Lordstown-Wallpack complex, 15 to 25 percent slopes	953	0.3
LorDh	Lordstown-Wallpack complex, 15 to 35 percent slopes, very rocky	2,123	0.6
MabEh	Manlius-Nassau complex, 35 to 60 percent slopes, very rocky	797	0.2
NauBh	Nassau-Manlius complex, 0 to 8 percent slopes, very rocky	5,922	1.7
NauCh	Nassau-Manlius complex, 8 to 15 percent slopes, very rocky	19,398	5.6
NauDh	Nassau-Manlius complex, 15 to 35 percent slopes, very rocky	19,108	5.6
NavE	Nassau-Rock outcrop complex, 35 to 60 percent slopes	6,175	1.8
OpnCh	Oquaga-Lackawanna complex, 8 to 15 percent slopes, very rocky	119	*
OpnDh	Oquaga-Lackawanna complex, 15 to 35 percent slopes, very rocky	1,952	0.6
OprC	Oquaga-Rock outcrop complex, 0 to 15 percent slopes	493	0.1



Tabular Data Version: 4
Tabular Data Version Date: 12/07/2006

* See footnote at end of table.

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Acreage and Proportionate Extent of the Soils

Sussex County, New Jersey

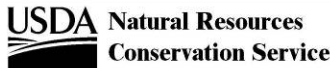
Map symbol	Map unit name	Acres	Percent
OprE	Oquaga-Rock outcrop complex, 35 to 60 percent slopes	567	0.2
PHG	Pits, sand and gravel	788	0.2
PohA	Pompton sandy loam, 0 to 3 percent slopes	555	0.2
QY	Quarry	719	0.2
RkrB	Riverhead sandy loam, 3 to 8 percent slopes	774	0.2
RnaF	Rock outcrop-Arnot-Rubble land complex, 60 to 80 percent slopes	324	*
RnfC	Rock outcrop-Farmington-Galway complex, 8 to 15 percent slopes	8,412	2.4
RnfD	Rock outcrop-Farmington-Galway complex, 15 to 35 percent slopes	17,142	5.0
RoefBc	Rockaway loam, thin fragipan, 0 to 8 percent slopes, extremely stony	463	0.1
RoefCc	Rockaway loam, thin fragipan, 8 to 15 percent slopes, extremely stony	3,884	1.1
RoefDc	Rockaway loam, thin fragipan, 15 to 35 percent slopes, extremely stony	4,285	1.2
RokB	Rockaway-Chatfield-Rock outcrop complex, 0 to 8 percent slopes	1,320	0.4
RokC	Rockaway-Chatfield-Rock outcrop complex, 8 to 15 percent slopes	3,185	0.9
RokD	Rockaway-Chatfield-Rock outcrop complex, 15 to 35 percent slopes	18,803	5.5
RooB	Rockaway-Urban land complex, thin fragipans, 0 to 8 percent slopes	481	0.1
RooC	Rockaway-Urban land complex, thin fragipans, 0 to 15 percent slopes	2,011	0.6
RooD	Rockaway-Urban land complex, thin fragipans, 0 to 25 percent slopes	1,355	0.4
ScoA	Scio silt loam, 0 to 3 percent slopes	154	*
SwfBc	Swartswood loam, 0 to 8 percent slopes, extremely stony	3,598	1.0
SwfCc	Swartswood loam, 8 to 15 percent slopes, extremely stony	9,290	2.7
SwfDc	Swartswood loam, 15 to 35 percent slopes, extremely stony	10,110	2.9
UccAs	Udifluvents, 0 to 3 percent slopes, occasionally flooded	617	0.2
UdaB	Udorthents, 0 to 8 percent slopes, smoothed	1,663	0.5
UdauB	Udorthents-Urban land complex, 0 to 8 percent slopes	1,724	0.5
UnfA	Unadilla silt loam, 0 to 3 percent slopes	73	*
UnfB	Unadilla silt loam, 3 to 8 percent slopes	365	0.1
USCHRB	Urban land-Chatfield-Rock Outcrop complex, 0 to 8 percent slopes	101	*
USCHRC	Urban land-Chatfield-Rock Outcrop complex, 0 to 15 percent slopes	911	0.3
USCHRD	Urban land-Chatfield-Rock Outcrop complex, 0 to 35 percent slopes	1,918	0.6
USFARC	Urban land-Farmington-Rock outcrop complex, 0 to 15 percent slopes	1,096	0.3
USFARD	Urban land-Farmington-Rock outcrop complex, 0 to 35 percent slopes	238	*
USFAWB	Urban land-Farmington-Wassaic complex, 0 to 8 percent slopes	146	*
USHAZA	Urban land-Hazen-Hoosic complex, 0 to 3 percent slopes	65	*
USHAZB	Urban land-Hazen-Hoosic complex, 0 to 8 percent slopes	520	0.2
USNAMB	Urban land-Nassau-Manlius complex, 0 to 8 percent slopes	261	*
USNAMC	Urban land-Nassau-Manlius complex, 0 to 15 percent slopes	519	0.2
USNAMD	Urban land-Nassau-Manlius complex, 0 to 25 percent slopes	213	*
USWUSB	Urban land-Wurtsboro-Swartswood complex, 0 to 8 percent slopes	61	*
VepBc	Venango silt loam, 0 to 8 percent slopes, extremely stony	2,284	0.7
VepCc	Venango silt loam, 8 to 15 percent slopes, extremely stony	2,068	0.6
WaahAt	Wallkill silt loam, 0 to 3 percent slopes, frequently flooded	1,160	0.3
WabBb	Wallpack fine sandy loam, aeolian mantle, 0 to 8 percent slopes, very stony	63	*
WabCb	Wallpack fine sandy loam, aeolian mantle, 8 to 15 percent slopes, very stony	776	0.2

Acreage and Proportionate Extent of the Soils

Sussex County, New Jersey

Map symbol	Map unit name	Acres	Percent
WabDb	Wallpack fine sandy loam, aeolian mantle, 15 to 35 percent slopes, very stony	1,033	0.3
WacB	Wallpack silt loam, 3 to 8 percent slopes	97	*
WacBc	Wallpack silt loam, 3 to 8 percent slopes, extremely stony	350	0.1
WacC	Wallpack silt loam, 8 to 15 percent slopes	1,331	0.4
WacCc	Wallpack silt loam, 8 to 15 percent slopes, extremely stony	677	0.2
WacD	Wallpack silt loam, 15 to 25 percent slopes	685	0.2
WacDc	Wallpack silt loam, 15 to 35 percent slopes, extremely stony	811	0.2
WATER	Water	10,427	3.0
WecBc	Wellsboro silt loam, 0 to 8 percent slopes, extremely stony	69	*
WecCc	Wellsboro silt loam, 8 to 15 percent slopes, extremely stony	242	*
WumBc	Wurtsboro loam, 0 to 8 percent slopes, extremely stony	682	0.2
WusBc	Wurtsboro-Swartswood complex, 0 to 8 percent slopes, extremely stony	7,850	2.3
WusCc	Wurtsboro-Swartswood complex, 8 to 15 percent slopes, extremely stony	8,079	2.4
WusDc	Wurtsboro-Swartswood complex, 15 to 35 percent slopes, extremely stony	3,572	1.0
Total		343,694	100.0

* Less than 0.1 percent.



Tabular Data Version: 4
Tabular Data Version Date: 12/07/2006

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¹ United States Department of Agriculture: National Agricultural Statistic Service, 2002 Census of Agriculture.

http://www.nass.usda.gov/Census_of_Agriculture/index.asp. Accessed June 2007.

² United States Department of Agriculture Soil Conservation Service in Cooperation with New Jersey Agricultural Experiment Station and Cook College, Rutgers University. *Soil Survey of Sussex County, New Jersey*. Washington, DC, 1975.

³ Natural Resource Conservation Service (NRCS). 2005 Sussex County Soil Survey. Online at: <http://soildatamart.nrcs.usda.gov/Survey.aspx?County=NJ037>. Accessed September 2007.

⁴ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. *Official Soil Series Descriptions*. <http://soils.usda.gov/technical/classification/osd/index.html>. Accessed June 2007.

⁵ Morris Land Conservancy in Cooperation with the Sussex County Agriculture Development Board. *A Comprehensive Farmland Preservation Plan for the County of Sussex*. Boonton, NJ, September 2003.

CHAPTER 2: AGRICULTURAL INDUSTRY IN SUSSEX COUNTY



The farming industry of Sussex County is an integral part of New Jersey's agricultural economy and heritage. It is the traditional hub of dairy and livestock operations in the State, and remains among the top three New Jersey counties in milk production, dairy cows, and beef cattle. Sussex County is also among the state-wide leaders in hay and apple production. (*2006 Annual Report of the New Jersey Department of Agriculture*)¹

While maintaining its preeminence in the more traditional farming practices, the agricultural industry in Sussex County has also been able to effectively diversify its activities in response to changing market conditions. The County supports thriving agritourism operations that attract thousands of visitors each year, and is also pioneering new cooperative programs in which farmers produce more "value added" products.

In addition to its importance within the State's agricultural economy, farming in Sussex County is a significant part of the local economy. Agriculture accounted for more than \$14.8 million in sales during 2002 – an amount that was dramatically influenced by the severe and statewide drought conditions that occurred that year. (*2002 Census of Agriculture*)² While this figure represents less than one percent of the County's overall business sales (*2002 Economic Census*)³, agriculture exerts a considerable economic influence through its many market linkages. Agriculture directly supports ancillary businesses, such as equipment suppliers and livestock veterinarians, whose sales are not captured within agricultural figures, but depend upon agriculture to create the necessary demand for their services.

Farms provide indirect support to the local economy as well. They offer seasonal employment opportunities for young residents and seasonal workers who, in turn, patronize local stores and businesses. Tourists who visit Sussex County to enjoy its scenic agricultural landscapes and patronize its farm stands and markets also support local restaurants and motels. The influence of these agricultural linkages on Sussex County's economy is unmistakable.

Agriculture also provides a greater economic benefit to the local community than other kinds of land uses. Farms require few, if any, municipal services while residential neighborhoods and commercial districts demand significant expenditures on road improvements, sewers, and schools. Many studies have found that New Jersey municipalities spend between \$1.04 and \$1.67 on residential developments per \$1.00 in tax revenues levied on them – a net loss to local governments. Meanwhile, towns spend

between \$0.27 and \$0.33 per \$1.00 levied on farms, which indicates that agriculture provides a net gain to local governments. (*Association of New Jersey Environmental Commissions, 2004*)⁴ In fact, farms also provide many external benefits, such as groundwater filtration and stormwater control, that local governments might otherwise have to supply.

Additionally, farms generate a positive cash flow to the local economy by selling their products to buyers outside the County, such as distributors and tourists. Local farmers spend the revenue earned from these sales locally, which supports the County's economy. Contrarily, retail stores and other non-agricultural firms that cater to local residents often send their revenues out of the County. In this way, agricultural production is preferable to other kinds of business activities because it promotes a more stable and independent local economy.

Statistical Resources

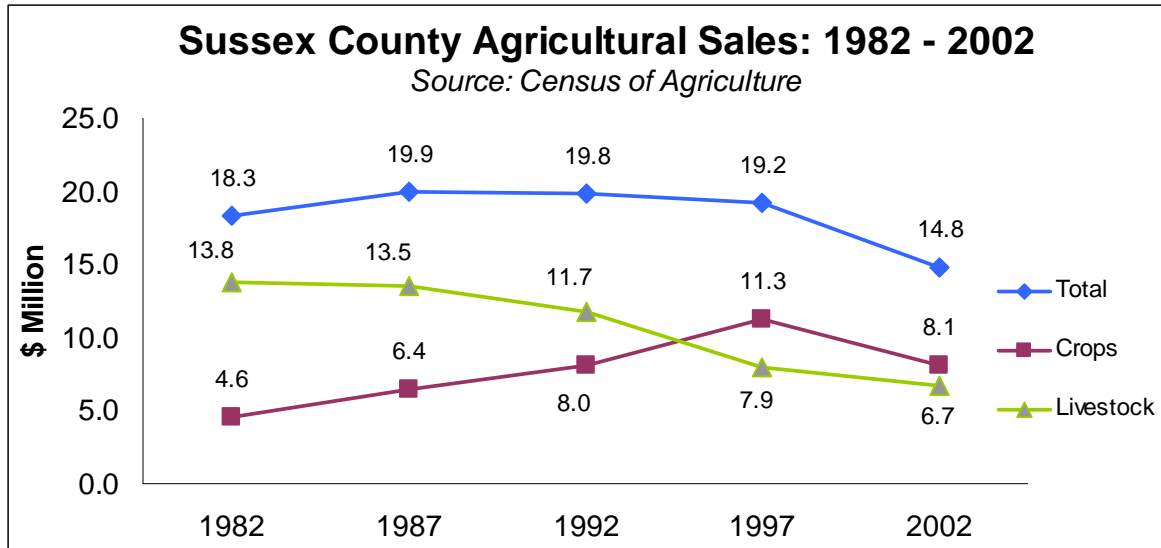
Agricultural production and market value trends were calculated using data from the United States Department of Agriculture's National Agriculture Statistics Service. (*NASS*)⁵ The agricultural yields for many products have been tabulated annually since 1953, while the yields of other products have been recorded only in more recent years. These historical trends are supplemented by data from the annual reports of the New Jersey Department of Agriculture. (*2006 Annual Report of the New Jersey Department of Agriculture*)

Trends in the market value of the products produced by Sussex County's agricultural industry are more difficult to determine. Overall market values are not compiled annually at the county level, but rather reported every five years as part of the National Census of Agriculture. The most recent set of information available through the Census of Agriculture was published in 2002. The next Census report will be available in 2008.

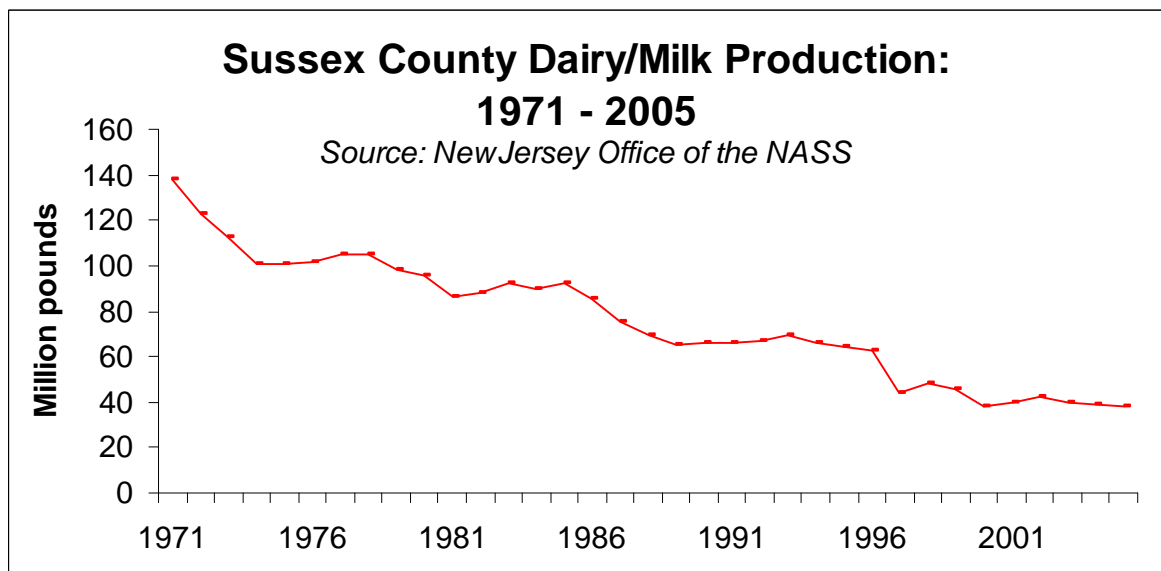
Further obscuring this trend is the additional susceptibility to sampling error that occurs with less frequent data observations. For example, the last Census report was taken in 2002 – a year in which New Jersey experienced severe drought conditions that greatly reduced the agricultural output of many crops. This variability should also be considered when interpreting market value data.

Agricultural Production and Market Trends

The Census of Agriculture classifies agricultural activities in two categories: "crops, including nursery and greenhouse" and "livestock, poultry and their products". Crop sales in Sussex County fell 28% to \$8.1 million in 2002 from \$11.3 million in 1997. This sudden drop in the County's upward-trending crop sales is most directly attributable to abnormally dry weather conditions in 2002. Sales of "Livestock, poultry and their products" dropped 15% from \$7.9 million in 1997 to \$6.7 million during 2002, showing a continuing decline in sales from this sector (see *Agricultural Sales* chart below).

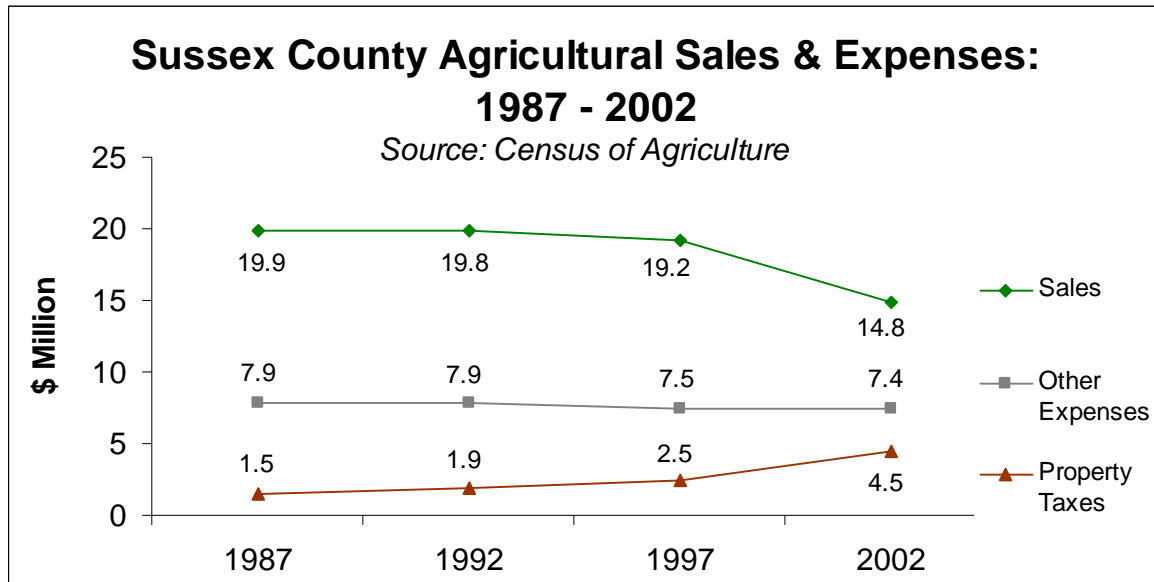


Dairy has been the dominant agricultural industry in Sussex County throughout its history. It remains the largest single contributor to agricultural sales in Sussex County today accounting for nearly \$4.6 million of the County’s livestock sales during 2002. In spite of this, dairy production has been in decline since the early 1960’s. (*1975 Sussex County Soil Survey*⁶; *2005 Sussex County Soil Survey*) The County’s best year on record in terms of milk production was 1971 when it produced over 138 million pounds, while its worst year on record was 2005 when it produced less than 38.4 million pounds (see *Milk Production* chart below). (NASS)



Decreasing dairy production has been largely influenced by unfavorable market conditions. A combination of high input costs, historically low milk prices, and weather related losses in 2005 created a scenario that the New Jersey Department of Agriculture likened to “a perfect storm”. (*2006 Annual Report of the New Jersey Department of Agriculture*)

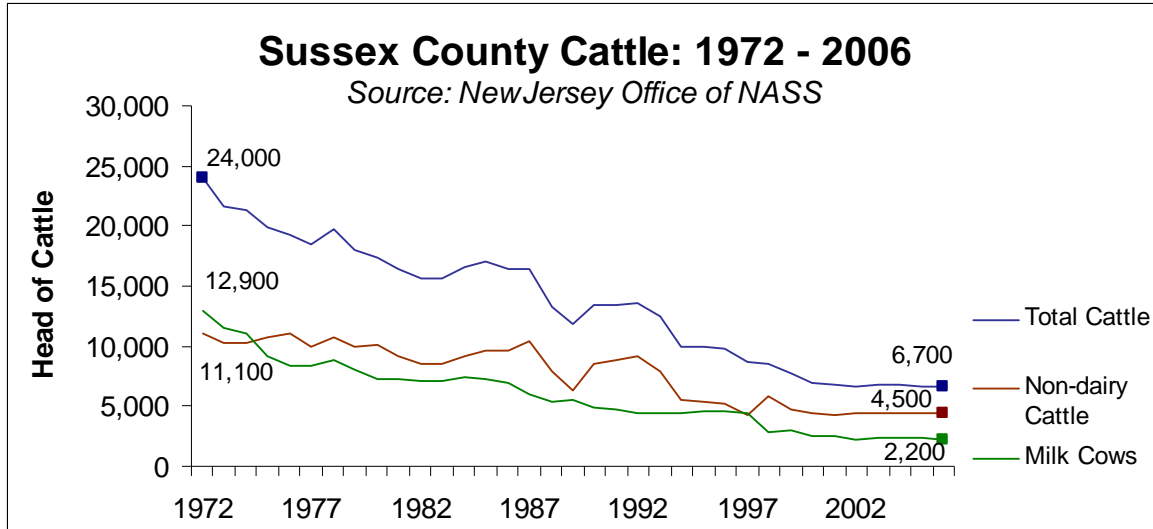
Among the most significant input costs to Sussex County dairy farmers are high property taxes (see *Agricultural Expenses* chart on page 2-10). Dairy farms require more extensive plots of land than most agriculture operations, and rising taxes affect them disproportionately. As property taxes continue to occupy more and more of farmers' sales (see *Sales & Expenses* chart below), alternative uses of dairy land will be more economically attractive to many farmers.



Erosion of the local support infrastructure has affected dairy producers as well. After the New York demand for Sussex County dairy products dropped during the 1960's, many dairy support businesses relocated or closed. Consequently, there are few remaining creameries in Sussex County, which forces many dairy producers to ship their products considerable distances to be processed. There is also a lack of livestock veterinarians in the region. The expenses incurred by dairy farmers due to inadequate support services have influenced those who wish to remain in agriculture to transition their operations towards less infrastructure-intensive practices, such as corn or wheat production. These factors present a significant danger to the continued success of dairy farms in Sussex County.

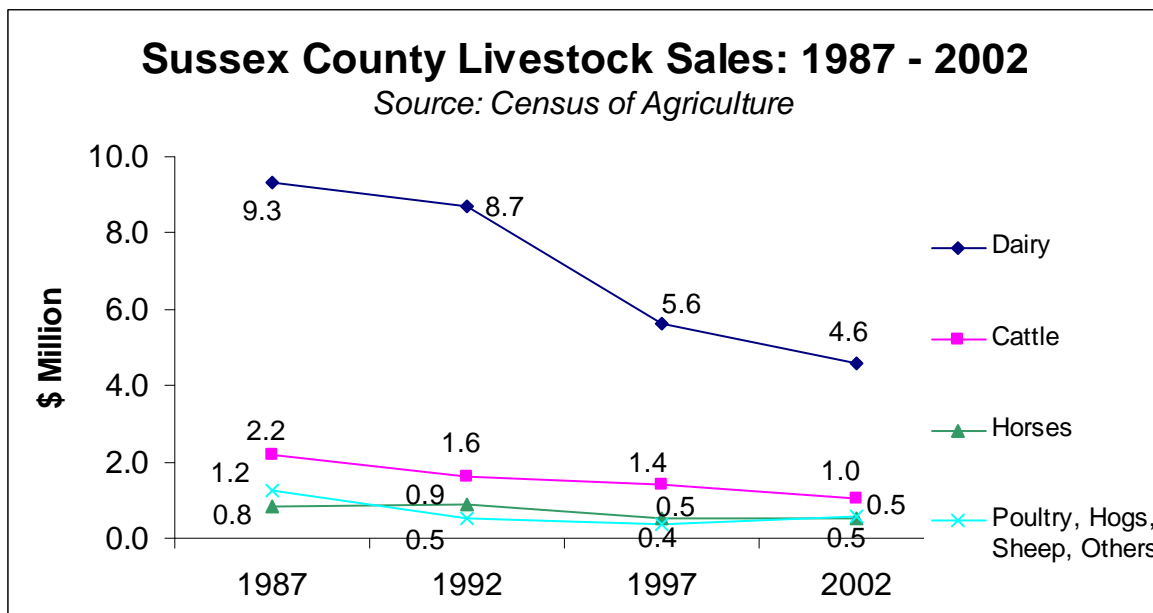
Non-dairy cattle operations comprise a significant portion of the County's livestock activity as well. The number of non-dairy cattle in Sussex County (4,500) was more than twice the number of dairy cattle (2,200) during 2006, and more farms engaged in the sale of cattle (182 in 2002) than any other livestock activity. Sales of cattle and their products exceeded \$1.0 million in 2002, down from previous Census years (see *Livestock Sales* chart below).

The sale of cattle is related to the dairy industry and its demand for these animals. As the dairy industry in Sussex County has waned, so has the number of cattle in the County (see *Sussex County Cattle* chart below). However, the comparatively lower land intensity of non-dairy cattle operations may encourage dairy farmers in Sussex County to explore alternative uses for their herds, such as beef. If land values continue to increase, it is likely that more dairy farms will begin to utilize their cattle in different ways.

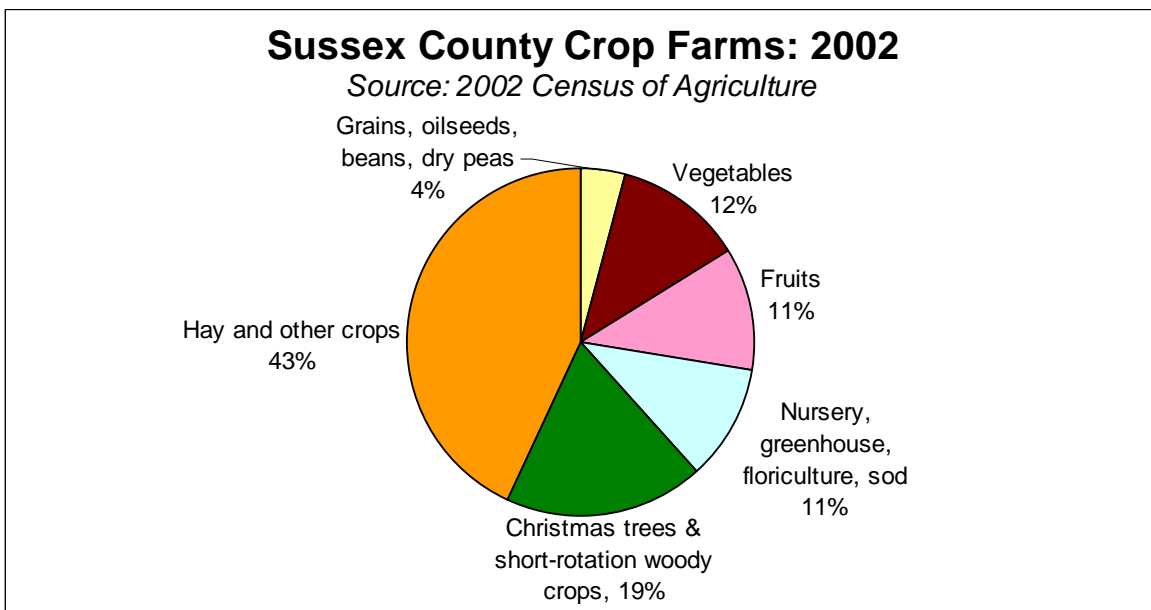
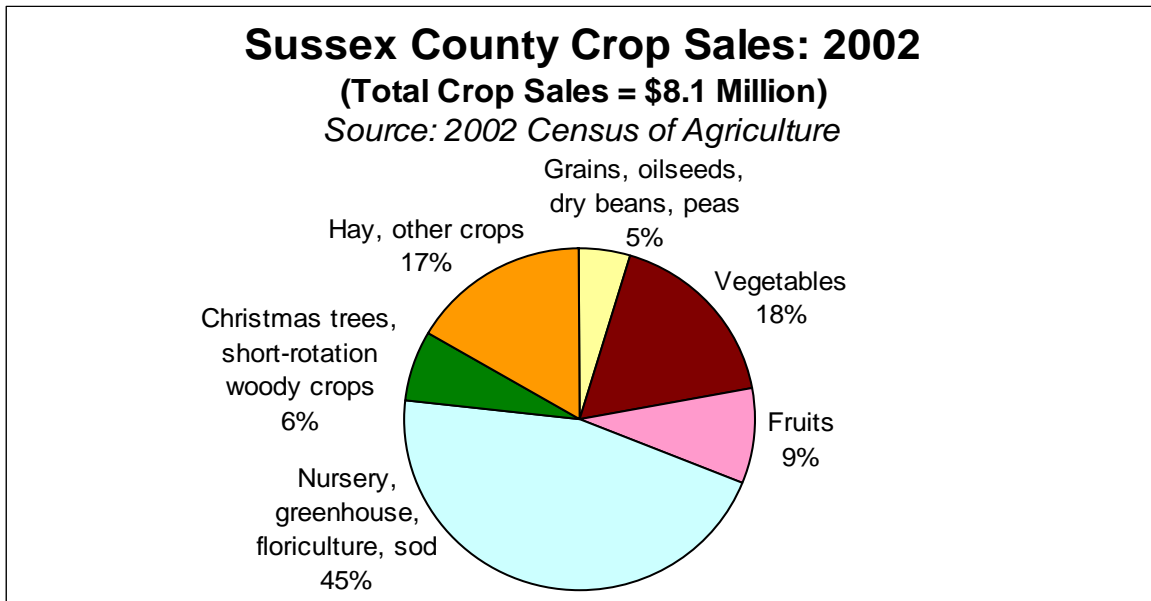


Horses, as well as horse goods and services, are popular agricultural products in Sussex County. Their share of the County's overall agricultural sales is small (\$525,000 in 2002), but they offer more economic linkages, in the forms of riding lessons and Agritourism, than most other agricultural products. Also, horse farms in Sussex County are moving away from the breeding of horses and more towards pasturing and stabling. Revenues from these activities are not reflected by agricultural sales numbers, but provide a significant contribution to the financial viability of these farms.

Other livestock produced by Sussex County farmers include poultry (\$274,000), sheep and goats (\$153,000), hogs (\$74,000), and other animals (\$71,000). Most of the farms that support these animals do so to supplement other agricultural or economic activities. Consequently, few operations rely upon them as their sole source of agricultural income.

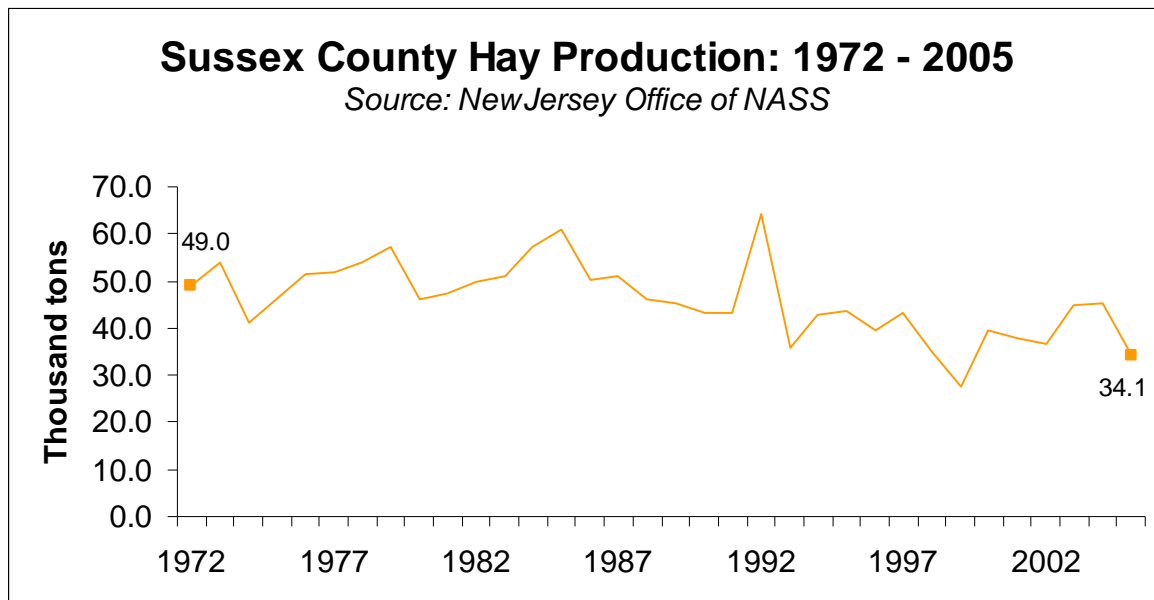


Crops in Sussex County generated \$8.1 million in sales during 2002. (see *Crop Sales* chart below) Among the County’s crops, nursery and greenhouse products yielded the most sales with nearly \$3.7 million (45% of all crop sales). Sales from this sub-sector steadily increased during the 1980’s and 1990’s, reaching a peak of nearly \$6.0 million in 1997. The sales of nursery / greenhouse products and vegetables (the County’s second highest grossing sub-sector with \$1.5 million in 2002 sales) have since declined. These declines are due to drought-related losses in the 2002 Census year and growing costs associated with maintaining these operations. Nursery/greenhouse and vegetable crops – including sweet corn, tomatoes, and pumpkins – are among the most input-intensive and expensive crops to grow. They often require substantial nutrient and irrigation inputs, artificially created growing conditions and agricultural labor in order to harvest and process them.



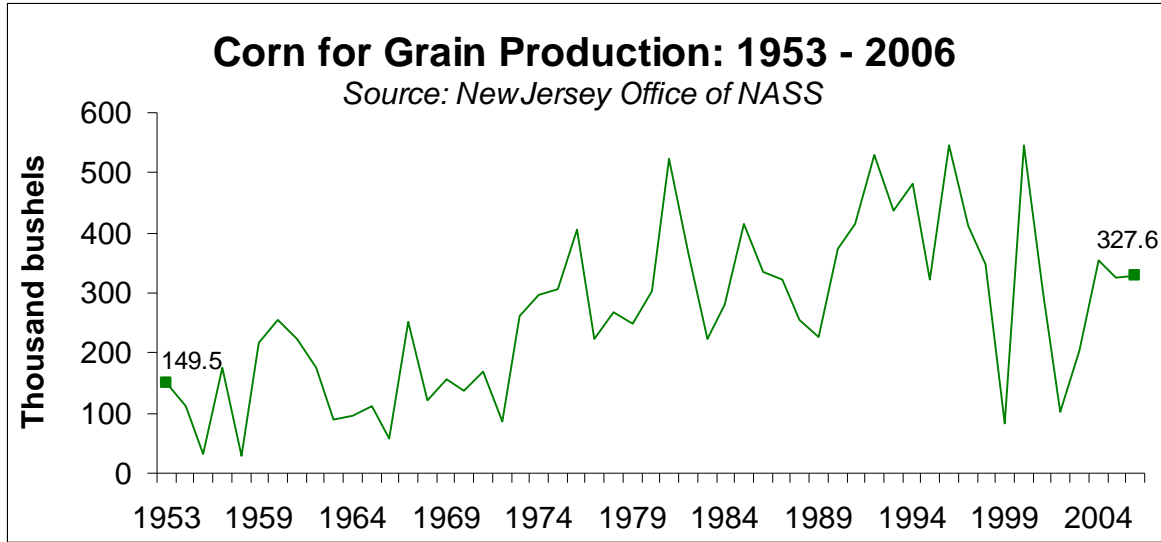
The most commonly produced field crop in Sussex County is hay. Hay is grown by 43% of the County's farms and is planted on nearly 80% of the County's tilled cropland (21,195 acres in 2002). Sussex County produced 36,700 tons of hay in 2002, making it the second highest producer of hay in the State behind Hunterdon County (see *Hay Production* chart below). Hay is an excellent crop to grow in Sussex County because it can be easily farmed on the County's rolling hills and soils. It also does not require many of the fertilizer and irrigation inputs that are necessary with other field crops. Increases in the costs of these inputs have encouraged more farms in Sussex County to rely heavily on hay production (see *Crop Farms* chart above and *Production Expenses* chart on page 2-11).

Sales of hay from Sussex County totaled only \$1.4 million in 2002. Much of the County's hay is produced for horse and livestock operations that, in turn, use it as feed for their animals. Consequently, this hay is never sold or recorded in the Census sales figures, and plays a larger role within the local agricultural industry than its sales numbers indicate.

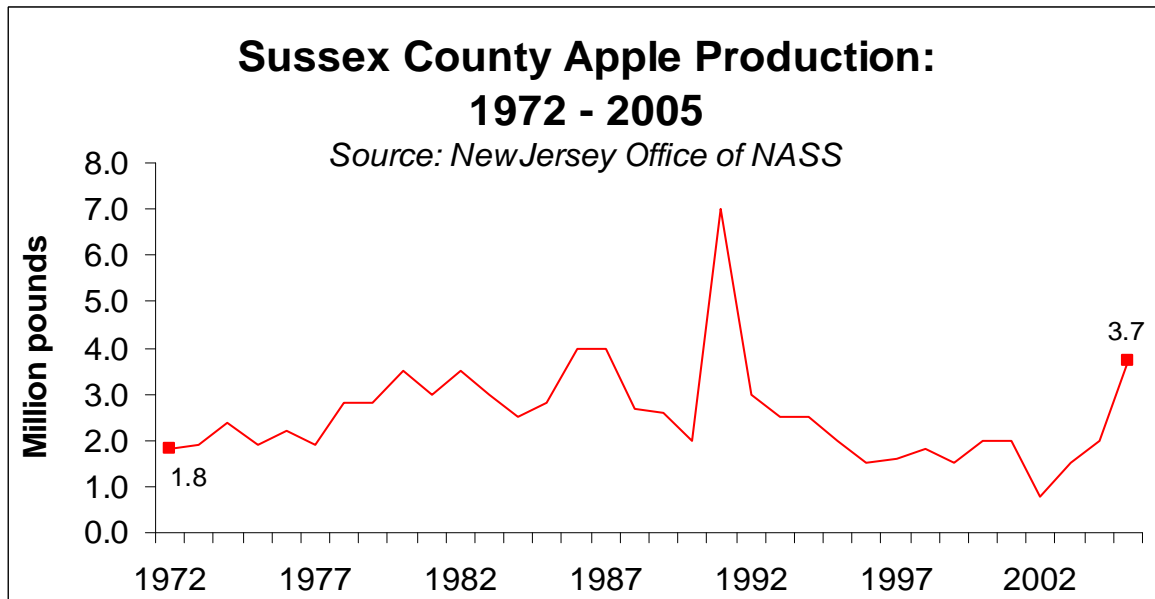


Corn for grain has been a staple crop of the agricultural industry in Sussex County. Behind hay, corn occupies the most tilled acreage in the County (4,059 acres in 2002). Similar to hay, corn requires relatively low input costs and grows well in Sussex County's soils. It is also commonly grown by livestock farms and used as feed for their animals, causing much of the County's corn production to be excluded from Census sales figures.

Corn for grain sales fell to \$382,000 in 2002; however, this figure is not representative of the County's regular corn sales. Corn production is closely related to rainfall, and large annual fluctuations are common. Severe drought conditions during the 2002 Census year were observed throughout the State, yielding one of the smallest corn harvests in recorded history (101,000 bushels). Production during the past three years has exceeded 2002's figures by more than three times (see *Corn for Grain Production* chart below).



Fruit production in Sussex County is dominated by apples and peaches. Together, these crops grossed roughly \$700,000 in sales during 2002. Their yields were heavily affected by drought conditions, however, which reduced output to its lowest level in recorded history – 800,000 pounds (see *Apple Production* chart below). (NASS) The apple industry has recovered strongly from the drought, and has produced larger harvests since 2002. Sussex County now ranks fourth among New Jersey counties in terms of apple production (3.7 million pounds in 2005). Fruit farms have excellent potential to utilize value-added and Agritourism markets in order to boost their agricultural yields. Consequently, their growth is expected to continue throughout Sussex County.



Agricultural Support Services and Related Industries

Agricultural support businesses are scarce in Sussex County. Small concentrations of agriculture-oriented businesses exist near Newton and Sussex Borough, but farmers in Sussex County primarily rely upon out-of-state and mail order businesses for their supplies. Necessary processing facilities, such as creameries, meat processing plants, and lumber mills, are limited within Sussex County as well.

Some farmers find that reliance upon out-of-state suppliers and non-local processing facilities imposes high transportation costs that cut deeply into the profitability of their operations. Consequently, Sussex County's farmers have become adept at minimizing the need for many repair services by fixing most mechanical problems themselves. Farmers tend to specialize in agricultural repair and supplement their incomes by offering their services to other farmers.

Sussex County farmers benefit from a variety of non-business support services that work to maintain agricultural viability in the County. Sussex County farmers have the support of many non-business organizations including: the Sussex County Board of Agriculture, the New Jersey Farm Bureau, Rutgers Cooperative Extension, 4-H, Future Farmers of America, Sussex County Soil Conservation District, Natural Resource Conservation Service, and the Sussex County Farm and Horse Show / New Jersey State Fair. *Chapter 8* contains a more thorough discussion of these groups and their efforts.

There are numerous other reference materials and websites that provide listings of other agricultural organizations that provide assistance to farmers. These include Rutgers Cooperative Extension of Salem County Green Pages (<http://salem.rutgers.edu/greenpages/services.pdf>), and the Directory of New Jersey Agricultural Organizations published yearly by the NJ Department of Agriculture

These organizations work together to undertake various initiatives that substantively improve the County's agricultural industry. One such initiative – the Sussex County Dairy project – began as a collaborative effort between Rutgers Cooperative Extension, the New Jersey Department of Agriculture (NJDA), and the Sussex County Board of Agriculture to increase the profitability of Sussex County's dairy industry. It has since published studies promoting and outlining the necessary steps for establishing a milk processing facility in or near the County. The Agricultural Heritage Center at the Lusscroft Farm in Wantage Township is the product of a similar citizen-driven initiative aimed at preserving buildings on the historical farm and raising awareness of agricultural issues in the region. The project is currently seeking additional funding sources and refining its plans for the site.

Perhaps the most significant support service available to Sussex County farmers is its exceptional Agritourism industry. Sussex was the first county in New Jersey to develop a county-wide Agritourism program. Its goal is to bolster farmers' profitability by advertising local produce and farm markets and encouraging the public to enjoy the County's various agricultural resources. Through this program, the Sussex County

Agriculture Development Board (CADB) has developed an Agritourism brochure entitled “The Four Seasons of Agriculture in Sussex County”. The current brochure lists over 111 Sussex County farms to visit during all seasons, and targets markets in New York, New Jersey, and Connecticut. The County’s Agritourism website (www.sussexfarmvisits.com) serves as a clearinghouse for information about visiting Sussex County’s farms. Additionally, the CADB and staff work closely with the Sussex County Chamber of Commerce Tourism Committee and the Skylands Tourism Council to further these goals. Sussex County’s efforts to promote Agritourism have been extraordinarily successful. Sussex County led the State in recreational sales from farm activities in 2002 (\$231,000) and sold \$920,000 worth of products directly to consumers for human consumption (from farm stands and markets). (NASS) The Food Policy Institute at Rutgers University⁷ reports that 93% of farmers in the northern region of the State (including Sussex County) consider Agritourism “very important” to the future economic viability of farming their counties.

The aforementioned revenues are generated from tourism-related endeavors such as farmers’ markets and local farm stands. The Sussex County Farmers’ Market is held at the Olde Lafayette Village – a commercial shopping area at the intersection of Routes 94 and 15 in Lafayette Township for approximately 18 weeks each year. This location allows farmers to sell their products in a popular and highly trafficked commercial setting, increasing their visibility and ability for direct marketing. Sussex County also hosts the annual New Jersey State Fair, which regularly attracts over 200,000 visitors and provides an important showcase for Sussex County agriculture. The County contains more than 30 farm stands and roadside markets that sell crops and value-added products directly to the public. (*New Jersey Department of Agriculture – Jersey Fresh website*)⁸ It also contains 111 farms that are open to the public. (“*Four Seasons of Agriculture in Sussex County*”)

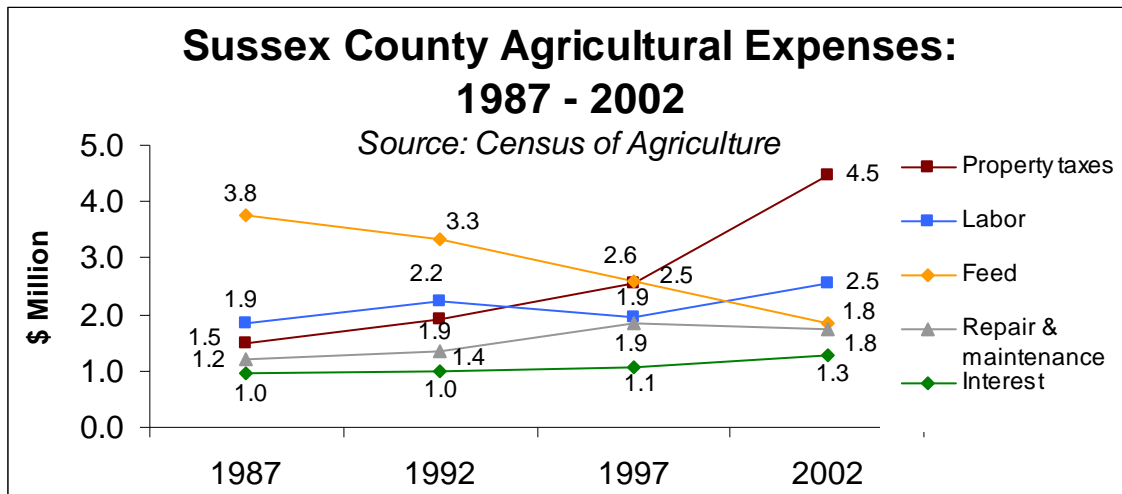
Future of Agriculture

The future of agriculture in Sussex County is shaped by market forces and social trends that are occurring throughout New Jersey and the Tri-state metropolitan region. Among the most substantial trends that are shaping Sussex County agriculture is the decline in the dairy market. Dairy occupies a foundational role in Sussex County’s agricultural industry, and its continued deterioration will have various secondary impacts. Most notably, a continuing dairy decline will result in more of the County’s dairy and livestock farmers to transition towards other forms of agriculture. Consequently, the grain and hay farms that support them will shift as well. Strong support for efforts such as that to establish a local dairy processing facility make it unlikely that dairy farms will disappear from the County. However a concerted effort is necessary to sustain dairy’s dominance in the County.

Another challenge facing Sussex County farmers is increasing land prices and property taxes (see *Agricultural Expenses* chart below). (*2002 Census of Agriculture*) This trend dictates that farm operations will become smaller and occupy less land. (*New Jersey Department of Agriculture, 2007*)⁹ However, farmers are currently trying to meet this challenge by producing goods with higher rates of return on their smaller plots of land. Farmers are transitioning towards less land-intensive products such as nursery goods, farm

stand merchandise, and equine services. These types of farming activities are on the rise in Sussex County, and are expected to continue growing.

Uncertain and inconsistent weather conditions complicate farming in Sussex County and throughout New Jersey. Widely varying weather patterns, such as those of the past ten years, make it difficult for farmers to optimize their agricultural activities. Sussex County’s staple corn and hay crops are highly dependent upon adequate, but not excessive, precipitation during the summer and autumn months. Dry years, such as 1999 and 2002, are associated with poor crop development and reduced yields. Irrigating crops to minimize drought-related losses is not a viable option for most of Sussex County’s farmers due to poor groundwater resources and high infrastructure costs. Conversely, wet and cloudy years, such as 2003 and 2004, complicate harvesting and hinder crop development. The timing of precipitation is also critical with the combination of moderately rainy conditions during the growing seasons and cool, dry conditions during harvest seasons being optimal. Annual weather conditions have a strong influence on the types of crops that are planted and, consequently, the economic viability of local farmers.



The demographics of farmers in Sussex County are shifting, too. Young farmers are being lured away from the agricultural industry by higher paying opportunities in other employment sectors. They are also being discouraged from entering the farming business by high land costs created by growing demand from developers and landowners who practice agriculture only as a secondary occupation or hobby. Consequently, fewer young people are becoming farmers, and the average age of farmers in Sussex County is increasing. Sussex County is working to address this challenge by exploring ways to attract new, young farmers and prevent the conversion of active agricultural land into non-agricultural uses. Specifically, the County has aggressively marketed its Agritourism resources and promoted the N.J. Department of Agriculture’s Farm Link program.

Overall, the outlook for agriculture in Sussex County is positive. The County’s agricultural industry responds quickly to market demands and continues to evolve as its support systems shift and its economic base changes. Innovation is second-nature to Sussex County’s farmers, and many of the County’s farming operations have already diversified

and stabilized their products in response to changing industry and market conditions. Agritourism facilities such as farm stands, pick-your-owns, and corn mazes are expected to continue thriving as the County's residential population grows and the market for these types of services expands. Value-added revenue streams from niche products such as wine, organic produce, and farm stand goods will continue increasing as well. The various agricultural organizations and governmental agencies in the County are working to make this transition easy for most farmers, and promise to continue promoting innovations that will sustain and enhance the growth of agriculture in Sussex County.

¹ New Jersey Department of Agriculture. New Jersey Agriculture 2006 Annual Report. www.state.nj.us/agriculture/pdf/06AnnualReport.pdf.

² United States Department of Agriculture: National Agricultural Statistics Service, 2002 Census of Agriculture. www.nass.usda.gov/Census_of_Agriculture/index.asp. Accessed June 2007.

³ United States Bureau of the Census. 2002 Economic Census – Sussex County, New Jersey. www.census.gov/econ/census02/data/nj/NJ037.HTM. Accessed September 2007.

⁴ Association of New Jersey Environmental Commissions. Open Space is a Good Investment. 2004.

⁵ New Jersey Office: National Agriculture Statistics Service. www.nass.usda.gov/Statistics_by_State/New_Jersey/index.asp. Accessed June 2007.

⁶ United States Department of Agriculture Soil Conservation Service in Cooperation with New Jersey Agricultural Experiment Station and Cook College, Rutgers University. *Soil Survey of Sussex County, New Jersey*. Washington, DC, 1975.

⁷ Schilling, B. et al. *The Opportunity for Agritourism Development in New Jersey*. Food Policy Institute at Rutgers University. October 2006.

⁸ Jersey Fresh. State of New Jersey Department of Agriculture. www.state.nj.us/jerseyfresh/. Accessed June 2007.

⁹ New Jersey Department of Agriculture. "2007 Economic Development Strategies." www.nj.gov/agriculture/conventions/2007/strategies.html. Accessed September 2007.

CHAPTER 3: THE LAND USE PLANNING CONTEXT IN SUSSEX COUNTY



Historical Land Use Patterns

In Sussex County, geography and history have combined to form complex and evolving land use patterns. The natural geography of Sussex County greatly stimulated European settlement. During the pre-Revolutionary era, agriculture and mining were the region's driving socio-economic forces. Abundant resources of fertile land and metal-rich mountainsides were both readily available in Sussex County. However, the foundation of Sussex County's development was laid prior to European colonization when Native Americans established a system of trails between different parts of the region. These trails were restricted mostly to river valleys and mountain passes by the region's rolling topography, which formed formidable boundaries to land transportation. They later served as paths into the wilderness for colonists, and became magnets for European settlement.

For these reasons, Sussex County was settled by two different groups in two different areas. The first European settlement in Sussex County was made by the Dutch in the Upper Delaware Valley. The County's first village – Minisink – was established during the early 1700's near the Montague/Sandyston border. It helped support eastbound shipments of copper along a former Native American trail (Old Mine Road) from Pahaquarry in Warren County to Kingston, New York. (*Decker, 1942*)¹ Settlers quickly took advantage of the Valley's fertility and moved agricultural products eastwards by the same route. (*2003 Sussex County Open Space & Recreation Plan*)² However, they were virtually cut off from larger acreages of fertile farmland to the south by the Kittatinny Ridgeline. Consequently, the development of the Upper Delaware Valley has been more closely associated with that of southern New York than New Jersey.

On the other side of the Kittatinny Ridgeline, English and German settlers migrated to Sussex County from the south and east along different trails and established agricultural homesteads there. Newton – the County's largest town – was situated at the convergence of three major trails, and was declared the County seat in 1753. (*2003 Sussex County Open Space & Recreation Plan*)

Trails remained the primary stimulus for growth until more modern transportation routes, such as the Morris Canal and railroad lines, began to crisscross the County during the 1800's. These high-capacity routes allowed for heavier products such as pork, dairy, and iron ore to be shipped out of Sussex County. Towns formed around the railroad hubs at Andover, Sussex, and Branchville where agricultural products were loaded onto trains

bound for markets in eastern New Jersey and New York City. Improved transportation access also attracted industrial operations and their workers to Sussex County. Railroads served the productive mining towns of Franklin and Ogdensburg while the Morris Canal serviced the settlement at Andover Forge (Waterloo Village). (*2003 Sussex County Open Space & Recreation Plan*)

Agriculture replaced mining as the main economic force in Sussex County during the late 1800's. Competition from newly accessible iron deposits in the Midwest caused most of the region's mines to close while the County's proximity to the growing markets in New York prompted demand for perishable agricultural goods, especially dairy products. The region's dairy industry boomed during this time. Perishable agricultural products could be swiftly loaded and shipped via railroad to the New York markets before they spoiled. Sussex County's rolling landscape of hills and grasslands were particularly well-suited to dairy production as well. The dairy farmers' success prompted growth in field crop agriculture as well. The Kittatinny Valley and parts of the Highlands ridgeline were extensively cultivated.

The County's population became more dispersed in its increasingly agricultural landscape. The region's trail system expanded into a more intricate road network that serviced many far-flung areas and connected them to one another. However, significant concentrations of commercial, industrial, and residential land uses persisted in the transportation hubs at Newton, Franklin, and Sussex Borough. This agrarian, centers-based land use pattern, with development in existing towns and agricultural or natural areas surrounding them, remained prevalent in Sussex County through the mid-twentieth century. Then, residential development expanded westward from New York City causing the County's population to grow by more than 40% during the 1950's (see *Population Table* below). (*Workforce New Jersey Public Information Network website*)³; (*American Fact finder website*)⁴

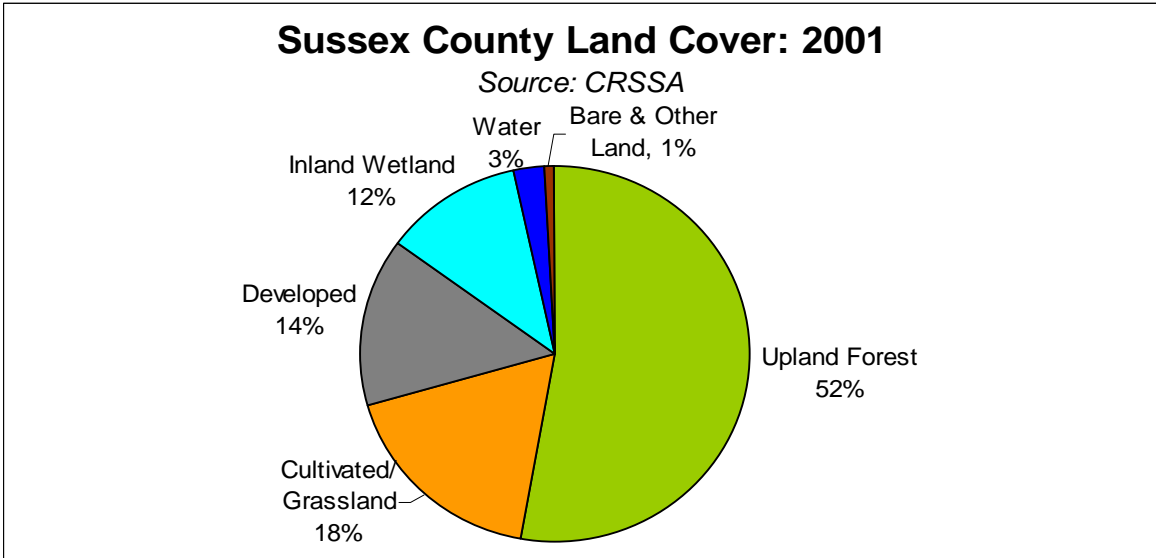
A number of factors contributed to the County's rapid growth during this decade. Government incentives encouraged the construction of single-family homes, causing developers to seek out larger and cheaper parcels of land on which to build. Simultaneously, the nation began constructing Interstate highways, which greatly increased the ease of living in rural communities far from traditional employment centers. Sussex County contained the necessary combination of inexpensive land and automobile accessibility that promoted rapid growth. Large subdivisions in the County's eastern municipalities created the demand for a more expanded road network. New arterial highways, such as Interstate 80, made Sussex County even more automobile accessible.

Residential and road construction perpetuated one another during the 1960's and 1970's. Between 1960 and 1980, Sussex County added nearly 67,000 residents and grew by 136%. Towns that were closest to the job centers and highways to Morris County and New York City began to transform from rural, agricultural areas into bedroom communities. Although growth occurred throughout Sussex County, its eastern municipalities – Vernon, Hardyston, Sparta, Hopatcong, and Byram – experienced some of the most dramatic increases. For example, Vernon added roughly 14,000 residents between 1960 and 1980, which increased its population by almost eight times (see *Population table*).

Sussex County Population: 1930 – 2000

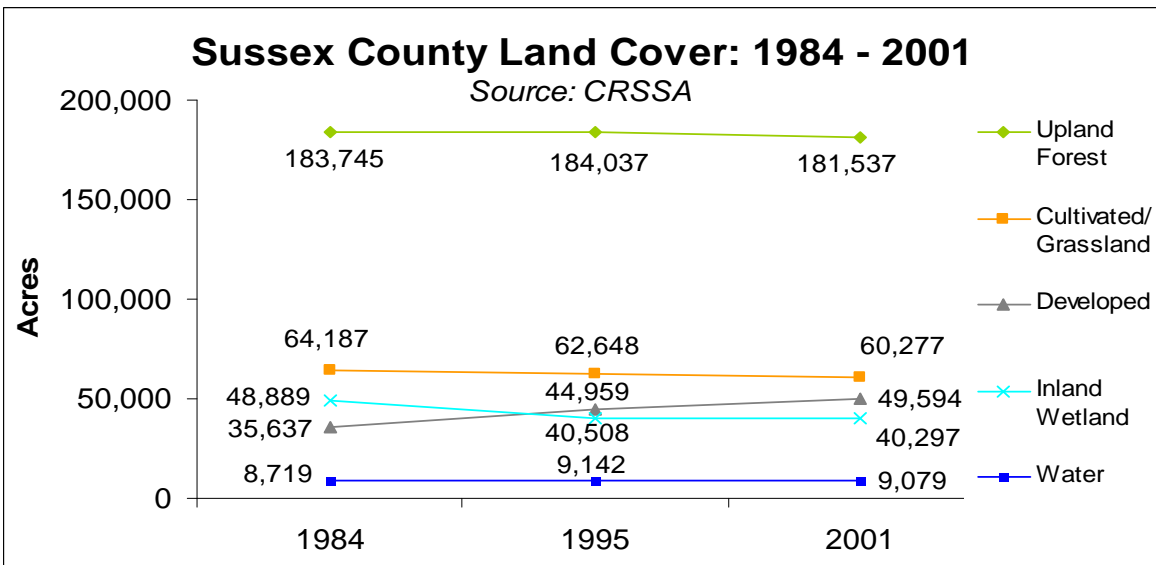
MUNICIPALITY	1930	1940	1950	1960	1970	1980	1990	2000
Andover Borough	479	512	560	734	813	892	700	658
Andover Township	496	591	1,052	2,177	3,040	4,506	5,438	6,033
Branchville Borough	665	715	810	963	911	870	851	845
Byram Township	245	373	761	1,616	4,592	7,502	8,048	8,254
Frankford Township	1,074	1,244	1,530	2,170	2,777	4,654	5,114	5,420
Franklin Borough	4,176	4,009	3,864	3,624	4,236	4,486	4,977	5,160
Fredon Township	412	478	584	804	1,372	2,281	2,763	2,860
Green Township	539	540	596	854	1,343	2,450	2,709	3,220
Hamburg Borough	1,160	1,116	1,305	1,532	1,820	1,832	2,566	3,105
Hampton Township	581	611	668	1,174	2,091	3,916	4,438	4,943
Hardyston Township	946	1,034	1,279	2,206	3,499	4,553	5,275	6,171
Hopatcong Borough	534	660	1,173	3,391	9,052	15,531	15,586	15,888
Lafayette Township	735	803	836	1,100	1,202	1,614	1,902	2,300
Montague Township	581	621	602	879	1,131	2,066	2,832	3,412
Newton Town	5,401	5,533	5,781	6,563	7,297	7,748	7,521	8,244
Ogdensburg Borough	1,138	1,165	1,169	1,212	2,222	2,737	2,722	2,638
Sandyston Township	610	651	829	1,019	1,303	1,485	1,732	1,825
Sparta Township	1,316	1,729	3,021	6,717	10,819	13,333	15,157	18,080
Stanhope Borough	1,089	1,100	1,351	1,814	3,040	3,638	3,393	3,584
Stillwater Township	706	679	816	1,339	2,158	3,887	4,253	4,267
Sussex Borough	1,415	1,478	1,541	1,656	2,038	2,418	2,201	2,145
Vernon Township	1,279	1,407	1,548	2,155	6,059	16,302	21,211	24,686
Walpack Township	178	207	204	248	384	150	67	41
Wantage Township	2,075	2,376	2,543	3,308	4,329	7,268	9,487	10,387
TOTAL	27,830	29,632	34,423	49,255	77,528	116,119	130,943	144,166
GROWTH RATE**		6.5%	16.2%	43.1%	57.4%	49.8%	12.8%	10.1%
** - Population increase over previous 10-year period								
<i>Sources: Workforce New Jersey Public Information Network website; American Factfinder website</i>								

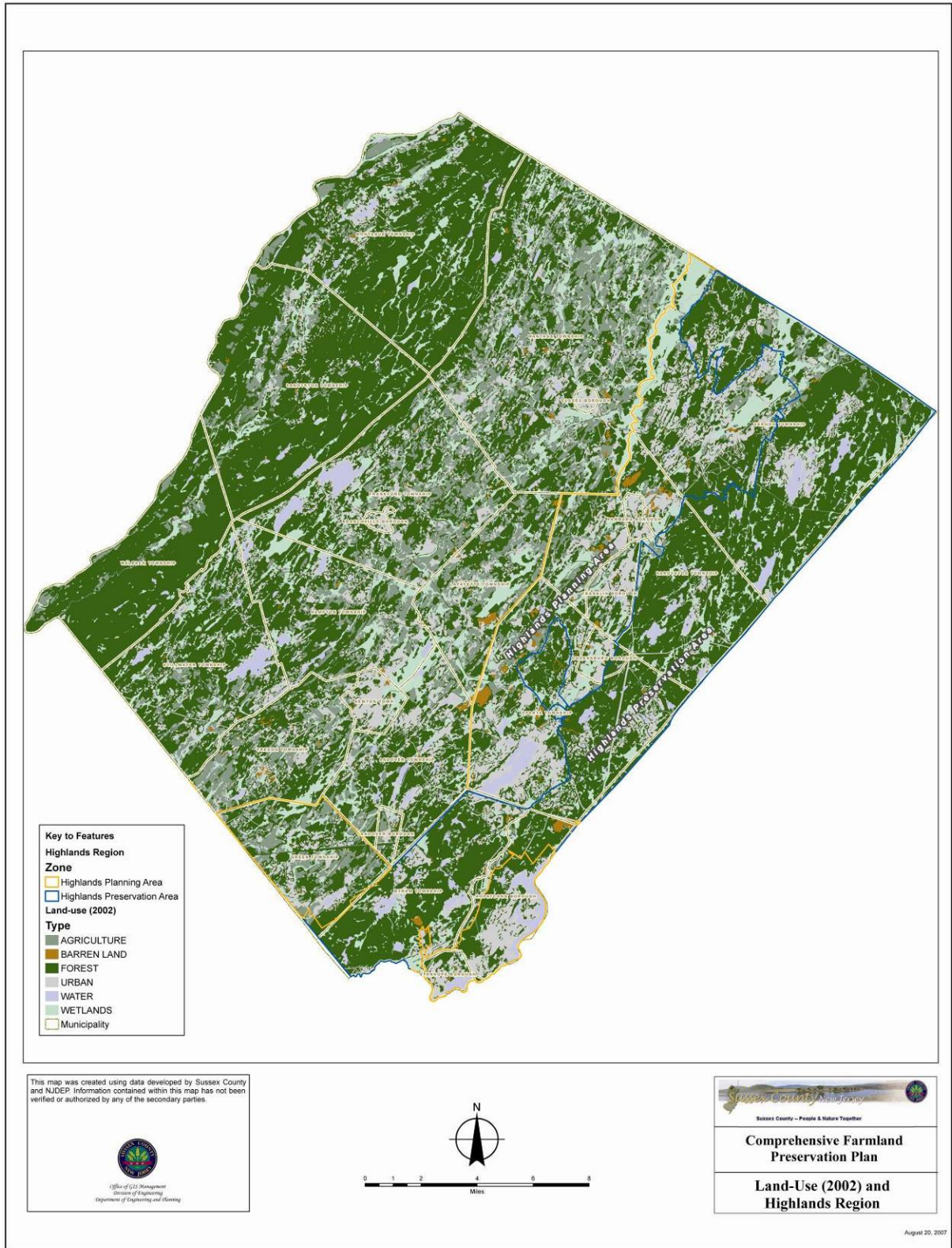
Today, Sussex County contains a diversity of rural, urban, and suburban areas. The Kittatinny and Upper Delaware Valleys are still predominately rural with a multitude of development centers that dot the agricultural landscape. These areas range from large regional centers such as Newton to small villages, such as Hainesville in Sandyston Township. Suburbanized areas of Sussex County remain concentrated in its eastern municipalities. Here, residential development tends to be evenly spread throughout the landscape while commercial and office areas are located next to arterial roads such as Routes 206, 15, 94, and 23. Large areas of forested land associated with the Highlands Ridgeline (and afforded significant protections through the Highlands Act) are the most substantial undeveloped areas in eastern Sussex County. The following *Land Cover* charts display the breakdown of these land uses in Sussex County as of 2001. (*Center for Remote Sensing and Spatial Analysis*)⁵



Land Value and Development Trends

Although the pace of development has slowed in recent years, Sussex County continues to lose natural and agricultural lands. The Center for Remote Sensing and Spatial Analysis at Rutgers University reports that 7,275 acres were converted to urban and barren land uses between 1995 and 2000. Roughly 4,100 of these newly urbanized acres had been forested while approximately 1,800 acres had been used for agriculture. The vast majority of these lands became residential subdivisions or transitional areas. (*Center for Remote Sensing and Spatial Analysis*) Prior to this time, inland wetlands were the most commonly developed areas (see *Land Cover Trend* chart below). (This chart also accounts for formerly developed and barren land that is now occupied by undeveloped land uses.) The 2002 *Land Use/Land Cover* map on the following page shows an aerial interpretation of Sussex County’s land uses as well as the Highlands Regional and Preservation Area boundaries.





Source: Sussex County Division of Planning

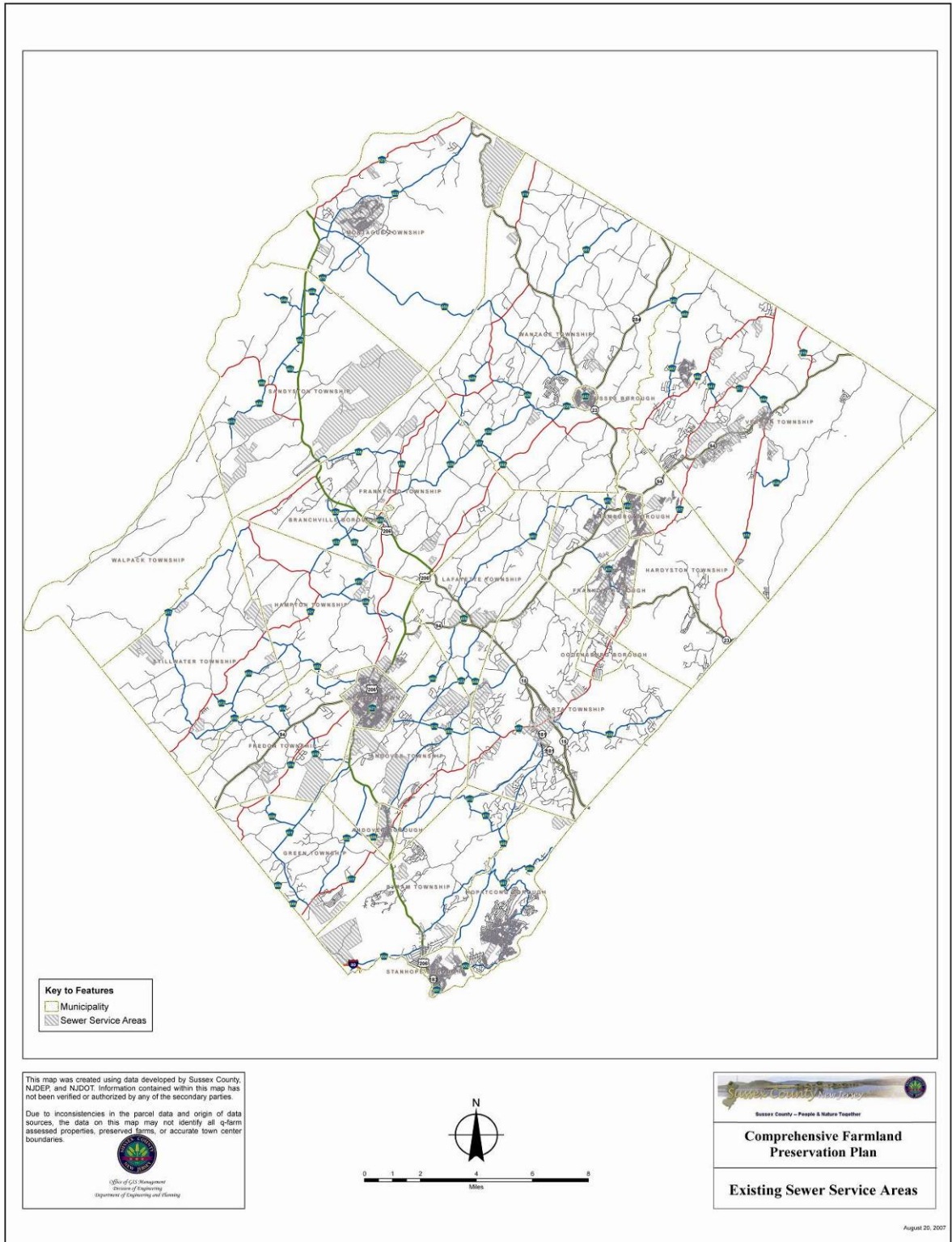
Development pressures in Sussex County intensified throughout the Kittatinny Valley after the Highlands Act imposed heightened development restrictions over many areas in eastern parts of the County. Many new developments have been proposed on former agricultural lands from Wantage to Andover. Farmland here is particularly attractive to developers because it tends to be clear of significant obstructions and is generally more flat than surrounding lands. Unfortunately, this land is usually the best farmland. Expanding development in the Kittatinny Valley – the heart of Sussex County’s agricultural industry – limits the effectiveness of the County’s substantial farmland preservation efforts there.

Public Infrastructure – Sewer and Water Service Areas

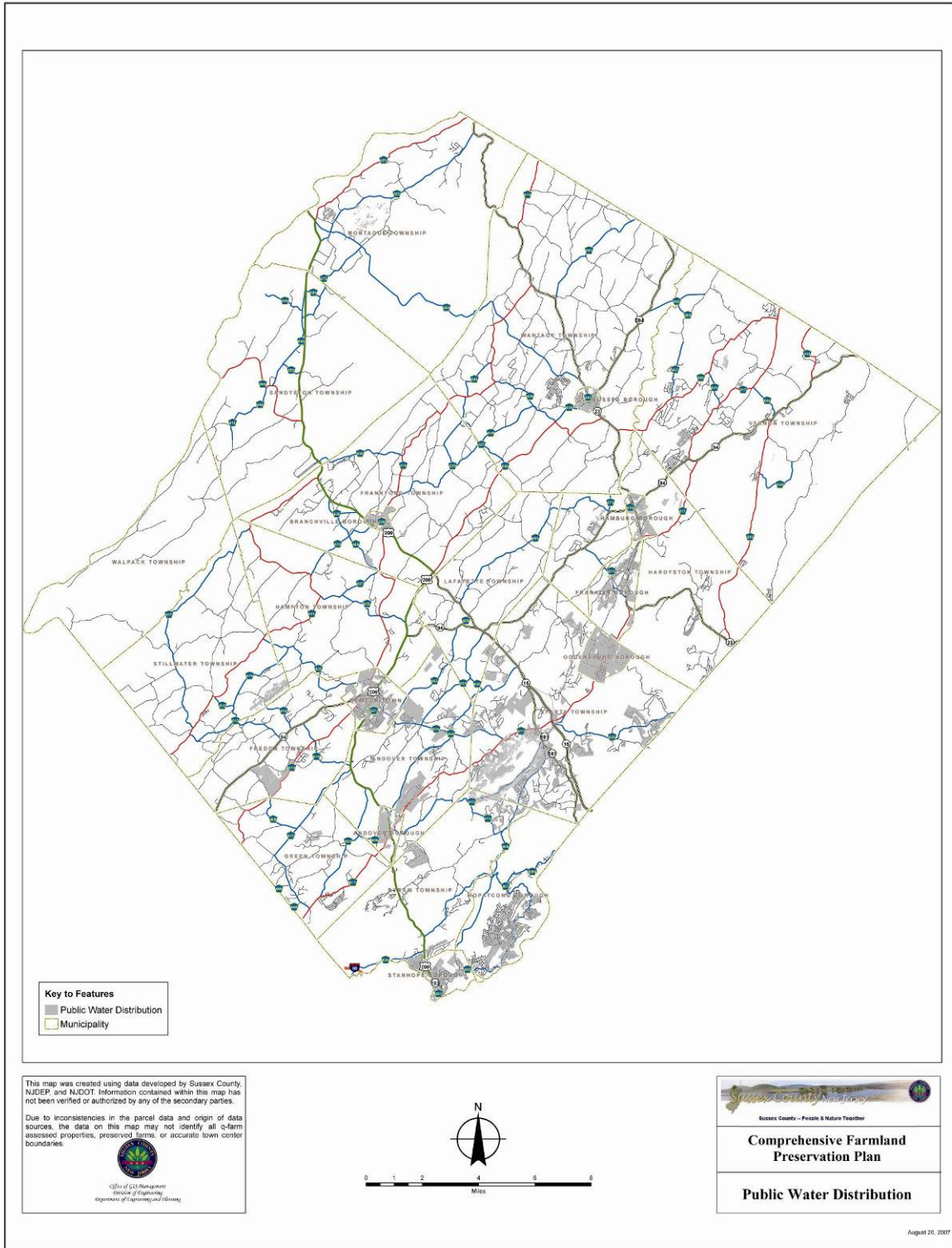
There are three publicly operated sewer treatment agencies in Sussex County. The Sussex County Municipal Utilities Authority (SCMUA) operates the “Upper Wallkill Valley Water Pollution Control Plant” in Hardyston Township. Its existing service area extends into Franklin, Hamburg, Hardyston, Vernon, Sussex, Wantage, and Sparta. Currently, the SCMUA’s coverage area uses roughly 2 million gallons per day (gpd) of the plant’s total permitted flow of 3.265 million gpd (see *Sussex County ADA* map). The SCMUA also operates other many smaller wastewater facilities in the County, including the Hampton Commons facility in Hampton Township. Each municipality in the sewer service area has an allocation for their use, and excess allocation may be transferred to another municipality upon mutual agreement and amendment to the County’s Wastewater Management Plan. Marginal increases to the SCMUA’s service areas are expected in the near future throughout the County. (*2007 Sussex County Wastewater Management Plan*)⁶

The Musconetcong Sewer Authority (MSA) owns and operates a wastewater treatment plant in Morris County with a permitted discharge of 5.9 million gpd. Its sewer service area extends into Stanhope, Byram, and Hopatcong as well as some towns in northwestern Morris County. Significant expansions to the MSA’s service area are planned within Hopatcong and Byram in the near future. (*2007 Sussex County Wastewater Management Plan*) The Town of Newton owns and operates its own wastewater treatment plant that currently operates at roughly 70% capacity of its 1.4 million gpd allocation. There are also smaller package treatment plants located throughout Sussex County that service schools, commercial areas, and industrial sites, which typically process less than 20,000 gpd. (*2007 Sussex County Wastewater Management Plan*) A map showing the *existing sewer service areas* in Sussex County is provided on the following page.

More than 90% of Sussex County’s residents rely upon local groundwater as their sole source of drinking water. (*2003 Sussex County Open Space Plan*)⁷ Private wells that tap underlying aquifers are these residents’ primary supplies of water. Areas that are serviced by public water systems and/or private water companies also receive most of their water from local wells. (see *Public Water Distribution* map on page 3-8)



Source: Sussex County Division of Planning



Source: Sussex County Division of Planning

Surface waters in Sussex County are primarily recreational, but the following surface water bodies are used for potable water supply purposes:

- Morris Lake, in Sparta – used by Newton;
- Lake Rutherford, in Wantage – used by Sussex Borough;
- Branchville Reservoir, in Frankford – used by Branchville;
- Franklin Pond, in Franklin – used by Franklin as an emergency water supply;
- Lake Hopatcong - an emergency water supply for several towns;
- Canistear Reservoir, in Vernon – contained on Newark water supply lands; and
- Heaters Pond, in Ogdensburg – an emergency water supply.

(2007 Sussex County Wastewater Management Plan)

Publicly supplied sewer and water service areas provide some of the most appropriate lands for development. Developments in sewer service areas can be easily connected to the existing wastewater system, which helps prevent contamination of the County's aquifers and drinking water reserves from leaking septic tanks. Restricting development to areas with existing infrastructure also conserves the rural environs that surround them. The table on *page 3-13* of this Plan lists the designated centers in Sussex County, where available infrastructure and development potential are both present. *(2007 Sussex County Strategic Growth Study)*⁸

Land Use Planning Initiatives

Sussex County has been the subject of extensive land use planning efforts. Through the *State Development and Redevelopment Plan* and the *Highlands Regional Master Plan*, the New Jersey State government has recognized Sussex County as the location of excellent agricultural and natural resource lands. The County incorporates many of the State's policy directives from these plans into its own *2007 Strategic Growth Study*, which was formally endorsed by the New Jersey Office of Smart Growth in 2007. Many of the County's municipalities also conduct their own master planning efforts and participate in the State's Cross-acceptance process.

State Development and Redevelopment Plan

The New Jersey State Planning Commission has written and updated a *State Development and Redevelopment Plan* (SDRP)⁹ that outlines general policy objectives concerning land use and future development in the State. The SDRP identifies five Planning Areas within the State where different sets of goals and guidelines are considered appropriate to determine development activities. These Planning Areas are labeled as Metropolitan, Suburban, Fringe, Rural, and Environmentally Sensitive lands. The SDRP also identifies Centers where future development activities are most appropriate and where they will be actively promoted. Centers are categorized as Urban Centers, Regional Centers, Towns, Villages, and Hamlets corresponding to criteria including size, regional location, population, residential and employment densities, and available housing stock. The combination of Planning Areas and Designated Centers establishes a comprehensive framework for pursuing land use and development regulation throughout New Jersey (see *State Development and Redevelopment Plan Policy Map – Sussex County* on *page 3-11*).

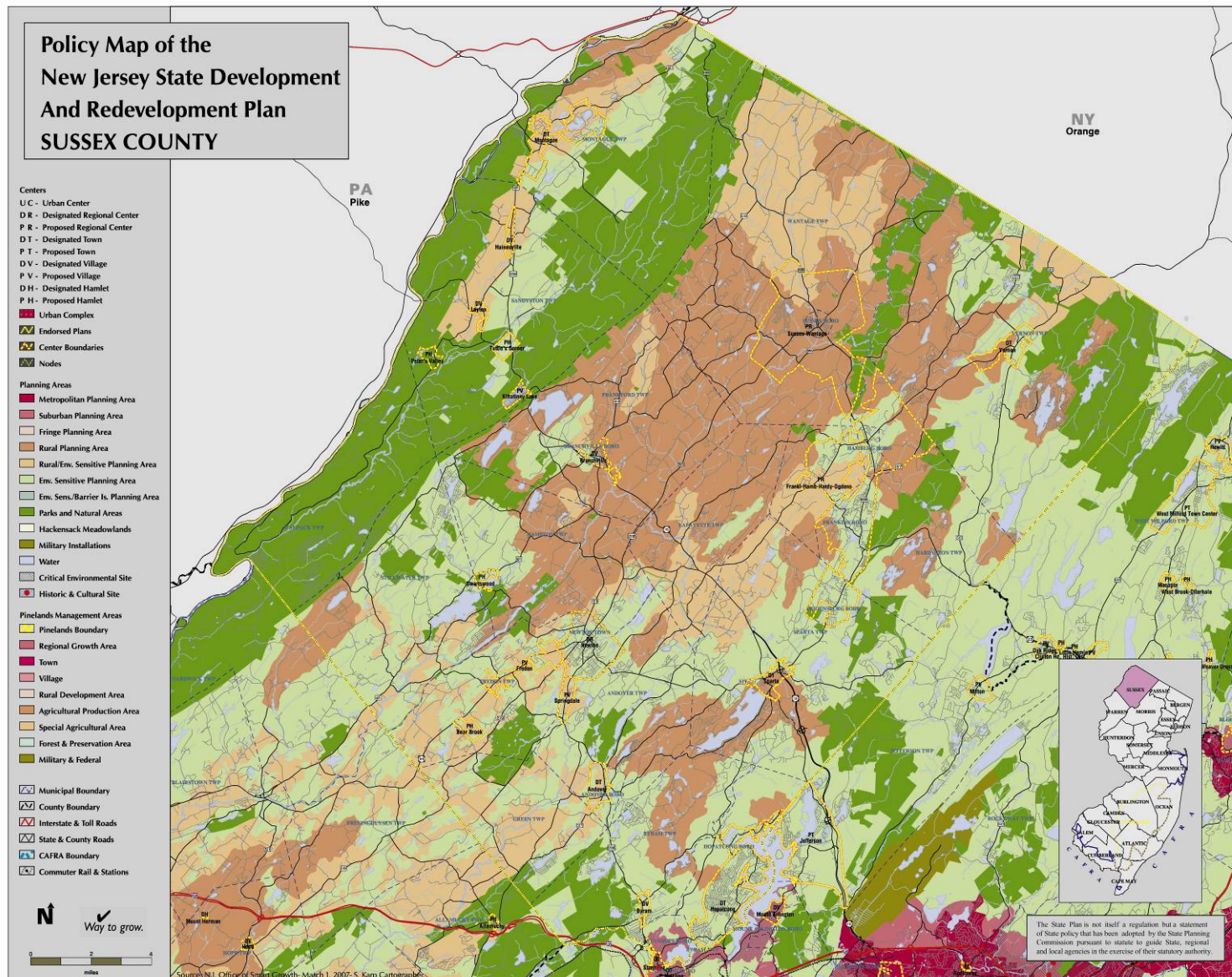
Metropolitan Planning Areas are comprised of the highly developed regions in the state. The goals in this planning area revolve around revitalizing existing cities and towns by encouraging compact growth and redevelopment. The Metropolitan Planning Area is identified as the most appropriate location for future development in New Jersey. Sussex County does not contain any land within the Metropolitan Planning Area.

Suburban Planning Areas are called upon to support most of the new development that will occur in New Jersey while maintaining the character of existing communities there. Growth in suburban town centers is especially encouraged in order to help protect and preserve the natural resources that exist in these areas. The Suburban Planning Area is meant to complement metropolitan areas, and is most commonly found outside heavily urban areas. Sussex County has one small pocket of Suburban Planning Area land along its southern border in Stanhope Borough.

Fringe Planning Areas serve as an appropriate interface between suburban and rural areas. They are not as built-up as metropolitan and suburban areas, but may support more development activity than nearby rural lands. Fringe Areas are buffers between these land uses. Consequently, they are often the frontlines of urban sprawl, and must be carefully planned to ensure that development is appropriately restricted to existing urbanized areas. Sussex County does not contain any land designated as Fringe Planning Area.

Rural Planning Areas are suitable for the preservation of large contiguous areas of farmland. Sustaining the agricultural industry while confining development and redevelopment within existing towns are included among the policy objectives applicable to these areas. Much of the land within the Rural Planning Area supports environmentally-sensitive resources such as underground aquifers or critical wildlife habitats. Lands within the Rural and Rural-Environmentally Sensitive Planning Area are widespread throughout Sussex County. The Rural Planning Area is concentrated mostly within the Kittatinny Valley with another significant pocket to the west of Andover Borough. Rural-Environmentally Sensitive Planning Area lands are scattered throughout the County with notable concentrations in the Upper Delaware Valley and the eastern, central, and western portions of the Kittatinny Valley.

Environmentally Sensitive Planning Areas contain lands where natural resource preservation should be the primary planning consideration. Development is to be minimized or constrained around existing centers while large contiguous natural areas are to be preserved as open space. Large areas of Sussex County fall within the Environmentally Sensitive Planning Area. Most of this area is located along the Highlands Ridge that runs between Vernon and Byram Townships or the Kittatinny Ridge near the County's northern border. There is a significant acreage of Environmentally-Sensitive Planning Area land scattered among the Rural Planning Area in Stillwater, Green, Fredon, Andover, and Hampton Townships as well.



Centers are defined by the New Jersey State Planning Commission as “compact forms of development that, compared to sprawl development, consume less land, deplete fewer natural resources and are more efficient in the delivery of public services.” (*State Development and Redevelopment Plan*) Centers become designated after the municipalities or counties that encompass them submit plan endorsement applications to the State Planning Commission (Office of Smart Growth) that are subsequently approved. Proposed Centers are currently in the process of having their plans reviewed by the State. A list of the *Designated Centers in Sussex County* is found on the following page.

There are various types of center designations. Each different center category corresponds to the characteristics of the areas being considered. Different policies concerning land use and the promotion of future development opportunities are recommended in each type of center. *Urban Centers* are the most intensively utilized areas in the State. They serve as concentrations for corporate headquarters, industry, residential areas, and culture. Sussex County contains no Designated, Proposed, or Potential Urban Centers.

Regional Centers are smaller urban areas that provide the various commercial, cultural and residential needs of a geographically-defined region. Regional Centers are generally less than 10 square miles, but are sufficiently active enough to support public transportation. Newton is the only Designated or Proposed Regional Center in Sussex County.

Towns are smaller than Urban and Regional Centers, usually less than two square miles in size, that serve as a local concentrations of commerce and government activity. They support residential neighborhoods and offer access to local commercial goods and services. Sussex County contains six Designated Town Centers including Andover, Hopatcong, Montague, Sparta, Stanhope, and Vernon.

Villages are residential neighborhoods that have access to some local public and commercial facilities. Villages are small, occupying less than one square mile. There are four Designated Villages in Sussex County – Branchville, Byram, Hainesville (Sandyston Township), and Layton (Sandyston Township). Tri-State (Montague Township) is the County’s only proposed Village.

Hamlets are the smallest type of Center. They are small residential communities between 10 and 100 acres that are oriented around a local focal point, such as a house of worship or general store. The recommended size of a hamlet varies depending on its accessibility to community wastewater systems. Sussex County contains no designated Hamlets.

Sussex County's Centers

Source: 2007 Sussex County Strategic Growth Study

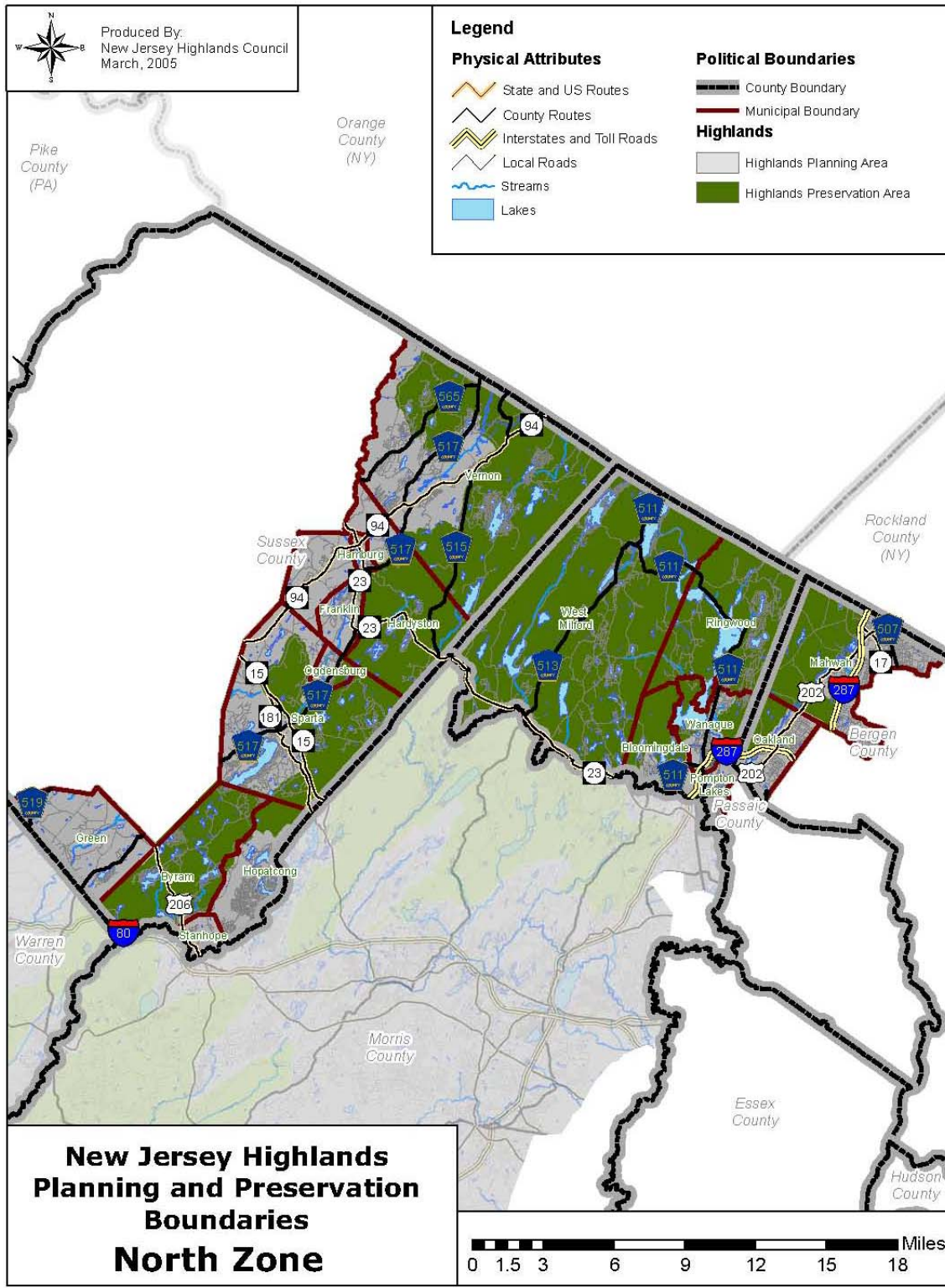
Municipality	Center	Type	Designation Status	Sewer Service
Andover Borough	Andover	Town	Designated	Existing
Branchville Borough	Branchville	Village	Designated	Proposed
Byram Township	Byram	Village	Designated	Existing & Proposed
Hopatcong Borough	Hopatcong	Town	Designated	Existing & Proposed
Montague Township	Montague	Town	Designated	Existing
Newton Town	Newton	Regional	Designated	Existing
Sandyston Township	Hainesville	Village	Designated	None
Sandyston Township	Layton	Village	Designated	None
Sparta Township	Sparta	Town	Designated	Existing
Stanhope Borough	Stanhope	Town	Designated	Existing
Vernon Township	Vernon	Town	Designated	Existing

Highlands Regional Master Plan

The New Jersey State Legislature enacted the Highlands Water Protection and Planning Act on August 10, 2004. In an effort to ensure the integrity of northern New Jersey's drinking water resources, the Highlands Act imposes strict land use controls over large parts of the 88-municipality region, known as the Highlands Preservation Zone. Areas within the Preservation Zone are subject to heightened restrictions on development, water use, and activities that affect water quality or environmentally sensitive lands. Among the most prohibitive Preservation Area rules is the enforcement of State-mandated development densities of 25 acres per unit on open fields and 88 acres per unit on wooded parcels. The Act also expands mandatory buffers around the region's streams and water bodies, sets limits on impervious coverage for individual properties, and requires master plan conformance from Preservation Area municipalities, among other criteria.

Significant portions of Sussex County fall within the Highlands region. Over 70,000 acres in eight Sussex County towns fall within the Highlands Preservation Zone, and are subject to the restrictions that apply there (see *Highlands Acreage* chart below). The Preservation Area in Sussex County roughly extends from the Highlands Ridgeline along the County's eastern border into Vernon, Hardyston, Sparta, and Byram Townships. Developed areas in Stanhope and Hopatcong Boroughs are left in the Planning Zone while natural resource areas in western Vernon and Sparta Townships are included within the Preservation Zone (see *Highlands* map below).

The 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 *Highlands Draft Regional Master Plan* identifies an Agricultural Resource Area that will receive the bulk of future funding and institutional support from the Highlands Council. The Agricultural Resource Area encompasses areas that contain contiguous farmbelts and quality agricultural soils. Large parts of Green, Sparta, Hardyston, and Vernon Townships fall within the Agricultural Resource Area. (*Highlands Draft Regional Master Plan*)



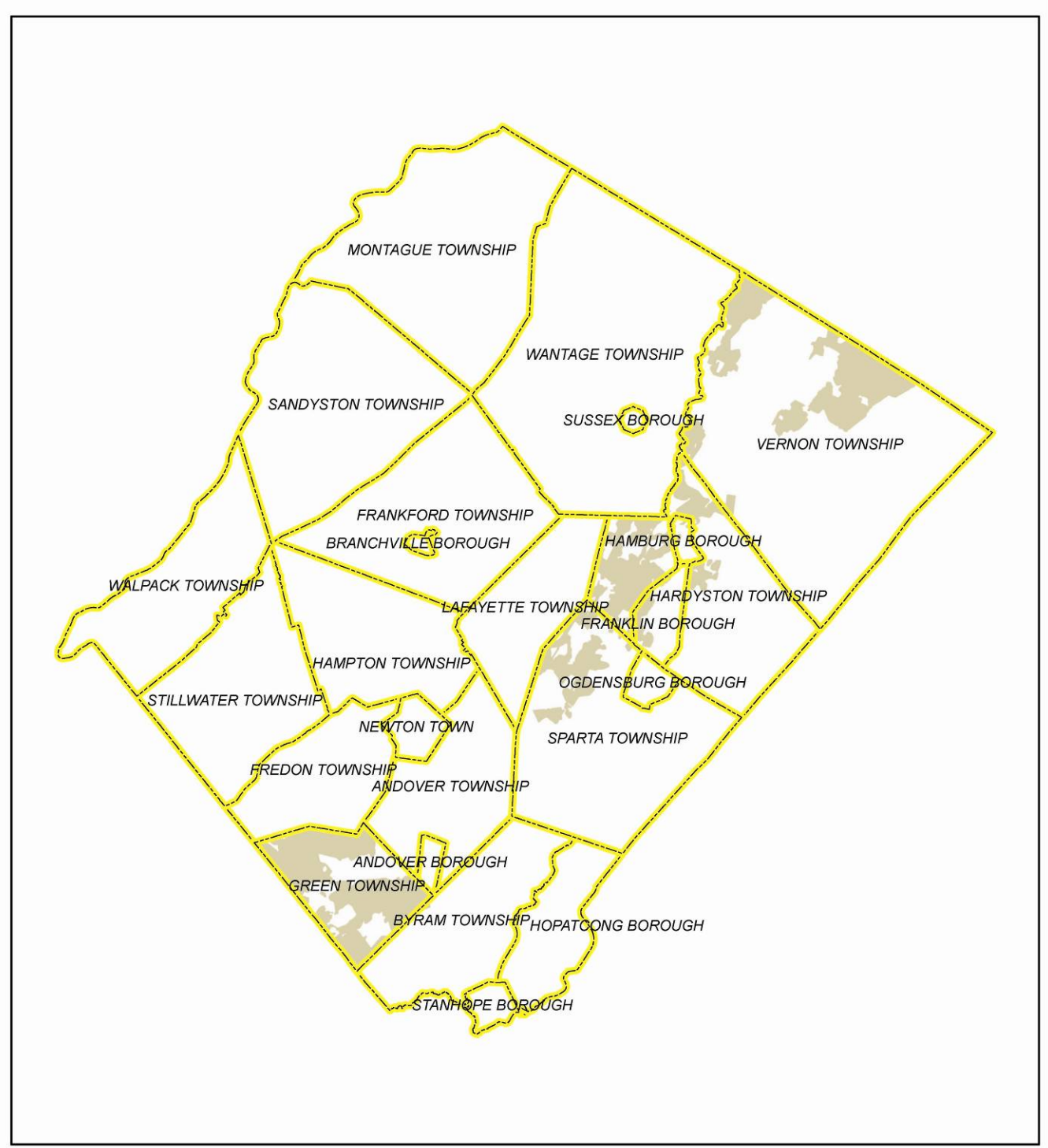
Source: New Jersey Highlands Council Website: www.highlands.state.nj.us . Accessed July 2007

HIGHLANDS ACREAGE			
<i>MUNICIPALITY</i>	<i>PLANNING AREA</i>	<i>PRESERVATION AREA</i>	<i>TOTAL</i>
Byram Township	233	14,272	14,505
Franklin Borough	2,843	0	2,843
Green Township	10,198	281	10,478
Hamburg Borough	753	0	753
Hardyston Township	8,254	12,557	20,811
Hopatcong Borough	5,346	2,607	7,953
Ogdensburg Borough	1,232	199	1,431
Sparta Township	13,359	11,538	24,896
Stanhope Borough	1,399	5	1,404
Vernon Township	15,470	29,319	44,789
Total	59,087	70,778	129,864
<i>Source: Highlands Draft Regional Master Plan</i>			

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. (*Highlands Sustainable Agriculture Technical Report*)¹⁰ Clusters of High Priority Agricultural Areas are found in Vernon, Sparta, and Green Townships. (*Highlands Draft Regional Master Plan*, see table below and *Agricultural Priority Areas Map* on following page).

Agriculture Priority Areas by Municipality	
Municipality	Acreage
ANDOVER BOROUGH	0
ANDOVER TOWNSHIP	0
BYRAM TOWNSHIP	55
FRANKLIN BOROUGH	584
GREEN TOWNSHIP	7,325
HAMBURG BOROUGH	124
HARDYSTON TOWNSHIP	5,147
SPARTA TOWNSHIP	2,630
VERNON TOWNSHIP	7,111
<i>Source: Highlands Council</i>	

As the *Highlands Regional Master Plan* is still in draft form, the Sussex CADB feels that it would be inappropriate to comment on the effect of the Plan on agricultural issues in Sussex County. This *Comprehensive Farmland Preservation Plan Update* addresses agricultural issues for the entire county, both in and outside of the Highlands. On the following pages are tables detailing the acreage, by municipality, of land in each of the Land Use Capability Zones and acres, by municipality, of the total farm assessed property and both the preserved and unpreserved farmland.



This map was created using data developed by Sussex County and NJ Highlands Council. Information contained within this map has not been verified or authorized by any of the secondary parties.

Due to inconsistencies in the parcel data and origin of data sources, the data on this map may not identify all q-farm assessed properties, preserved farms, or accurate town center boundaries.



Office of GIS Management
 Division of Information Management
 Department of Central & Shared Services



Comprehensive Farmland Preservation Plan

Agriculture Priority Areas
23,038 acres

September 24, 2007

Land Use Capability Zones by Municipality			
	Acreage within Conservation Zone	Acreage within Protection Zone	Acreage within Existing Community Zone
ANDOVER BOROUGH	0.39	0.41	-
ANDOVER TOWNSHIP	0.48	5.66	0.40
BYRAM TOWNSHIP	-	12,737.91	1,764.53
FRANKLIN BOROUGH	563.71	858.99	1,420.11
GREEN TOWNSHIP	5,742.18	4,063.92	667.06
HAMBURG BOROUGH	68.87	89.52	594.66
HARDYSTON TOWNSHIP	3,773.49	14,962.64	2,069.52
HOPATCONG BOROUGH	-	4,651.86	3,301.47
OGDENSBURG BOROUGH	-	1,030.04	401.09
SPARTA TOWNSHIP	1,879.74	19,591.00	3,419.37
STANHOPE BOROUGH	-	431.60	972.23
VERNON TOWNSHIP	5,951.70	33,907.35	4,916.21

Source: Highlands Council

QFarms by Municipality			
Municipality	Total Acreage of Qfarms in Municipality	Acreage of Preserved Farms	Acreage of Unpreserved QFarms
ANDOVER BOROUGH	341.74	-	341.74
ANDOVER TOWNSHIP	4,925.49	221.67	4,703.82
BRANCHVILLE BOROUGH	15.02	-	15.02
BYRAM TOWNSHIP	4,221.31	-	4,221.31
FRANKFORD TOWNSHIP	10,709.47	735.07	9,974.40
FRANKLIN BOROUGH	489.20	-	489.20
FREDON TOWNSHIP	5,466.26	101.28	5,364.98
GREEN TOWNSHIP	5,504.87	523.56	4,981.31
HAMBURG BOROUGH	12.78	-	12.78
HAMPTON TOWNSHIP	7,056.64	686.49	6,370.15
HARDYSTON TOWNSHIP	6,985.52	-	6,985.52
HOPATCONG BOROUGH	1,130.01	-	1,130.01
LAFAYETTE TOWNSHIP	6,449.15	1,231.80	5,217.35
MONTAGUE TOWNSHIP	2,848.65	515.31	2,333.34
NEWTON TOWN	110.17	-	110.17
OGDENSBURG BOROUGH	101.38	-	101.38
SANDYSTON TOWNSHIP	4,638.99	256.18	4,382.81
SPARTA TOWNSHIP	2,417.02	67.56	2,349.46
STANHOPE BOROUGH	166.93	-	166.93
STILLWATER TOWNSHIP	7,823.77	322.60	7,501.17
SUSSEX BOROUGH	34.05	-	34.05
VERNON TOWNSHIP	6,030.24	334.65	5,695.59
WALPACK TOWNSHIP	92.41	-	92.41
WANTAGE TOWNSHIP	24,289.53	4,884.13	19,405.40

Source: Sussex County GIS Office, April 2008

2007 Sussex County Strategic Growth Study

The *2007 Sussex County Strategic Growth Study* was endorsed by the New Jersey State Planning Commission in May 2007. It recommends specific land use policies for the County to follow and establishes consistency between these policies and the more general policies outlined in the *State Development and Redevelopment Plan*. The *Strategic Growth Study* identifies six different Sussex County Landscapes in which the Plan's policies will be differentially applied: Rural/Agricultural, Highlands, Parks/Wildlife Areas, Lake Communities, Job Centers, and Town Centers. For instance, housing construction is actively encouraged in Town Centers, discouraged in the Highlands, and accepted in low-density clusters within the Rural/Agricultural landscape. The following are the land use policies recommended by the Strategic Growth Plan for the Agricultural/Rural landscape:

- Provide guidelines for municipal use in redirecting development from the environs to centers;
- Encourage the establishment and expansion of mass transit options, tied to existing and proposed centers;
- Continue the County contribution to the bi-state effort to reactivate the Lackawanna Cut-off and New Jersey efforts to extend and add passenger service to the New York, Susquehanna and Western railroad;
- Emphasize the multi-state importance of small scale aviation facilities;
- Continue to refine and focus the farmland preservation and open space programs in the County;
- Assist landowners and coordinate with the Natural Resources Conservation Service, the Resource Conservation and Development Program, County Board of Agriculture and County Agriculture Development Board to publicize the numerous agriculture support programs of the State;
- Avoid slopes in excess of twenty-five percent wherever possible and approach the disturbance of lesser slopes with care; and
- Determine density based upon both soil characteristics and available water supply as determined through on-site groundwater hydrology. The soils analysis (modified nitrate dilution model @ 5.2mg/l), suggests that an *average* acceptable density for residential construction is three acres per unit, and that 100,000 square feet of commercial space would require a land area of not less than 150 acres. (*2007 Sussex County Strategic Growth Study*)

Municipal Planning

Municipalities in Sussex County have utilized a number of planning tools that seek to preserve agricultural and open space lands. Some towns have opted to implement cluster zoning ordinances that require or “strongly encourage” constraining development on a portion of a parcel being developed. For example, if a 10-acre parcel is approved for the development of 10 homes, a cluster zoning scheme would require the developer to set aside five acres for agriculture or open space while building up to ten homes on half-acre lots instead of one-acre lots. The land that is set aside through clustering should be the most valuable agricultural or natural resource areas. Byram Township is an example of one

Sussex County municipality that offers flexible minimum lot size requirements in order to accommodate clustering. (*Code of Township of Byram, New Jersey, 240:10*)

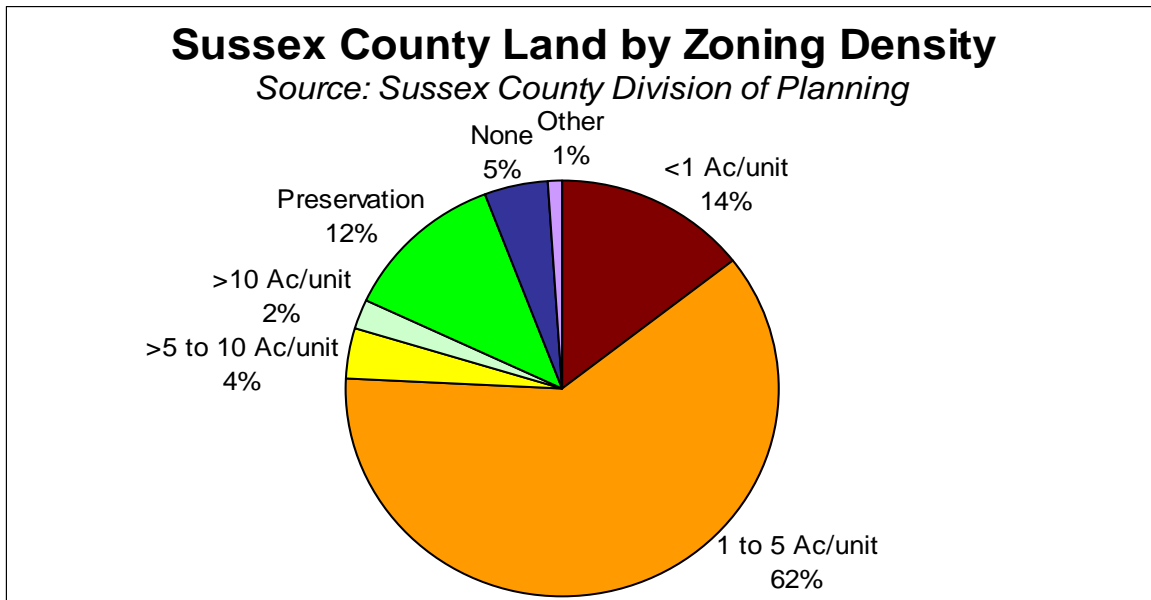
Another planning tool employed in Sussex County is the designation of Open Space and Minimum Impact Development Districts (MIDD's) where the conservation of natural resources and rural environs is given paramount consideration. These zones usually require developers to provide substantial buffers around environmentally-sensitive areas. Some require extensive studies that document important natural features, such as stone rows and wildlife habitats, with plans for their conservation, as in Hardyston Township. (*Code of the Township of Hardyston, New Jersey, 185:23*) Open Space zones and MIDD's normally incorporate some sort of clustering provision as well.

Municipal Zoning

The majority of land in Sussex County is zoned at densities between three and seven acres per development unit. (see *Municipal Zoning* chart below) Zoning densities of greater than one unit per acre tend to be concentrated within towns that have existing or proposed centers such as Byram, Hardyston, and Vernon. Large lot zoning of greater than ten acres per development unit exists in many municipalities, but only Stillwater uses it on most of the land in their municipality. Conservation zoning districts are utilized in six Sussex County towns to designate preserved parkland, such as High Point State Park in Montague. This zoning scheme, where most of the County's land is zoned between three and seven acres per development unit, encourages growth of the sprawling, suburban landscape that Sussex County is trying to prevent. A zoning scheme that is more consistent with the centers-based land use pattern that the County favors would have more land designated for high density uses (more than 1 unit per acre) near development centers and lower density uses outside the centers. Mixed-use, or "other", zoning standards within centers may help encourage attractive and economically feasible land uses there. Intermediate zoning, between one and ten acres per development unit, is appropriate for some TDR receiving areas so that additional development credits can be applied to these lands. Also, conservation zoning should be applied to town recreation and resource areas as well as permanent parklands.

Sussex County Municipal Zoning Densities (Acres)								
<i>Municipality</i>	<i><1 Ac/unit</i>	<i>1 to 5 Ac/unit</i>	<i>>5 to 10 Ac/unit</i>	<i>>10 Ac/unit</i>	<i>Conser- vation</i>	<i>None*</i>	<i>Other^</i>	<i>TOTAL</i>
Andover Borough	201	638	0	0	0	0	0	839
Andover Township	875	11,489	0	538	0	0	0	12,902
Branchville Borough	400	0	0	0	0	0	0	400
Byram Township	6,679	7,223	0	423	0	0	0	14,325
Frankford Township	289	21,556	0	680	0	0	0	22,525
Franklin Borough	756	1,829	0	365	0	0	0	2,950
Fredon Township	166	9,655	0	0	1,421	0	287	11,529
Green Township	0	9,778	807	0	0	0	0	10,585
Hamburg Borough	423	279	0	0	0	37	0	739

Sussex County Municipal Zoning Densities (Acres)								
<i>Municipality</i>	<i><1 Ac/unit</i>	<i>1 to 5 Ac/unit</i>	<i>>5 to 10 Ac/unit</i>	<i>>10 Ac/unit</i>	<i>Conser- vation</i>	<i>None*</i>	<i>Other^</i>	<i>TOTAL</i>
Hampton Township	69	15,932	163	0	0	0	0	16,164
Hardyston Township	16,663	2,091	0	0	0	0	2,181	20,935
Hopatcong Borough	3,327	4,501	0	0	0	0	0	7,828
Lafayette Township	0	11,798	0	0	0	0	0	11,798
Montague Township	811	10,898	0	0	17,049	0	0	28,758
Newton Town	1,674	447	0	0	0	0	42	2,163
Ogdensburg Borough	781	417	0	56	226	0	0	1,480
Sandyston Township	2,037	24,141	0	0	0	642	0	26,820
Sparta Township	2,314	16,761	193	4,645	0	0	0	23,913
Stanhope Borough	777	685	0	0	0	0	0	1,462
Stillwater Township	439	6,162	10,155	266	1,142	74	0	18,238
Sussex Borough	289	78	0	0	20	0	16	403
Vernon Township	7,433	13,932	2,197	247	21,310	0	607	45,726
Walpack Township	0	0	0	0	0	15,881	0	15,881
Wantage Township	2,946	39,246	0	496	0	0	379	43,067
TOTAL	49,349	209,536	13,515	7,716	41,168	16,634	3,512	341,430
* - No zoning density requirements indicated					^ - Mixed or planned unit dev. densities			
<i>Source: Sussex County Planning Division</i>								



Cluster zoning allows the reconfiguration of a subdivision from uniform lot areas incorporating all portions of a property into smaller lots for private use and reservation of one or more lots for open space. There are few disadvantages to its use as it involves only one property and permits reasonable use of the land while conserving areas of particular concern/interest to the municipality.

Non-contiguous cluster zoning has the potential to be more effective than standard cluster zoning as it permits complete preservation of one or more parcels of land in favor of concentrated development on one or more others. Its downside is the degree of coordination needed between varied property owners if all properties are not in common ownership.

Lot size averaging is a highly limited cluster-like option with the spectrum of alternative lot sizes typically constrained within a narrow range.

Transfer of development rights (TDR) is an option with the greatest potential for wholesale land preservation at no cost to the municipal, county and/or state government(s). The land development pattern resulting from use of this technique is focused, center-based development with substantial areas of protected environs. The downside of this technique is the extensive and expensive studies needed, including plan endorsement from the State Planning Commission. It has been successfully used in very limited areas of Burlington County although it is now an option available to all counties in the state. It has been successfully employed in other states.

Mandatory versus voluntary options would really only apply to cluster zoning and TDR. Where the market or incentives in the municipal code are sufficient to motivate a developer to voluntarily cluster or use TDR, it is preferable from a community relations standpoint to permit the option to be voluntary. Where the issue is critical or market conditions and ordinance incentives prove insufficient, mandatory use of the option is needed to accomplish the objectives of focusing growth in areas considered most appropriate by the municipality.

In Sussex County, the use of cluster development has been sporadic, although it is being considered more frequently as experience is gained. The County is not aware of any instances of non-contiguous cluster or actual transfer of development rights being used in Sussex to date. In fact, TDR may not be used until a municipality has either received plan endorsement from the State Planning Commission or plan conformance from the Highlands Council. No municipalities in the County have received either of these certifications. As the State Planning Commission is requiring some form of environs protection in connection with establishment or expansion of centers, both non-contiguous zoning and TDR will be a near necessity for a municipality to receive plan endorsement.

All of these techniques serve as alternatives to finding monetary compensation for the purchase of development rights. As the eventual financial yield from a property is maintained or increased, the affected government is able, through zoning, to protect or increase wealth outside of any form of taxation. From the perspective of the Sussex CADB,

these techniques will be useful to leverage their efforts under existing programs to preserve farmland and farming.

Transfer of Development Rights

Transfer of Development Rights (TDR) is a planning tool that channels development into desirable locations without diminishing landowners' equity. TDR allows development rights to be separated from the land in TDR *sending areas* and transferred to parcels in a different location – TDR *receiving areas*. Sending areas are places where further development is inconsistent with the local landscape, such as natural resource lands or contiguous farm belts, while receiving areas are places where further development is consistent with local planning objectives, such as Towns and Boroughs.

By allowing the development rights of sending area lands to be exercised in a geographically different location, TDR preserves the economic value of land in sending areas without requiring that development take place there. Therefore, sending area land (where physical development may be legally precluded) can be sold at fair market values that are comparable to those in areas where development is still permitted. Sending area lands are thereby effectively preserved in an undeveloped state while sending area landowners retain the economic value of their full property rights.

The New Jersey State Transfer of Development Rights Act (*N.J.S.A. 40:55D-140*)¹¹ authorizes the transfer of development rights by municipalities and outlines what a town must do in order to adopt or amend a TDR ordinance. First, the municipality must 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. It must then 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. Finally, a town must receive approval from the State Planning Commission to adopt the TDR ordinance. (*N.J.S.A. 40:55D-140*)

There are many different transfer-of-development rights programs that may be instituted in Sussex County. One such program is the *intra-municipal* TDR in which sending and receiving areas are located within the same town. Intra-municipal TDR programs would be appropriate for the many Sussex County towns that have designated or proposed centers and large amounts of agricultural or natural resource lands such as Montague, Sandyston, Vernon, Lafayette, and Sparta.

Townships with large acreages of resource lands and proximity to existing centers in adjoining municipalities might be better served by *inter-municipal* TDR programs. In this case, sending areas are established in one municipality with receiving areas in another. Some form of tax-based revenue sharing is normally involved with these programs. Pairs of Sussex County municipalities where inter-municipal TDR programs may be appropriate are Wantage-Sussex Borough, Hampton-Newton, and Frankford-Branchville.

Regional TDR programs could also be instituted in Sussex County. These may operate throughout the County or at a higher level of regional government. The New Jersey Highlands Council is currently considering a regional TDR program that will be open to all Sussex County municipalities. Through the Highlands program, landowners within the Preservation Zone may sell the development rights on their lands at pre-Highlands Act prices to developers, who will then use them within designated receiving areas throughout the seven-county region. The municipalities containing these receiving areas will have the right to assess impact fees of up to \$15,000 per unit for all new development. They will also be able to apply for grants to offset the costs associated with amending their master plans and municipal ordinances.

In the future, the New Jersey TDR Bank will facilitate TDR activities Statewide. It plans to offer Planning Assistance Grants to municipalities looking to establish municipal TDR programs, and may provide funds for the purchase of development credits. The State TDR Bank will also provide financial banking on loans secured using development credits as collateral, and keep records of all development credit transfers within the State. The New Jersey Office of Smart Growth (OSG) also offers Smart Future Planning Grants to municipalities in order to help them plan for and implement TDR programs. Frankford Township is the only municipality in Sussex County that has taken advantage of these State programs. It has received an OSG Smart Future Grant of \$45,000 and a Planning Assistance Grant for \$40,000 to develop and implement an intra-municipal TDR program.

Summary of future trends

Sussex County is slowly seeing a shift to more development in centers. There is also more multi-family development rather than single-family homes on large lots. This shift will continue and more development is expected to occur in centers due to the *Sussex County Strategic Growth Plan* which was endorsed by the State Planning Commission. Additionally, the *Sussex County Wastewater Management Plan* is being updated to discourage sprawl in environs and promote growth in Centers with the designation of sewer service areas. The new NJDEP rules to be adopted in May 2008 will also add regulations for major subdivisions (of six or more lots) that will discourage large lot subdivisions.

See charts on the following pages for information on building permits by municipality.

Total Building Permits, by Municipality, for 2007		
Sussex County	Total Units	Single Family Units
Andover Borough	0	0
Andover Township	25	25
Branchville Borough	0	0
Byram Township	15	15
Frankford Township	19	19
Franklin Borough	10	10
Fredon Township	10	10
Green Township	32	32
Hamburg Borough	7	7
Hampton Township	5	5
Hardyston Township	12	12
Hopatcong Borough	18	18
Lafayette Township	4	4
Montague Township	27	27
Newton Town	0	0
Ogdensburg Borough	3	3
Sandyston Township	4	4
Sparta Township	78	54
Stanhope Borough	1	1
Stillwater Township	12	12
Sussex Borough	7	7
Vernon Township	28	28
Walpack Township	0	0
Wantage Township	48	33
Sussex County Total	365	326

(US Census Bureau¹²)

RESIDENTIAL BUILDING PERMITS AUTHORIZED 2000-2006

SUSSEX COUNTY MUNICIPALITY		TYPE	2000	2001	2002	2003	2004	2005	2006	Total
Andover Boro.	Total		0	1	0	0	2	0	0	3
	Single		0	1	0	0	2	0	0	3
	Multi		0	0	0	0	0	0	0	0
Andover Twp.	Total		49	43	34	24	22	31	37	240
	Single		49	43	34	24	22	31	37	240
	Multi		0	0	0	0	0	0	0	0
Branchville Boro.	Total		0	0	2	0	0	2	1	5
	Single		0	0	2	0	0	2	1	5
	Multi		0	0	0	0	0	0	0	0
Byram Twp.	Total		26	28	34	22	22	18	16	166
	Single		26	28	34	22	22	18	16	166
	Multi		0	0	0	0	0	0	0	0
Frankford Twp.	Total		26	22	23	22	22	19	20	154
	Single		26	22	23	22	22	19	20	154
	Multi		0	0	0	0	0	0	0	0
Franklin Boro.	Total		5	4	4	6	9	9	14	51
	Single		5	4	4	6	9	9	14	51
	Multi		0	0	0	0	0	0	0	0
Fredon Twp.	Total		25	18	40	48	29	25	21	206
	Single		25	18	40	48	29	25	21	206
	Multi		0	0	0	0	0	0	0	0
Green Twp.	Total		26	22	16	19	16	16	20	135
	Single		26	22	16	19	16	16	20	135
	Multi		0	0	0	0	0	0	0	0
Hamburg Boro.	Total		67	28	37	15	21	8	9	185
	Single		67	28	37	15	21	8	9	185
	Multi		0	0	0	0	0	0	0	0
Hampton Twp.	Total		12	24	23	27	22	20	16	144
	Single		12	24	23	27	22	20	16	144
	Multi		0	0	0	0	0	0	0	0
Hardyston Twp.	Total		173	203	114	81	155	195	110	1,031
	Single		173	121	102	61	131	195	99	882
	Multi		0	82	12	20	24	0	11	149
Hopatcong Boro.	Total		9	6	10	13	14	14	25	91
	Single		9	6	10	13	14	14	25	91
	Multi		0	0	0	0	0	0	0	0
Lafayette Twp.	Total		12	12	13	14	12	15	3	81
	Single		12	12	13	14	12	15	3	81
	Multi		0	0	0	0	0	0	0	0
Montague Twp.	Total		11	23	42	62	59	46	35	278
	Single		11	23	42	62	59	44	35	276
	Multi		0	0	0	0	0	2	0	2
Newton Town	Total		18	18	7	9	32	0	4	88
	Single		18	18	7	9	9	0	0	61
	Multi		0	0	0	0	23	0	4	27
Ogdensburg Boro.	Total		0	0	0	0	0	6	7	13
	Single		0	0	0	0	0	6	7	13
	Multi		0	0	0	0	0	0	0	0

RESIDENTIAL BUILDING PERMITS AUTHORIZED 2000-2006

SUSSEX COUNTY									
MUNICIPALITY	TYPE	2000	2001	2002	2003	2004	2005	2006	Total
Sandyston Twp.	Total	5	8	16	8	11	12	6	66
	Single	5	8	16	8	11	12	6	66
	Multi	0	0	0	0	0	0	0	0
Sparta Twp.	Total	103	117	134	53	50	75	105	637
	Single	103	117	134	53	48	75	71	601
	Multi	0	0	0	0	2	0	34	36
Stanhope Boro.	Total	9	4	18	12	3	0	3	49
	Single	9	4	18	12	3	0	3	49
	Multi	0	0	0	0	0	0	0	0
Stillwater Twp.	Total	10	15	5	10	14	14	14	82
	Single	10	15	5	10	14	14	14	82
	Multi	0	0	0	0	0	0	0	0
Sussex Boro.	Total	2	4	6	6	6	10	11	45
	Single	2	4	6	6	6	10	8	42
	Multi	0	0	0	0	0	0	3	3
Vernon Twp.	Total	50	149	33	53	30	54	46	415
	Single	50	44	33	33	25	54	46	285
	Multi	0	105	0	20	5	0	0	130
Walpack Twp.	Total	0	0	0	0	0	0	0	0
	Single	0	0	0	0	0	0	0	0
	Multi	0	0	0	0	0	0	0	0
Wantage Twp.	Total	81	59	68	83	61	79	80	511
	Single	81	59	68	83	61	79	80	511
	Multi	0	0	0	0	0	0	0	0
Sussex County	Total	719	808	679	587	612	668	603	4,676
	Single	719	621	667	547	558	666	551	4,329
	Multi	0	187	12	40	54	2	52	347

Source: U.S. Census Bureau, Manufacturing & Construction Division
 Prepared by: New Jersey Department of Labor & Workforce Development, 7/07

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- ¹ Decker, A. 1942. *That Ancient Trail*. Trenton, NJ: Petty Printing Company.
- ² County of Sussex Board of Chosen Freeholders. *Sussex County Open Space & Recreation Plan*. 2003.
- ³ Workforce New Jersey Public Information Network. Labor Market Information Website: www.wnjp.in.net/OneStopCareerCenter/LaborMarketInformation/lmi01/poptrd6.htm . Accessed July 2007.
- ⁴ United States Census Bureau. American Factfinder – Sussex County, New Jersey. www.factfinder.census.gov . Accessed July 2007.
- ⁵ Lathrop, R. Land Use / Land Cover Update to Year 2000/2001. Center for Remote Sensing and Spatial Analysis – Cook College, Rutgers University. 2004.
- ⁶ Sussex County Department of Engineering and Planning. *Draft Sussex County Wastewater Management Plan*. 2007. page 5.
- ⁷ Morris Land Conservancy in Cooperation with the Sussex County Open Space Committee. *An Open Space and Recreation Plan for the County of Sussex*. Boonton, NJ, September 2003.
- ⁸ Sussex County Department of Engineering and Planning. *Sussex County Strategic Growth Plan*. 2007.
- ⁹ New Jersey State Planning Commission. *New Jersey State Development and Redevelopment Plan*. March 2001.
- ¹⁰ New Jersey Highlands Council. *Highlands Sustainable Agriculture Technical Report*. January 2007.
- ¹¹ New Jersey Statutes Annotated 40:55D: *Municipal Land Use Law*.
- ¹² U.S. Census Bureau, Manufacturing & Construction Division. Residential Building Permits Authorized 2000-2006. Prepared by New Jersey Department of Labor & Workforce Development, July 2007 <http://lwd.dol.state.nj.us/labor/lpa/industry/bp/hist00/bpsus.pdf>. Accessed May 8, 2008.

CHAPTER 4: SUSSEX COUNTY'S FARMLAND PRESERVATION PROGRAM – OVERVIEW



Farmland is an irreplaceable natural resource, and the farmers who are stewards of this land are important to the County for their value to both the local economy and the quality of life for residents. Agriculture provides food and fiber, clean air, stormwater management, groundwater recharge, wildlife habitat, and the open, scenic vistas that are the hallmark of Sussex County's landscapes. The farming industry is the basis of the County's successful Agritourism program which brings visitors to the County supporting both the farmer and other ancillary businesses.

Since 1983 Sussex County has permanently preserved **12,362 acres** of farmland. Sussex County remains firmly committed to land conservation and supports this highly successful program through their County Agriculture Development Board and its careful utilization of the County's dedicated trust fund for the purchase and preservation of open space and farmland.

Agricultural Development Area for Sussex County

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

Statutory Criteria:

- 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 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.

In 2007 the Sussex CADB identified and recommended areas in the County as part of the ADA. To help encourage and sustain agriculture in Sussex County and support the County's farmland preservation program, the Sussex CADB designated as much land as appropriate within the County's ADA. Prior to this time the County had designated ADAs

on a voluntary, case-by-case basis for farmland assessed properties or those properties eligible for farmland assessment. These properties had to have a minimum of 40 acres, or be located within a project area or reasonably contiguous to another application for farmland preservation. Utilizing the state's regulatory criteria for designating ADA and existing farmland assessment data, public water and sewer, centers designated per the *State Development and Redevelopment Plan*, tillable acreage, and soils, the County designated an ADA on a county-wide basis that does not exceed 90% of the County's agricultural land base. A map of the ADA is included in the *Maps Section* of this Plan.

County Criteria:

- All farm assessed property in Andover, Frankford, Fredon, Green, Hampton, Hardyston, Lafayette, Montague, Sandyston, Sparta, Stillwater, Vernon, and Wantage Townships as cited by tax assessments as of July 2006.
- The ADA does not include farm assessed property that is in an existing sewer service area or designated Center as per State Development and Redevelopment Plan.
- Land is currently in agricultural production or has strong potential for agricultural production or is farm assessed through a woodland management plan.
- Agriculture is the preferred, but not necessarily the exclusive use.
- Agriculture is permitted by current municipal zoning ordinance or is a protected, pre-existing, non-conforming use.

Description of the Sussex County ADA

The Sussex County ADA was approved by the Sussex CADB at its February 2007 meeting and was approved by the SADC at their July 2007 meeting (*Donna Traylor and Steve Bruder*)¹. Of the total assessed farmland in Sussex County, 80% of the non-preserved farmland is included within the ADA. (*February 2007 CADB Resolution and below table*) All preserved farmland is included within the ADA.

The Sussex ADA excludes the town centers as designated and/or proposed by the State Development and Redevelopment Plan. The ADA also excludes those sites with proposed and/or existing sewer service areas. Thus, the County's small towns and boroughs are outside of the designated ADA due to their proximity and suitability for development.

In addition, densely wooded farm-assessed property in Byram Township and publicly held open space are also excluded from the ADA. The Sussex CADB focused the ADA on the most agriculturally productive land in the County.

Acres of Farm Assessed Property within the Agriculture Development Area:

Municipality	Acres of Q-Farm Assessed Property	Acres of Q-Farm minus Town Centers and Sewer Service Areas	Q-Farm in Town Centers/SSA
ANDOVER TOWNSHIP	5,110.74	5,106.37	4.36
FRANKFORD TOWNSHIP	10,706.53	10,706.53	-
FREDON TOWNSHIP	5,466.28	5,466.28	-
GREEN TOWNSHIP	5,641.76	5,299.39	342.38
HAMPTON TOWNSHIP	7,107.24	7,107.24	-
HARDYSTON TOWNSHIP	6,922.00	3,901.18	3,020.82
LAFAYETTE TOWNSHIP	6,449.17	6,449.17	-
MONTAGUE TOWNSHIP	2,848.66	2,515.94	332.72
SANDYSTON TOWNSHIP	4,639.00	4,632.37	6.63
SPARTA TOWNSHIP	2,454.29	2,419.66	34.63
STILLWATER TOWNSHIP	7,835.96	7,835.96	-
VERNON TOWNSHIP	6,030.27	5,995.19	35.07
WANTAGE TOWNSHIP	24,620.13	24,613.76	6.37
TOTAL	95,832.03	92,049.04	3,782.98

Acres of Farm Assessed Property Outside of Agriculture Development Area:

ANDOVER BOROUGH	341.74
BRANCHVILLE BOROUGH	15.02
BYRAM TOWNSHIP	4,221.32
FRANKLIN BOROUGH	489.20
HAMBURG BOROUGH	12.78
HOPATCONG BOROUGH	1,130.01
NEWTON TOWN	110.17
OGDENSBURG BOROUGH	101.38
STANHOPE BOROUGH	166.93
SUSSEX BOROUGH	34.05
WALPACK TOWNSHIP	92.41
TOTAL	6,715.02

Summary Table –Adopted Agriculture Development Area as of February 2007:

TOTAL FARM ASSESSED PROPERTY:	102,547.05	
<i>PRESERVED FARMS</i>	9,468.00	
TOTAL QFARM IN ADA	92,049.04	
TOTAL QFARM IN TOWN CENTER/SSA	3,782.98	
TOTAL QFARM NON-ADA TOWN	6,715.02	
TOTAL QFARM (Not Preserved) WITHIN ADA	82,581.04	80.53%
QFARM PRESERVED/TOWN CENTER/ADA	19,966.01	19.47%
TOTAL	102,547.05	100.00%

The heaviest concentration of farmland assessed land in the County is located within the Kittatinny Valley stretching from Wantage Township west to Stillwater and Fredon Townships. There is also a productive belt of farmland stretching from Montague Township into neighboring Sandyston Township. These agricultural lands are bounded by High Point State Park, Stokes State Forest, and the Delaware Water Gap National Recreation Area. Further southwest of Sandyston is Walpack Township, which contains land that is farmland assessed, but Walpack is entirely encompassed by the Delaware Water Gap National Recreation Area and is excluded from the ADA.

Within the Highlands physiographic province in Sussex County there is agricultural land from Vernon Township through Hardyston and Sparta into Green Township. Farmland in this region of the County is surrounded by Wallkill River National Wildlife Refuge, Wawayanda State Park, Newark Pequannock Watershed, and Hamburg Mountain Wildlife Management Area.

Farmland Preserved to Date by Program and Municipality

The Sussex County Board of Chosen Freeholders created the Sussex County Agriculture Development Board (CADB) in 1983. This was the same year that the New Jersey State Legislature adopted the State Agriculture Retention and Development Act and created the State Agriculture Development Committee (SADC), which provides funding for farmland preservation programs, establishes farmland preservation policy statewide, and oversees program administration.

The Sussex CADB is comprised of seven voting members and three ex-officio members, including the County Agriculture Agent, a representative of the County Planning Department, and Sussex County Soil Conservation District. By law, a simple majority of the voting members must be farmers. The members are appointed by the Board of Chosen Freeholders.

The Sussex CADB made their first purchase of development rights on a 47-acre farm in Andover Township in 1990. Although funding for preservation was in short supply during the early years of the program, landowner participation and the number of farms approved for preservation have grown steadily. As of June 2007, there are **12,362 acres** of pending and preserved farmland in Sussex County. This includes projects for which the closing date is pending and will close this year. Of this number, **9,468 acres** (as of February 2007) (see above *ADA table*) are permanently preserved and **2,894 acres** have final approval and are pending preservation (see attached *Program History Table*). (*Sussex County Division of Planning*)². Additional acreage preserved through several SADC programs can be added to this total, including the 166-acre farm in Fredon preserved through the state-direct program, the 577-acre Lusscroft Farm, and two farms preserved through the nonprofit grant program totaling 329 acres.

Note: Farmland in Sussex County has been preserved with funding from the state and county, currently no municipality has been required to or contributed funding to purchase an agricultural easement. Thus, there is no "municipal cost share" column on the attached Program History Table

Sussex County Farmland Preservation – Program History

FARM NAME	ACRES PRESERVED	CLOSED DATE	TOTAL COST	SUSSEX COUNTY COST SHARE	SADC COST SHARE	TOTAL PER ACRE
Coray Kirby	72.97	07/27/1990	\$436,962.98	\$107,348.98	\$329,616.00	\$5,914.92
Minifie/Elwood	46.74	6/12/1991	\$299,585.00	\$59,917.00	\$239,668.00	\$6,500
Beemer/Cosh	197.86	06/30/1995	\$593,601.00	\$158,293.60	\$435,307.40	\$3,000.00
Kuperus Meadows	308.50	06/30/1995	\$925,507.80	\$246,802.08	\$678,705.72	\$3,000.00
Siek & Rena Postma	88.97	10/28/1996	\$199,295.04	\$50,891.41	\$148,403.63	\$2,240.00
Richard Harden	237.27	10/28/1996	\$642,845.16	\$169,044.47	\$473,800.69	\$2,700.00
Marjorie Cosh	258.88	06/26/1997	\$654,455.22	\$170,448.31	\$484,006.91	\$2,528.00
Ricker Brothers	250.11	8/13/1997	\$737,598.73	\$196,265.40	\$541,324.33	\$2,949.00
Bertha Compton	151.14	08/13/1997	\$430,456.69	\$114,022.66	\$316,434.03	\$2,848.00
Ernest & Marilyn Cosh	309.69	11/18/1997	\$774,247.25	\$201,304.28	\$572,942.97	\$2,500.00
Fred Joseph/Hans Amell	246.66	06/23/1998	\$616,668.25	\$299,515.77	\$317,152.48	\$2,500.00
Borderland Farm	69.24	06/23/1998	\$155,196.89	\$75,380.00	\$79,816.89	\$2,310.00
Elizabeth & Ruth Struble	106.66	10/07/1998	\$255,381.84	\$123,889.00	\$131,491.85	\$2,400.00
I. & B. Hamming	281.51	10/13/1999	\$492,131.46	\$239,029.77	\$253,101.69	\$1,785.00
John Russell	87.58	12/09/1999	\$283,593.60	\$70,898.10	\$212,695.20	\$2,000.00
Barbara Snook	141.79	12/09/1999	\$283,593.60	\$70,898.40	\$212,695.20	\$2,000.00
Edward Zebrowski	158.91	12/15/1999	\$401,138.53	\$104,581.13	\$296,557.40	\$2,542.00
John & Irene Frankowski	111.66	03/08/2000	\$206,986.00	\$51,237.80	\$155,784.20	\$1,900.00
Bruce & Beverly Hoehn	112.31	10/24/2000	\$242,828.49	\$81,616.89	\$161,211.60	\$2,162.00
John & Holly Vaughan	636.12	12/12/2000	\$1,073,282.76	\$258,850.55	\$814,432.21	\$1,700.00
Raymond Mooney Dairy	294.07	01/08/2001	\$1,099,245.20	\$322,068.81	\$777,176.39	\$3,738.00
Gilman Farm, Inc	86.87	02/07/2001	\$185,673.94	\$138,658.26	\$47,015.68	\$2,137.50
Marlyn & Margaret Shaffer	183.01	03/02/2001	\$274,515.45	\$64,853.36	\$210,461.85	\$1,500.00
Robert Cahill	39.11	06/11/2001	\$131,520.61	\$38,187.12	\$93,333.49	\$3,800.00
Patrick Kelly	123.61	08/31/2001	\$105,073.18	\$21,014.64	\$84,058.54	\$850.00
Harold Wirths	225.36	08/31/2001	\$392,983.36	\$95,357.20	\$297,626.16	\$1,875.00
James Cuneo	52.04	09/19/2001	\$98,583.66	\$24,388.67	\$74,194.99	\$1,900.80
John C. & Sonya Kuperus	37.07	10/15/2001	\$118,624.00	\$32,621.60	\$86,002.40	\$3,200.00
Paul Lundbergh	122.01	11/15/2001	\$372,137.52	\$100,050.09	\$272,087.43	\$3,050.00
Warsex Developers	149.70	12/21/2001	\$280,878.50	\$69,292.84	\$211,586.66	\$1,676.25
Claus Nepple	86.62	01/15/2002	\$190,370.84	\$48,458.03	\$141,912.81	\$1,640.00
John & Anita Hoitsma	74.69	07/19/2002	\$351,068.39	\$110,549.20	\$240,519.19	\$4,700.00

Sussex County Farmland Preservation – Program History (continued)

FARM NAME	ACRES PRESERVED	CLOSED DATE	TOTAL COST	SUSSEX COUNTY COST SHARE	SADC COST SHARE	TOTAL PER ACRE
Ed Scott	134.73	11/14/2002	\$547,946.91	\$165,266.76	\$382,680.15	\$4,067.00
Allen Ulrich	27.79	11/14/2002	\$71,531.46	\$18,680.44	\$52,851.02	\$2,574.00
Leonard Cagno	99.61	11/27/2002	\$209,181.00	\$52,793.30	\$156,387.70	\$2,100.00
Daniel & Judith Kadish	265.41	12/10/2002	\$712,929.33	\$187,474.01	\$525,455.32	\$2,700.00
Harriet Brooks	70.02	01/07/2003	\$157,837.03	\$40,348.58	\$117,488.45	\$2,254.00
Maple Farm Endeavors, L.P.	154.03	05/20/2003	\$254,152.30	\$60,842.52	\$193,309.78	\$1,650.00
Andrew Fairclough	65.63	05/30/2003	\$197,477.96	\$52,917.18	\$144,560.78	\$3,029.50
Christian & Brooks Parrott	121.15	06/27/2003	\$202,931.78	\$48,764.21	\$154,167.57	\$1,675.00
Alfred Jaeger	120.81	08/23/2003	\$223,511.27	\$54,971.69	\$168,539.58	\$1,850.00
Henry Boheim	89.80	12/29/2003	\$211,219.01	\$54,385.30	\$156,833.71	\$2,352.00
Jeffery Beetle	91.99	12/30/2003	\$289,777.95	\$79,113.98	\$210,663.97	\$3,150.00
Edward Gaffney	35.72	01/06/2004	\$99,658.80	\$26,325.74	\$73,333.16	\$2,790.00
Wolfpit Trust	52.25	03/16/2004	\$170,611.31	\$48,143.04	\$122,468.27	\$3,395.00
Ed Nowicki	174.40	04/08/2004	\$431,654.85	\$112,055.86	\$319,598.99	\$2,475.00
Johnathan Alpert	31.94	05/07/2004	\$79,650.00	\$20,561.00	\$59,069.00	\$2,500.00
Stephen & Tracy Landauer	85.14	06/25/2004	\$149,855.20	\$36,442.06	\$113,413.14	\$1,760.00
Jacob & Karen Westbrook	117.82	11/05/2004	\$291,020.34	\$75,523.90	\$215,496.44	\$2,600.00
James Ayers	72.67	11/05/2004	\$181,302.50	\$47,138.65	\$134,163.85	\$1,850.00
Raymond Barnitt	67.03	11/19/2004	\$147,481.40	\$37,540.72	\$109,940.68	\$2,200.00
Glenn Thomas	76.12	12/20/2004	\$220,756.70	\$58,614.71	\$162,141.99	\$2,900.00
Westfall Winery	332.30	12/20/2004	\$564,468.00	\$136,136.40	\$428,331.60	\$1,700.00
William Van Wingerdan	75.71	12/21/2004	\$271,306.80	\$78,377.52	\$192,929.28	\$3,600.00
Nicholas Cerbo	214.36	01/04/2005	\$601,592.21	\$159,523.56	\$442,068.65	\$2,871.00
Jack Dreisbach	244.76	01/13/2005	\$689,983.50	\$182,527.55	\$507,455.95	\$2,820.00
Peter Bina	25.56	07/15/2005	\$76,704.00	\$20,454.40	\$76,704.00	\$3,000.00
James Luckey	81.83	11/03/2005	\$261,659.20	\$91,811.28	\$169,847.92	\$3,200.00
Karen Takacs	67.56	12/12/2005	\$668,923.20	\$267,569.28	\$401,353.92	\$9,900.00
Carolyn Sadlon	109.41	12/23/2005	\$381,940.65	\$109,690.39	\$272,690.39	\$2,735.00
Lorraine Jordan	45.33	03/16/2006	\$206,260.60	\$64,371.44	\$141,889.16	\$4,550.00
John K. & Naomi Komar	35.34	04/10/2006	\$169,632.00	\$63,716.80	\$115,915.20	\$4,800.00
George & Leon Roof	84.42	05/19/2006	\$360,895.50	\$110,590.20	\$250,305.30	\$4,275.00
John & Barbara Fairclough #1	37.63	5/31/2006	\$160,600.00	\$49,640.00	\$110,960.00	\$4,400.00
Miriam Rogers	120.36	06/27/2006	\$431,589.62	\$124,501.85	\$307,267.77	\$3,588.00
Frank & Nancy Pritchard	19.64	07/26/2006	\$113,946.80	\$39,292.00	\$74,654.80	\$5,800.00
Helen Lust	29.91	08/01/2006	\$151,719.90	\$49,085.85	\$102,634.85	\$5,100.00
Bruce Ringier	67.79	08/11/2006	\$155,096.24	\$40,249.67	\$114,846.57	\$2,470.00
Ralph Hunt	101.28	08/16/2006	\$341,034.80	\$100,515.52	\$240,519.28	\$3,800.00
Arthur & Sarah Braunwell	34.04	09/20/2006	\$173,997.25	\$56,579.53	\$117,417.72	\$5,148.00

Sussex County Farmland Preservation – Program History (continued)

FARM NAME	ACRES PRESERVED	CLOSED DATE	TOTAL COST	SUSSEX COUNTY COST SHARE	SADC COST SHARE	TOTAL PER ACRE
Lorenz Frank	129.51	12/22/2006	\$336,744.20	\$88,071.56	\$248,672.64	\$2,600.00
Alice Gebhard	164.16	02/13/2007	\$443,234.70	\$116,553.61	\$326,680.39	\$2,700.00
Nelson Ortiz	41.76	02/26/2007	\$133,638.40	\$36,770.56	\$96,867.84	\$3,200.00
John & Barbara Fairclough #2	78.75	5/31/2007	\$172,035.12	\$49,342.05	\$122,693.07	\$3,800.00
John & Barbara Fairclough #3	31.59	5/31/2007	\$132,673.80	\$40,433.92	\$92,239.88	\$4,200.00
	9475.78	Total Cost:	\$25,156,194.53	\$ 7,269,444.01	\$17,918,633.72	
			Percent Share:	29%	71%	

Below is a table detailing the breakdown of preserved farmland by program and by municipality (provided by Sussex County Division of Planning, June 8, 2007). This data does not include pending farmland applications for projects that will be closing within the calendar year. This table includes the type of program the land was preserved under and the acreage totals for each municipality. Overall, 93% of all projects in Sussex County have been completed through the County Easement Purchase program.

Preserved Farmland by Municipality and Type of Program:

Municipality	Acres	Type
Andover Township	131.18	County Easement Purchase
Andover Township	38.564	Non-Profit
Frankford Township	693.28	County Easement Purchase
Fredon Township	101.27	County Easement Purchase
Fredon Township	165.91	SADC Direct Easement
Fredon Township	291.4	Non-Profit
Green Township	100	8-Year Program
Green Township	94.23	Emergency Appropriation
Green Township	523.56	County Easement Purchase
Hampton Township	764.43	County Easement Purchase
Lafayette Township	1,231.54	County Easement Purchase
Montague Township	515.05	County Easement Purchase
Sandyston Township	53.63	8-Year Program
Sandyston Township	202.18	County Easement Purchase
Sparta Township	67.56	County Easement Purchase
Stillwater Township	324.5	County Easement Purchase
Vernon Township	332.59	County Easement Purchase
Wantage Township	5,239.9	County Easement Purchase

total preserved:	10,870.77
total preserved (not including 8-year):	10,717.14
% County Easement Purchase:	93%
% SADC Direct Easement:	2%
% Non-Profit:	3%
% Emergency Appropriation:	1%
% 8-Year Program	1%

County Easement Purchase Program

County Easement Purchases involve the sale of farmland development rights to the County by the landowner. By selling their development rights to the County, the landowner agrees to restrict their land to agricultural use. To be eligible for the County Easement Purchase program, a landowner must complete an application. These applications are distributed once a year. Following review of the application and a site visit by the Sussex CADB are two independent appraisals, which determine the land's fair market value and its agricultural value. The difference between these two is the price of the farm's "development rights," also known as the easement value. This is the price that the State offers to the landowner, and if this price is accepted, the County has title work and a survey done for farms receiving final State, County and Municipal approvals, and then schedules a closing. The landowner still retains ownership of his or her farm and can sell it on the open market at any time, but the land is deed-restricted, in perpetuity, for agricultural use.

The majority of farmland preservation projects in Sussex County have been accomplished using County Easement Purchase program. Since 1990, 75 projects have been completed in twelve municipalities.

The below chart is a summary of the Sussex County Farmland Preservation program detailing the acres preserved, the number of projects completed each year since 1990, and the cost share between Sussex County and the SADC for the county easement purchase program.

YEAR	ACRES PRESERVED	NUMBER of PROJECTS	TOTAL COST	SUSSEX COUNTY COST SHARE	SADC COST SHARE	TOTAL PER ACRE
1990	72.97	1	\$ 436,962.98	\$ 107,348.98	\$ 329,616.00	\$ 5,914.92
1991	46.74	1	\$ 299,585.00	\$ 59,917.00	\$ 239,668.00	\$ 6,500.00
1995	506.36	2	\$ 1,519,108.80	\$ 405,095.68	\$ 1,114,013.12	\$ 3,000.00
1996	326.24	2	\$ 842,140.20	\$ 219,935.88	\$ 622,204.32	\$ 2,470.00
1997	969.82	4	\$ 2,596,757.89	\$ 682,040.65	\$ 1,914,708.24	\$ 2,706.25
1998	422.56	3	\$ 1,027,246.98	\$ 498,784.77	\$ 528,461.22	\$ 2,403.33
1999	669.79	4	\$ 1,460,457.19	\$ 485,407.40	\$ 975,049.49	\$ 2,081.75
2000	860.09	3	\$ 1,523,097.25	\$ 391,705.24	\$ 1,131,428.01	\$ 1,920.67
2001	1312.85	10	\$ 3,059,235.42	\$ 906,492.59	\$ 2,153,543.59	\$ 2,372.76
2002	688.85	6	\$ 2,083,027.93	\$ 583,221.74	\$ 1,499,806.19	\$ 2,963.50
2003	713.43	7	\$ 1,536,907.30	\$ 391,343.46	\$ 1,145,563.84	\$ 2,280.07
2004	1121.10	11	\$ 2,607,765.90	\$ 676,859.60	\$ 1,930,886.40	\$ 2,524.55
2005	743.48	6	\$ 2,680,802.76	\$ 831,576.46	\$ 1,870,120.83	\$ 4,087.67
2006	705.25	11	\$ 2,601,516.91	\$ 786,614.42	\$ 1,825,083.29	\$ 4,230.09
2007	316.25	4	\$ 881,582.02	\$ 243,100.14	\$ 638,481.18	\$ 3,475.00
TOTALS:	9475.78	75	\$ 25,156,194.53	\$ 7,269,444.01	\$17,918,633.72	\$ 3,009.00

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. The State Agricultural Development Committee (SADC) has recently updated their rules (N.J.A.C. 2:76-6.3 through 2:76-17A.17) to promote County PIGs to streamline and expand the farmland preservation program throughout the state. In order to qualify for PIGs, an agricultural advisory committee, as which the County Agricultural Development Board (CADB) functions for the county, is necessary. Additionally, the county must maintain a dedicated source of funding or alternative means for funding farmland preservation. Both county and municipal applications should correlate with county comprehensive farmland preservation plans. Sussex County has developed this *Comprehensive Farmland Preservation Plan Update* in order to bring it in to compliance with the newly adopted guidelines and qualify for the County Planning Incentive Grant program.

Municipal Planning Incentive Grants

Municipal Planning Incentive Grants (PIGs) are very similar to the County PIGs in their goals, requirements, and implementation. Like the County PIGs, Municipal PIGs require a local financial commitment for preserving farmland. Upon the completion of a municipal Farmland Preservation Plan and application to the SADC, grants are provided by the SADC in order to purchase development easements. The Farmland Preservation Plan Element describes the farms and programs that are the focus of the Municipal PIG. In order to qualify for this program, the town must have an agricultural advisory committee, a source of funding for farmland preservation, and a municipally approved Right to Farm ordinance. Currently there are no communities in Sussex County enrolled in the Municipal Planning Incentive Grant program. The Sussex CADB promotes the County Easement Purchase program for farmland preservation as the most effective and direct tool in Sussex County for farmland preservation.

SADC Direct Easement Purchase

Also important to Sussex County farmers is the State Agriculture Development Committee (SADC). The SADC is the lead program in administering the state's Farmland Preservation Program. The SADC:

- Provides cost share funding for purchase of development easements.
- Directly purchases farms and development easements from landowners;
- Administers grants to landowners in the Farmland Preservation Program to fund up to 50 % of soil and water conservation projects;
- Administers the Right to Farm Program (discussed in *Chapter 8*);
- Administers the Transfer of Development Rights Bank; and,
- Operates the Farm Link Program, which helps connect farm owners with potential tenant farmers.

The SADC Direct Easement Purchase is a program that allows a landowner to apply directly to the SADC for the sale of development rights. Landowners do not have to be within an ADA if they are making an application directly to the State, although this is not encouraged it is strongly recommended that the farm be located within the ADA. In most cases, the State will pay up to 100% of the certified appraised easement value in the direct easement purchase program. By participating in this program, the landowner still retains ownership of their land, but agrees to restrict land use to agricultural purposes. The Direct Easement Program does not receive monetary contributions from the County. In Sussex County, one farm in Fredon Township was preserved using SADC Direct Easement Purchase. The farm was 166 acres and was preserved at a cost of \$630,469 or \$3,800 per acre. The state covered 100% of the cost of preserving this farm.

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 SADC negotiates a purchase price subject to recommendations of two independent appraisers and review by a state review appraiser. The land becomes restricted so that it becomes permanently preserved for agriculture. In this type of acquisition, the landowner does not retain any rights. The property is then resold at auction, the SADC does not retain ownership. To qualify to participate in this program, the farmland must be within an ADA and be eligible for Farmland Assessment. Currently, no farm in Sussex County has been preserved through the fee simple program.

Nonprofit Grant Program

Grants are provided to nonprofit organizations by the State Agricultural Development Committee. These grants fund up to 50% of the fee simple or development easement values on farms. (*SADC website*) These grants help to preserve farmland throughout the county, and generally these transactions involve properties with both agricultural and environmental significance. These grants are obtained through an application process, in which the land is valued by independent appraisers.

Two farms were preserved in 2001 and 2002 using the nonprofit grant program, one in Fredon and one in both Andover Township and Fredon. Both were completed by The Nature Conservancy. Farmland acres preserved through the nonprofit program totals to 330 acres for a cost of \$4,250,000, 50% of which was covered by the state. The average total cost per acre was \$12,880.

In 2006 Morris Land Conservancy received a nonprofit Planning Incentive Grant to aid in the preservation of farmland in Sussex County. Working closely with the Sussex CADB, the Conservancy has identified five farmland preservation projects. Morris Land Conservancy will be contributing 30% of the funding towards these projects. As of July 2007, Morris Land Conservancy had signed contracts on all five farms. The County will be providing the balance of the funding.

Transfer of Development Rights

Currently, Frankford Township is the only municipality in Sussex County looking to develop and implement a Transfer of Development Rights program. More information about this can be found in *Chapter 3* under “Coordination with Transfer of Development Rights Program.” Transfer of Development Rights can be used in conjunction with the traditional Purchase of Development Rights program and other preservation tools that are available to the Sussex CADB.

Other programs and partnerships

The Lusscroft Farm in Sussex County was donated to the State of New Jersey by James Turner in 1930 and is preserved directly by the State as state-owned land. This 577 acre farm is located in Montague and Wantage Townships and is owned and managed by the NJDEP, Division of Parks and Forestry. The Lusscroft Farm is under the auspices of High Point State Park. There is a Memorandum of Understanding (MOU) between NJDEP and the SADC regarding the farmland.

Consistency with SADC Strategic Targeting Project

The purpose of the SADC Strategic Targeting Project is to prioritize farmland to be preserved by targeting farms for preservation based on specific criteria, including the prioritization of prime and statewide soils in agricultural production outside sewer service areas. According to the SADC, the Strategic Targeting Project has three primary goals. These are as follows:

- The coordination of farmland preservation and retention of agricultural practices “with proactive planning initiatives.”
- To update and create maps which serve as a tool for more accurate preservation targets
- To coordinate different preservation efforts, such as open space, with farmland preservation

Through the use of the Strategic Targeting Program, the SADC hopes to more efficiently target and designate farmland for preservation and, by doing so, boost the State’s agricultural industry.

The Sussex CADB, through the completion of its *2003 Comprehensive Farmland Preservation Plan* and this *Plan Update*, meets each of the goals as outlined in the Strategic Targeting Project.

Eight Year Programs

The 8-Year Farmland Preservation Program and the Municipally Approved 8-Year Farmland Preservation Program are both cost sharing programs for soil and water

conservation projects, in which the farmer receives 50% cost sharing for these projects as well as protection against emergency energy and water restrictions and eminent domain. In return, the farmer signs an agreement that restricts the land to agricultural use for eight years. For entrance into these programs and to qualify for benefits, a farm must be located within an ADA. Technical assistance for the soil and water practices comes through the Natural Resource Conservation Service. The cost share is based on the number of acres enrolled.

In Sussex County, two landowners are currently participating in an eight-year program. A 100-acre farm in Green Township and 54-acre farm in Sandyston Township are currently enrolled in the 8-Year Program.

Coordination with Open Space Preservation Initiatives

A cooperative project involves a partnership and/or funding from more than one agency. This kind of project leverages county farmland preservation dollars and makes use of municipal open space trust funds or grants to non-profit organizations. These “hybrid” projects are an opportunity to use traditional open space funds, where appropriate, to help preserve farm properties, especially where those properties are a mixture of cropland and woodland areas. The use of Green Acres funding, local open space trust funds, and nonprofit grant funds are becoming increasingly important to preserving agricultural landscapes. Sussex County has not completed cooperative/hybrid projects to date, but would be willing to do so should the opportunity arise. Thirty percent of Sussex County’s total land mass is permanently preserved, public open space.

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. As the establishment of trails and parks in local communities grows in Sussex County the CADB can look to the Open Space Plans to determine whether public access easements should be negotiated as part of a farmland preservation project.

Twelve towns in Sussex County currently have municipal Open Space trust funds (see *Municipal Open Space Funding table on page 4-13*). Through the adoption of Open Space Plans, the Sussex CADB is in a better position to coordinate farmland preservation with open space preservation.

It has never been the policy of the Sussex CADB to require a municipal monetary contribution toward farmland preservation projects. All easements (except one) to date have been funded through SADC and County monies. Although many county municipalities currently have dedicated funding for open space and farmland preservation, the amounts raised are small (on average \$40,000 to \$75,000 per year). It has been County policy to suggest that municipalities refer any interested farmland owners to the County farmland preservation program in order for towns to use their limited funds for open space projects. This protocol allows for more land protected under both programs.

Municipal Open Space Funding in Sussex County:

TOWNS	Municipal Open Space fund	Municipal Tax Rate (per \$100)	Existing Balance (\$)	Open Space Plan	Enrolled in the Green Acres Planning Incentive Program	Farmland Plan
Andover Borough	No	\$ -	\$ -	Master Plan	No	Master Plan
Andover Township *	Yes	\$ 0.01	will generate \$55,000 per year	2008 anticipated	No - plan to enroll	No
Branchville Borough	No	\$ -	\$ -	No	No	No
Byram Township *	Yes	\$ 0.02	\$ 383,379	Yes - 2001	Yes	No
Frankford Township *	Yes	\$ 0.03	\$ 687,977	Yes	Yes	under development
Franklin Borough	No	\$ -	\$ -	Master Plan - 2003	No	
Fredon Township *	Yes	\$ 0.02	\$ 136,463	Yes - 2003	Yes	
Green Township *	Yes	\$ 0.03	\$ 491,295	Yes - 2001	Yes	No
Hamburg Borough *	Yes	\$ 0.003	\$ 26,691	No	No	
Hampton Township *	Yes	\$ 0.03	\$ 799,455	Yes - 2000	No	
Hardyston Township	No	\$ -	\$ -	Master Plan - 2003	No	No
Hopatcong Borough *	Yes	\$ 0.01	\$ 256,523	Yes	No	
Lafayette Township *	Yes	\$0.01-\$0.03	\$ 70,515	Yes - 2005	Yes	
Montague Township	No	\$ -	\$ -	No	No	
Newton	No	\$ -	\$ -	No	No	No
Ogdensburg Borough	No	\$ -	\$ -	No	No	No
Sandyston Township	No	\$ -	\$ -	No	No	No

Sparta Township *	Yes	\$ 0.02	\$ 144,634	Yes 1997	No	No
Stanhope Borough	No	\$ -	\$ -	No	No	
Stillwater Township *	Yes	\$ 0.01	\$ 49,402	Yes 2006	Yes	
Sussex Borough	No	\$ -	\$ -	No	No	No
Vernon Township	No	\$ -	on November ballot for renewal	Yes 2003	Yes	
Walpack Township	No	\$ -	\$ -	No	No	
Wantage Township *	Yes 2007	\$ 0.02	will generate \$140,000 per year	No	No	

* tax data from Sussex Tax Administrator Carol Dennis

Last Updated: June 28, 2007

On the following page is the *Garden State Greenways Map* for Sussex County. This map details the location of local and regional open space and recreational lands in and around Sussex County and may be used in conjunction with the County's *Project Area Map* to identify land for preservation.

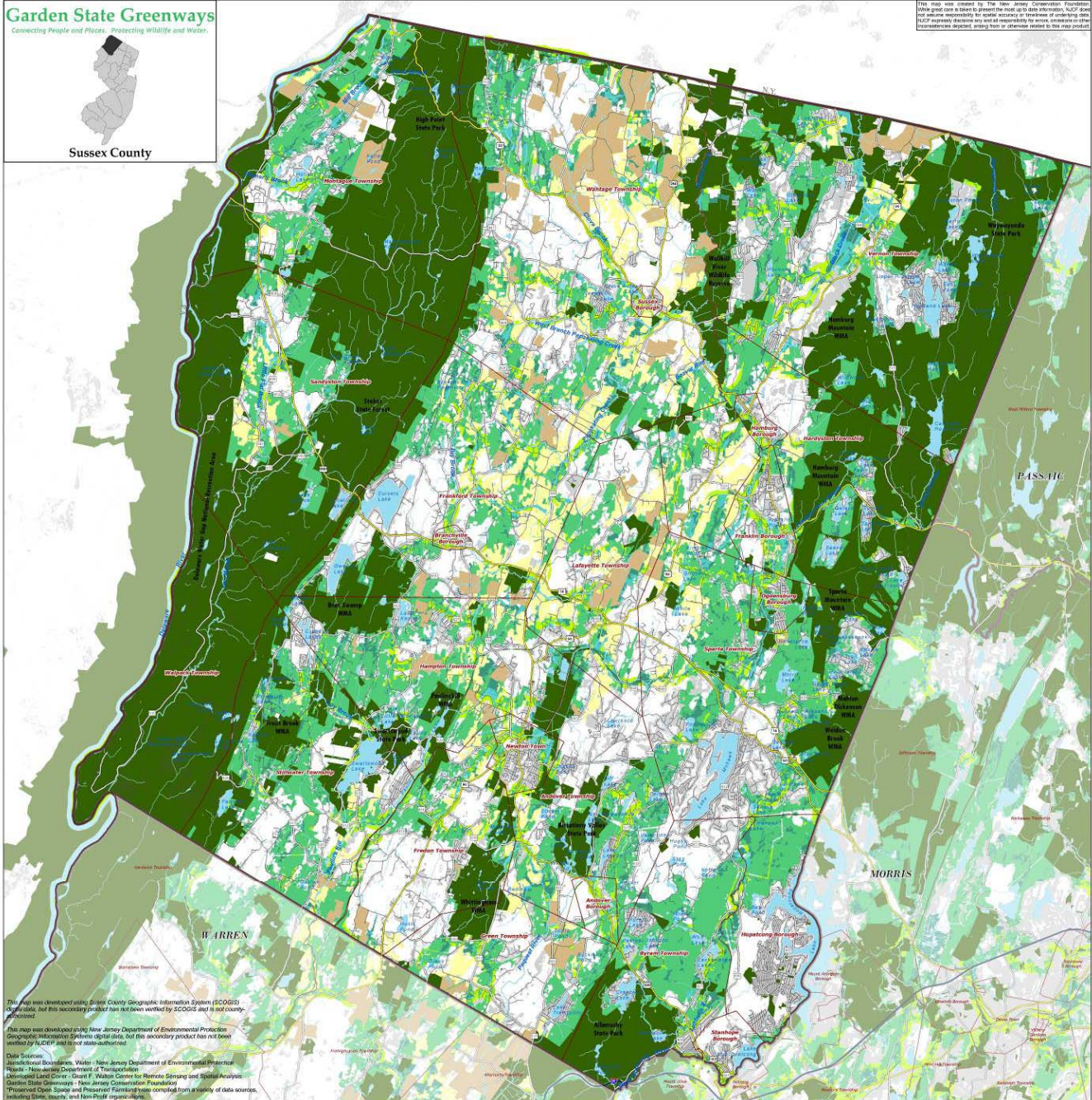
Garden State Greenways

Connecting People and Places. Protecting Wildlife and Water.



Sussex County

This map was created by The New Jersey Conservation Foundation. The map data is derived from the State of New Jersey's GIS data. The NJCF does not assume responsibility for spatial accuracy or treatment of underlying data. NJCF expressly disclaims any and all responsibility for errors, omissions or other inaccuracies that may result from or otherwise related to this map product.



This map was developed using Sussex County Geographic Information System (SCGIS) data files, but this secondary product has not been verified by SCGIS and is not county authorized.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System (NJGIS) data files, but this secondary product has not been verified by NJDEP and is not state authorized.

Data Sources:
 Municipal Boundaries, Water - New Jersey Department of Environmental Protection
 Land Cover - New Jersey Department of Transportation
 Land Use - Grant F. Walton Center for Remote Sensing and Spatial Analysis
 Garden State Greenways - New Jersey Conservation Foundation
 Preserved Open Space and Preserved Farmland data compiled from a variety of data sources, including State, County, and Non-Profit organizations.

Garden State Greenways	
	Agriculture/Grassland
	Emergent Wetland
	Forested Wetland
	Upland Forest
	Beach/Dune
	Connectors

Other Land Cover	
	Preserved Open Space
	Preserved Farmland
	Water
	Developed 2001
	County Boundary
	Municipal Boundary

Infrastructure	
	Interstate/Toll Highway
	U.S./State Highway
	County Road
	Local Road



Garden State Greenways (GSG) is a vision for an interconnected, statewide system of open space. GSG county maps depict the results of the New Jersey Green Infrastructure Assessment (NJGIA) conducted by the New Jersey Conservation Foundation in cooperation with the New Jersey Department of Environmental Protection Green Acres Program and the Grant F. Walton Center for Remote Sensing and Spatial Analysis at Rutgers University.

The NJGIA identified large tracts of undeveloped land that could function as "hubs" of an interconnected open space system in New Jersey. Linear "connectors" were also identified by the NJGIA in order to represent potential linkages among identified hubs.

Garden State Greenways refers to the "green infrastructure" identified by the NJGIA and represents a vision of interconnected open space that can help to lessen the environmental and social impacts of sprawl and maintain quality of life in New Jersey.

Green infrastructure plays a vital role in maintaining public health and quality of life in New Jersey by providing close-to-home recreation opportunities, safeguarding surface and underground water supplies and productive soils, protecting native plant and animal populations, and upholding scenic, cultural and historic amenities contributing to community character and livability throughout the state.

- Garden State Greenways sets forth eight broad goals towards achieving the vision of a "green infrastructure":
1. Establish parks, trails, or other protected lands within walking distance of every New Jersey resident.
 2. Permanently protect New Jersey's critical natural resource lands: those contributing to groundwater or aquifer recharge, surface water quality, rare and endangered species habitat, and prime soils.
 3. Permanently protect large, contiguous tracts of natural land for the long-term survival of native plant and animal species.
 4. Permanently protect large, contiguous tracts of farmland for the long-term viability of agriculture and the maintenance of scenic and cultural landscapes.
 5. Permanently protect parks, natural lands, and farmland surrounding historic sites, in order to maintain their historic character, visual context and interpretive value.
 6. Link together New Jersey's protected natural, agricultural, historic, and recreation lands via trails and greenway connectors.
 7. Grant public access and trail rights-of-way, where appropriate, across green infrastructure lands to allow the public to benefit from the scenic, recreational and interpretive opportunities provided therein.
 8. Coordinate state, local, and private preservation as well as land use planning efforts, around common maps and shared GIS data, towards achieving goals one through seven.

New Jersey Conservation Foundation
 visit the GSG website at www.gardenstategreenways.org

Farmland Preservation Program Funding Expended to Date

The Sussex County Open Space and Farmland Preservation Trust Fund was established in 2000, with the support of 73% of voters. This trust was initially set at two cents, with 90% of the income from the Trust allocated towards farmland preservation. Prior to the establishment of the dedicated Trust, Sussex County funded farmland preservation through a \$3 million bond issued in 1987. In 2005 the voters of Sussex County approved a second dedicated fund of one and one-half cents. This second source of funding is competitive and is shared between open space and farmland preservation. The below table details the amount generated per year since 2006 and the funds expended for farmland preservation and open space preservation.

County of Sussex Analysis of Open Space Tax Levies				
Year	Total Levy	Original Rate(0.02)		Additional Rate(0.015)
		Dedicated to Farmland Preservation	Dedicated to Open Space	Dedicated to Farmland or Open Space Preservation
2006	\$6,026,531.56	\$3,099,359.09	\$344,373.23	\$2,582,799.24
2007	\$6,940,123.99	\$3,569,206.60	\$396,578.52	\$2,974,338.87

To date, Sussex County has spent \$7,269,444 to preserve farmland in the County. (*See Farmland Program History Table*) State funding has totaled \$17,918,633.72 for farmland preservation in Sussex County. As noted earlier, there has been no municipal cost share to date in Sussex County.

Monitoring of Preserved Farmland

The Sussex CADB monitors the preserved farms on an annual basis to insure that the deed restrictions are being adhered to (*see SADC website*). This on-site visit and contact with the farmer also provides an important opportunity for meeting with landowners.

Nonprofit organizations holding farmland easements monitor their preserved farms on an annual basis, without the participation of County staff, to insure that the deed restrictions are adhered to. As noted earlier, when a nonprofit organization preserves a farm it may be both for its agricultural value and its natural resource value. In Sussex County, one of the two farms preserved by nonprofit organizations not only has an agricultural easement, it has a conservation easement as well. It is the responsibility of the owner of the easement, in this case, the New Jersey Conservation Foundation, to monitor both the agricultural easement and the conservation easement. An additional farm in Sussex County was preserved by The Nature Conservancy and was partially funded by other grant sources, in addition to state farmland funding.

Coordination with Transfer of Development Rights Programs

Frankford Township is currently the only municipality in Sussex County currently seeking to develop and implement a transfer-of-development rights program. Frankford is attempting to direct development activity towards land that is adjacent to existing commercial buildings and highways. Towards this end, the Township has identified a desirable receiving zone at Ross's Corner – a 250-acre site located at the intersection of Routes 15, 206 and County Road 565. Desirable sending zones and acceptable mechanisms for determining and transferring development credits have not yet been determined. Frankford Township has received an Office of Smart Growth Smart Future Grant for \$45,000 and a Planning Assistance Grant from the State TDR Bank for \$40,000 to cover a portion of the estimated cost of this project.

Developing a TDR program in Frankford Township is highly consistent with the County's goal of concentrating development while preserving its rural environs. Frankford is a predominately agricultural municipality, and most areas in the Township could provide excellent TDR sending zones.

¹ Personal Communication, Donna Traylor Sussex CADB and Steve Bruder State Agriculture Development Committee, June 2007.

² Information provided by Sussex County Division of Planning, July 11, 2007.

CHAPTER 5: FUTURE FARMLAND PRESERVATION PROGRAM



Preservation Goals

Sussex County is 343,445 acres (535 square miles) in size. Of this, 102,547 acres, or 30 % of total county land area, are under farmland assessment, which encompasses croplands, woodlands, farm structures and wetlands/waterways that occur on agricultural property. The *2002 Census of Agriculture* identifies 22% of total county land area, or 75,496 acres, as farms, which excludes some farmland assessed parcels that are not in active agricultural production.

Since 1983, the County has preserved 9,468 acres of farmland, with an additional 2,894 acres pending this year, for a total of **12,362 acres** of preserved farmland in Sussex County. According to the *2002 Census of Agriculture*, this leaves 63,134 acres comprising 84% of the County's total farmland unprotected in Sussex County.

The *2003 Comprehensive Farmland Preservation Plan* for Sussex County anticipated the following preservation goals:

One year acreage target:	2,522 acres
Five year acreage target:	12,610 acres
Ten year acreage target:	25,220 acres

In the four years since the completion of the Comprehensive Plan, the Sussex CADB has preserved 2,886 acres. Based upon the State's Minimum Eligibility Criteria and the funding available for farmland preservation, the 2003 goals remain appropriate for Sussex County. The following sections will outline the project areas, identify candidate farms meeting the Minimum Eligibility Criteria as defined by the SADC and provide funding projections for the purchase and preservation of land in Sussex County.

Public Participation

As part of the development of the *Sussex County Comprehensive Farmland Preservation Plan Update*, the Sussex CADB invited farmers, County Board of Agriculture members, and representatives from state and federal farming organizations and agencies to two public meetings on the Farmland Preservation Plan Update. The first meeting was to gather input

on the direction and future of the county's farmland program and the second was to receive comments on the Draft Plan.

Public Hearing #1 – Farmland Owners and Community Leaders – May 21, 2007

The Sussex County Board of Chosen Freeholders and the Sussex County Agriculture Development Board hosted a public meeting entitled "A Vision for Farmland Preservation in Sussex County". The meeting took place on May 21, 2007, at 7:00 p.m., in the Freeholder Meeting Room at the Sussex County Administrative Center at One Spring Street in Newton. Attended by over fifty residents, the meeting focused on the current and future status of agriculture and the farmer in Sussex County. Present at the meeting were representatives from the County Agriculture Development Board, farmland owners, interested residents, and local community leaders. Those present were encouraged to ask questions and voice their opinions about the existing plan and the future of agriculture in Sussex County.

Attendees expressed general support for the farmland preservation program as well as a strong desire to protect land from suburban sprawl, both as agricultural land and as habitat for wildlife. Some participants in the Farmland Preservation Program, especially those who have taken advantage of the variety of programs available to assist local farmland owners, stated that they were happy with the program. Some farmers in attendance felt that the program's restrictions on preserved farmland, especially those on farm buildings, placed them at a disadvantage. Restrictions on the use of farms structures for ancillary purposes, such as veterinary practices and farm stands, were particularly contentious. Farmers felt that these prohibited retail uses greatly supplement their incomes, and restrictions on them may prevent some farmers from preserving their land.

Many farmers felt that the program lacked consistency in its implementation. Some expressed a lack of faith in the appraisal process caused by appraisers presenting low and vastly different values. For example, one farmer reported a \$1,600 per acre difference in two separate appraisals on his farm, and though he wants to preserve his farm, he feels that the offer given him was too low. Additionally, some farmland owners reported inconsistencies among various government agencies concerning farmland preservation. One farmer reported that the County road department was trying to replace part of her working farm with roadside retaining ponds.

In addition to preserving the land on which agriculture takes place, efforts to preserve the farmer are considered necessary as well. Impediments to this, as stated by attendees of the meeting, include economic limitations on farmers' access to land and a lack of agricultural supply and service infrastructure in the County. Access to land is a major problem for Sussex County farmers. As development consumes tillable land, the remaining farmlands become more expensive. Attendees pointed out that the price of land is too high for most local farmers to compete for the purchase of preserved farmland. Some attendees asserted that the law should be changed in a way that would not only promote agriculture in the region, but also help farmers to compete in auctions for preserved farmlands. Infrastructure is another major issue. There is a shortage of processing facilities, such as

creameries and lumber mills, in the region, which makes agriculture more costly. Operations such as these must be actively supported in order to preserve farmers in Sussex County. Attendees were encouraged by a recent influx of agricultural businesses, such as the Sussex Tractor Supply and a new large animal veterinarian, to the area.

Public Hearing #2 – October 15, 2007 – Comments on Draft Farmland Plan

The Sussex CADB hosted the second of two public meetings on the Draft Comprehensive Farmland Preservation Plan Update on Monday evening, October 15, 2007 at the Sussex County Administrative Center. Attended by farmers from throughout the County, discussion focused on how the farmland program works, a description of the County farmland project areas, and the process for preserving farmland under the updated SADC rules. Several farmers also expressed concern regarding loss of equity in their land due to changing state regulation, the trend in land values in the County, and the potential loss of agricultural support services for local farmers. Following the public discussion, the Sussex CADB approved the draft Comprehensive Farmland Preservation Plan Update and recommended it be forwarded to the State and County Planning Board for their approvals.

Project Area Summaries

The Sussex CADB has identified ten project areas within the County's Agriculture Development Area for farmland preservation. These project areas are shown on the *Project Areas Map* included within this Plan and described below. These project areas were developed by analyzing the County's soils and tillable land areas, as well as productive farmland and existing preserved farmland clusters. Mapping tools developed by the Garden State Greenways program were also employed.

Western Highlands 1 and Western Highlands 2 Project Areas

The Western Highlands Project Areas (1 and 2) are the southernmost project area in Sussex County. They are located to the northeast of the border of Sussex and Warren County and northwest of the border of Sussex and Morris County. These project areas extend east to Route 15 and west to Route 94. Byram, Green, Andover, Fredon, Stanhope, Hopatcong, Newton, Hampton, Lafayette and Sparta are located within these project areas.

The Western Highlands 2 encompasses Byram and Hopatcong and falls within the Highlands. The Western Highlands 1 falls within the Ridge and Valley and contains higher quality agricultural soils and fewer steep slopes than the Highlands region. There are 11 preserved farms located within Western Highlands 1 project area.

Located within the Upper Delaware River watershed, these project areas are also home to forested woodland and wetland areas. The Musconetcong and Pequest Rivers flow through the region. It should be noted that Byram, Stanhope, Andover Borough, Hopatcong and Newton are not part of the approved ADA.

Eastern Highlands 1 and Eastern Highlands 2 Project Areas

The Eastern Highlands Project Areas (1 and 2) are the easternmost project areas in Sussex County. These project areas extend east to the County's border with Passaic (N.J.) and Orange (N.Y.) Counties. They extend west to Route 565 in the northwest and Route 15 in the southwest. These project areas include Franklin, Hamburg, Hardyston, Vernon, Sparta, and Ogdensburg.

Located completely within the Highlands Region, this Physiographic Province has steep slopes, many over 25%, which make the land very difficult to use for agricultural purposes. Due to its topography, the Eastern Highlands Project Areas (1 and 2) contains fewer ADA farmland assessed properties and much of the land falls within the Highlands Preservation or Highlands Planning Areas. There are three preserved farms within these project areas. Fed by the Pequannock River, Rockaway River and Wallkill River watersheds, the land in the Eastern Highlands Project Areas (1 and 2) consists mainly of upland forests. These forests provide critical habitat for threatened and endangered species. It should be noted that Franklin, Hamburg, and Ogdensburg are not part of the approved ADA.

Kittatinny Valley East Project Area

The Kittatinny Valley East Project Area is located in the northern part of Sussex County. It lies to the southwest of the County's border with Orange County and to the northwest of Route 565 in Vernon. Libertyville Road in Wantage and the Wantage-Montague border comprise the southwest and northwest boundaries of this project area. The townships of Wantage and Vernon are partially encompassed by this project area.

This project area falls within both the Highlands and the Ridge and Valley Physiographic Provinces, but the vast majority of it lies within the Ridge and Valley Province. This project area contains prime agricultural soils and includes 25 preserved farms, the highest number in the County. This project area is part of the Wallkill River watershed, which provides the water for the grassland habitat that composes much of the region. In addition to grasslands, there is a small concentration of wetlands located in the eastern part of the project area.

Central Kittatinny Valley Project Area

The Central Kittatinny Valley Project Area is located between the East and West Kittatinny Valley Project Areas within Sussex County. The southern boundaries of this project area are Routes 15 and 206 in the west and Route 94 in the east. It extends north to the town lines of Sandystown with Frankford and Wantage in the west and Libertyville Road in the east. The towns within this project area include Lafayette, Branchville and Frankford.

Located centrally within the Kittatinny Valley, this project area contains a high percentage of prime agricultural soils. This project area includes numerous ADA farmland assessed properties and 17 preserved farms. Fed by the Wallkill and Upper Delaware River watersheds, the Kittatinny Valley Central Project Area is mostly grassland, providing a

suitable land base for agriculture. The Paulins Kill is the primary surface water source that provides water to the local grasslands. Branchville is not part of the approved ADA.

Kittatinny Valley West 1 and Kittatinny Valley West 2 Project Areas

The Kittatinny Valley West Project Areas (1 and 2) are located northwest of the Western Highlands Project Areas (1 and 2). The southeast boundary of this project area is Route 94. These project areas extend north to the town line of Walpack Township in the west and Routes 15 and 206 in the east. Included in these project areas are Fredon, Stillwater, Hampton, Newton, Frankford and Lafayette.

The Kittatinny Valley West Project Areas (1 and 2) are situated in the southwest part of Sussex County within the Kittatinny Valley region. This region contains a large concentration of farmland assessed property that is identified as within the County's ADA. The topography of the Kittatinny Valley provides fairly flat and manageable lands for farming. There are 17 preserved farms within these project areas. The Paulins Kill provides the major water source for this region. Although composed primarily of grassland, there are a few forested areas and wetlands scattered throughout this project area. Newton is not part of the approved ADA.

Upper Delaware 1 and Upper Delaware 2 Project Areas

The Upper Delaware Project Areas (1 and 2) are the northernmost project areas in the County. They are located to the northwest of the Kittatinny Valley Project Areas. The boundary between these project areas is the town line between Sandystown and Frankford and the town line between Montague and Wantage. They lie to the northeast of Walpack, which is not included in the project area. The project area extends northwest up to the New Jersey- Pennsylvania State line and includes the Townships of Montague and Sandyston.

Within these project areas are the Kittatinny Ridge, which is composed of steep (greater than 25%) slopes. Much of the land outside of these project areas is preserved as public open space. The soils that are present are classified as prime farmland soils and soils of statewide importance. There are four preserved farms in these project areas. These project areas contain a productive belt of agricultural land stretching from Sandyston to Montague. The Delaware River and Flat Brook are two recognizable bodies of surface water in the region. Part of the Upper Delaware River watershed, most of the land within this area is upland forest which provides a critical habitat for threatened and endangered species that live within the forested area.

The below Table summarizes the total acreage within each of the Projects Areas:

PROJECT AREAS	TOTAL ACRES IN PROJECT AREA
Central Kittatinny Valley	33,375
Eastern Highlands 1	22,600
Eastern Highlands 2	12,648
Kittitiny Valley East	24,327
Kittitiny Valley West 1	19,158
Kittitiny Valley West 2	21,991
Upper Delaware 1	8,385
Upper Delaware 2	7,163
Western Highlands 1	11,006
Western Highlands 2	15,542
Total acreage:	176,195

Project Area Summaries

For each project area, an analysis was completed to identify the amount and density of preserved farmland, soils and size of the area. For each project area the following was determined:

- Final Approvals: Pending farmland applications with Final Approvals;
- County Easement Purchase: Farmland from which development easements have already been purchased through the County Easement Purchase program;
- Other Permanently Restricted Farmlands: Other permanently deed restricted farmlands;
- Eight-Year Programs: Farmland enrolled in the 8-Year Program;
- Open Space Compatible with Agriculture: Other permanently preserved lands dedicated for open space that are compatible with agriculture;
- Prime, Statewide, and Unique Soils: The total acreage of prime soils, soils of statewide importance, and unique agricultural soils in each project area.

For each of the above categories, the land area within each project area is expressed as a ratio between the total acreage for each category and the total acreage of the project area. Also included is the percentage of each category expressed as a percentage of the total project area.

The project area summaries for each are presented within the following tables.

Central Kittatinny Valley	Acreage	Density Ratio	Percentage
Total Acres in Project Area	33,375		
Farms with Final Approval	40.67	41 : 33,375	0.12%
County Easement Purchase	2,157.87	2,158 : 33,375	6.47%
Other Permanently Restricted Farmlands	-	- : 33,375	0%
Eight-Year Programs	-	- : 33,375	0%
Open Space Compatible with Agriculture	74.43	74 : 33,375	0.22%
Prime, Statewide & Unique Soils	7,176.05	7,176 : 33,375	21.50%

Eastern Highlands 1	Acreage	Density Ratio	Percentage
Total Acres in Project Area	22,600		
Farms with Final Approval	452.08	452 : 22,600	2.00%
County Easement Purchase	300.58	301 : 22,600	1.33%
Other Permanently Restricted Farmlands	-	0 : 22,260	0%
Eight-Year Programs	-	0 : 22,600	0%
Open Space Compatible with Agriculture	6.17	6 : 22,600	0.03%
Prime, Statewide & Unique Soils	2,317.28	2317 : 22,600	10.25%

Eastern Highlands 2	Acreage	Density Ratio	Percentage
Total Acres in Project Area	12,648		
Farms with Final Approval	-	0 : 12,648	0%
County Easement Purchase	172.29	172 : 12,648	1.36%
Other Permanently Restricted Farmlands	-	0 : 12,648	0%
Eight-Year Programs	-	0 : 12,648	0%
Open Space Compatible with Agriculture	569.61	570 : 12,648	4.50%
Prime, Statewide & Unique Soils	1,175.62	1176 : 12,648	9.29%

Western Highlands 1	Acreage	Density Ratio	Percentage
Total Acres in Project Area	11,006		
Farms with Final Approval	392.48	392 : 11,006	3.57%
County Easement Purchase	806.53	807 : 11,006	7.33%
Other Permanently Restricted Farmlands	329.96	330 : 11,006	3.00%
Eight-Year Programs	100.00	100 : 11,006	0.91%
Open Space Compatible with Agriculture	107.47	107 : 11,006	0.98%
Prime, Statewide & Unique Soils	2,580.75	2581 : 11,006	23.45%

Western Highlands 2	Acreage	Density Ratio	Percentage
Total Acres in Project Area	15,542		
Farms with Final Approval	31.56	32 : 15,542	0.20%
County Easement Purchase	42.97	43 : 15,542	0.28%
Other Permanently Restricted Farmlands	-	0 : 15,542	0%
Eight-Year Programs	-	0 : 15,542	0%
Open Space Compatible with Agriculture	190.63	191 : 15,542	1.23%
Prime, Statewide & Unique Soils	1,210.68	1211 : 15,542	7.79%

Upper Delaware 1	Acreage	Density Ratio	Percentage
Total Acres in Project Area	8,385		
Farms with Final Approval	106.84	107 : 8,385	1.27%
County Easement Purchase	545.58	546 : 8,385	6.51%
Other Permanently Restricted Farmlands	-	0 : 8,385	0%
Eight-Year Programs	53.63	54 : 8,385	0.64%
Open Space Compatible with Agriculture	0.13	0 : 8,385	0%
Prime, Statewide & Unique Soils	2,283.39	2283 : 8,385	27.23%

Upper Delaware 2	Acreage	Density Ratio	Percentage
Total Acres in Project Area	7,163		
Farms with Final Approval	395.39	395 : 7,163	5.52%
County Easement Purchase	283.36	283 : 7,163	3.96%
Other Permanently Restricted Farmlands	-	0 : 7,163	0%
Eight-Year Programs	-	0 : 7,163	0%
Open Space Compatible with Agriculture	48.44	48 : 7,163	0.68%
Prime, Statewide & Unique Soils	1,933.28	1933 : 7,163	26.99%

Kittatinny Valley West 1	Acreage	Density Ratio	Percentage
Total Acres in Project Area	19,158		
Farms with Final Approval	668.94	669 : 19,158	3.49%
County Easement Purchase	1,331.83	1332 : 19,158	6.95%
Other Permanently Restricted Farmlands	-	0 : 19,158	0.0%
Eight-Year Programs	-	0 : 19,158	0.0%
Open Space Compatible with Agriculture	1.35	1 : 19,158	0.01%
Prime, Statewide & Unique Soils	3,243.95	3244 : 19,158	16.93%

Kittatinny Valley West 2	Acreage	Density Ratio	Percentage
Total Acres in Project Area	21,991		
Farms with Final Approval	358.58	359 : 21,991	1.63%
County Easement Purchase	404.18	404 : 21,991	1.84%
Other Permanently Restricted Farmlands	-	0 : 21,991	0%
Eight-Year Programs	-	0 : 21,991	0%
Open Space Compatible with Agriculture	6.02	6 : 21,991	0.03%
Prime, Statewide & Unique Soils	805.52	806 : 21,991	3.66%

Kittatinny Valley East	Acreage	Density Ratio	Percentage
Total Acres in Project Area	24,327		
Farms with Final Approval	97.20	97 : 24,327	0.40%
County Easement Purchase	4,237.90	4238 : 24,327	17.42%
Other Permanently Restricted Farmlands	-	0 : 24,327	0%
Eight-Year Programs	-	0 : 24,327	0%
Open Space Compatible with Agriculture	2.31	2 : 24,327	0.01%
Prime, Statewide & Unique Soils	3,404.67	3405 : 24,327	14.00%

Minimum Eligibility Criteria

Minimum Eligibility Criteria are based upon the SADC's recently adopted (*May 21, 2007*) rules for farmland preservation and project eligibility. In order to be eligible for preservation the site must be developable, have soils capable of supporting agricultural or horticultural production and meet minimum tillable land standards. (N.J.A.C. 2:76-6.20) In summary:

For all lands less than or equal to 10 acres:

- The land must produce at least \$2,500 worth of agricultural or horticultural products annually.
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be tillable.
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be capable of supporting agriculture or horticulture.
- 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).
- 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.
- At least 50% or a minimum of 25 acres of land (whichever is less) must have soils capable of supporting agriculture or horticulture.
- The land in question must exhibit development potential as defined by the SADC.
- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

The minimum eligibility analysis involved a parcel-based screening of tax lot characteristics. Farmland preservation applications often include multiple lots; combining these lots may increase the acreage eligible for SADC cost share funding in Sussex County. These Minimum Eligibility Standards must be met in order for the State to provide matching funds on a farmland preservation project. The County may proceed without State funding on projects that do not meet these Minimum Eligibility Standards.

Any property included within the County's ADA is potentially eligible for preservation providing that at least one parcel is on the targeted farm list, is an assemblage of parcels that in total meet SADC minimum standards, or have sufficient justification by the

CADB that the parcels were not identified as targeted due to a specific mapping or other error.

Within the identified project areas, Sussex County has identified candidate farms (or “targeted farms” as referenced in the May 21, 2007 rules) that meet the tillable land and soils minimum eligibility standards. *Note:* The list of targeted farms will be provided in the PIG application to be submitted to the SADC, separate from this Plan.

The following queries were made utilizing the ArcView GIS data:

Farmland that meets the SADC Criteria for Agricultural Soils

Soil acreage was determined using the Soil Survey as prepared by the Natural Resource Conservation Service for prime farmland soils, soils of statewide importance and soils of unique importance. Farm parcels are sorted on size based upon the State Agriculture Development Committee (SADC) Minimum Eligibility Criteria for soils.

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

Farmland that meets the SADC Criteria for Tillable Land

Tillable acreage was determined using the N.J. Department of Environmental Protection 2002 Land Use/Land Cover mapping for agricultural lands, agricultural wetlands, brush/shrub lands, and old fields. Utilization of these classification codes is appropriate for Sussex County as these lands are actively farmed and are integral to the farming program in the County. Farm parcels were sorted on size based upon the State Agriculture Development Committee (SADC) Minimum Eligibility Criteria for tillable land.

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

Farmland that meets SADC Criteria for both Tillable Land and Soils

Utilizing the tillable acreage determined from the N.J. Department of Environmental Protection 2002 Land Use/Land Cover mapping for agricultural lands and soil acreage determined using the Soil Survey as prepared by the Natural Resource Conservation Service for prime farmland soils, soils of statewide importance and soils of unique importance, farm parcels were sorted on size based upon the State Agriculture Development Committee (SADC) Minimum Eligibility Criteria for tillable land and soils.

It is important to note that this analysis was completed on an individual “Q-Farm” basis, whereas a “farm” in many instances is a collection of “Q-Farm” parcels. Individual parcels

that do not meet the state minimum criteria can often be combined to become more competitive applications.

The following table details the acreage of Q-Farm parcels that meets each of the Minimum Eligibility Criteria as defined by the SADC for the Sussex County project areas.

PROJECT AREAS	Acreage of Q-Farm Parcels within the Project Area meeting the SADC Minimum Eligibility Criteria for Soils	Acreage of Q-Farm Parcels within the Project Area meeting the SADC Minimum Eligibility Criteria for Tillable Land	Acreage of Q-Farm Parcels meeting the SADC Minimum Eligibility Criteria for both the Soils and Tillable Land
Central Kittatinny Valley	3,743	8,463	4,778
Eastern Highlands 1	801	1,880	1,134
Eastern Highlands 2	203	1,075	267
Kittitinnny Valley East	1,570	6,755	1,409
Kittitinnny Valley West 1	1,445	3,268	1,871
Kittitinnny Valley West 2	343	3,726	383
Upper Delaware 1	612	540	501
Upper Delaware 2	1,058	938	1,025
Western Highlands 1	1,584	2,565	2,199
Western Highlands 2	225	820	483
Total acreage:	11,585	30,029	14,050

Of the ten project areas, soils are the limiting factor in determining project eligibility. Overall there are 30,029 acres of land that meet the tillable land criteria, but there is a third of that amount, 11,585 acres of land, that meets the soil criteria.

Merging these two data sets on a QFarm parcel basis, there are **14,050 acres** of Qfarm parcels that meets both the Minimum Eligibility Criteria for soils and tillable land. The *2002 Census of Agriculture* identifies 75,496 acres of farmland in Sussex County, of which 12,362 acres are permanently preserved. Of the remaining unreserved farmland (63,134 acres) only **22%** of the farmland in Sussex County would be eligible for farmland preservation using the State’s new Minimum Eligibility Criteria.

In Sussex County, farmers work marginal land so that it is productive and profitable. The Sussex CADB prefers to identify potential farmland preservation projects on a case by case basis, closely with the SADC, to ensure that the Minimum Eligibility Criteria are not constraining their farmland preservation program and the willingness of the farmer to preserve their property.

Sussex County was not able at this time to provide listings of properties as individual farms. Instead, the project area summaries are based on a given area and farm-assessed parcels. A list maybe generated during 2008 in which individual farms are listed with all relevant block and lots. The project areas include all farm-assessed properties. One requirement for the Sussex County Agriculture Development Area is that only farm assessed properties can be evaluated, thus applications from Sussex County to the SADC

will have parcels already on our target list. Sussex County will not submit substandard parcels unless sufficient justification for their inclusion into the farmland preservation program is provided as well. The Sussex CADB feels this would be extremely unlikely as there are a significant amount of productive, viable farms that will meet the SADC criteria to pursue for preservation.

The Sussex County Project Areas (and individual farms within them) will not always meet the soil criteria regarding percentages of prime and state significant soils. This does not make them ineligible for preservation by the Sussex CADB. The Sussex CADB will continue to accept and evaluate applications from any farm within the approved ADA.

In addition to the State's new Minimum Eligibility Criteria, the SADC has also identified an "Eligible Farm" standard as defined in section 17.2 of the newly adopted rules. In this case, grant funding will be based upon an individual farm having a rank score that is "*equal to or greater than 70% of the county's average quality score of all farms granted preliminary approval by the SADC through the county easement purchase program and/or the county planning incentive grant program within the previous three fiscal years.*" This number was certified at the July 2007 SADC meeting and transmitted to the Sussex CADB. (Steve Bruder)¹ Utilizing this Minimum Score may allow the Sussex CADB increased flexibility for identifying potential farmland preservation projects.

County Ranking Criteria

The Sussex CADB calculates the rank of each farm based upon the State's criteria. The Sussex CADB supplements this ranking with an on-site visit for each applicant. A copy of the State ranking criteria is included within the *Appendix*.

The Sussex CADB utilizes the SADC ranking criteria, which examines the size, boundaries and buffers, local commitment, percent of tillable acres, soil type and density of a farm. The request for exceptions (and their location) is also discussed. The Sussex CADB wants there to be a housing opportunity attached to each preserved farm.

The Sussex CADB conducts a field inspection for each farmland preservation application. The field visit allows for interaction between the farmer and the board members. This results in a better understanding of the farm for the members of the CADB and of the program and its implications for the landowner. This also allows the Board to see the type of operation, the potential for improving and/or expanding the operation and how this farm may fit into the overall farming economy of the municipality and County. The Sussex CADB carefully evaluates farms based on both SADC criteria, site inspections and how the farm, once preserved, will fit into the overall agricultural picture of Sussex.

County Policies - Farmland Preservation Applications

The Sussex CADB follows the SADC's policies regarding housing opportunities, division of premises and exception areas. Below is a brief summary of the state policies for each of these issues:

Approval of Housing Opportunities

Agricultural labor housing: Agricultural labor housing is permitted under the Farmland Preservation Program and protected under the Right-to-Farm (RTF) Act. The State Agricultural Development Committee understands the need for this type of housing and does have a policy that a landowner may refer to in order to construct labor housing. These applications are reviewed by both the local CADB and the State Agriculture Development Committee. The Sussex CADB recognizes that, currently, agricultural labor housing is not protected under the Right to Farm Act. It maybe permitted on a preserved farm, with the approval of the CADB and SADC, but that does not give it RTF protection.

House replacement: The policy of the State Agriculture Development Committee 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.

Residual dwelling site opportunity allocation: Residual Dwelling Site Opportunities (RDSOs) are potential housing prospects located within a deed-restricted farm. By designating an area as an RDSO, the landowner is implying that the land will be used for a residential unit or other structure as referred to in N.J.A.C. 2:76-6.17. The purpose of the building in question must be for "single-family residential housing and its appurtenant uses." (*SADC website*)² 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." The Sussex CADB does not regularly approve RDSO's. A farm may be eligible for an RDSO at a density not to exceed one residential unit per 100 acres. This density calculation includes existing and proposed residential buildings.

Division of the Premises

The goal of the State Agricultural Development Committee is to preserve large tracts of farmland and, therefore, a division of the premises is not an encouraged practice, however when division occurs it must be for agricultural purposes and must result in agriculturally viable land parcels. A landowner wishing to divide permanently preserved farmland must submit a written request. The application must be approved, in writing, by both the State Agricultural Development Committee and the CADB. Many landowners are currently utilizing this practice for estate planning purposes.

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. 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 which 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.” (*SADC website*) A severable exception is made “if a landowner wants to be able to sell the excepted area separate from the deed-restricted farm.”

Non-severable: Non-severable exceptions are defined by the SADC as “area which is part of an existing Block and Lot owned by the application that will not be subject to the restrictions of the Deed of Easement but cannot be sold separately from the remaining premises unless it is part of a larger area which is deemed to be agriculturally viable.” (*SADC website*) Unlike a severable exception, a non-severable exception is “always attached to the protected farm.”

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.

Funding Plan

Description of County Funding Sources

As written in *Chapter 4*, the Sussex County Open Space and Farmland Preservation Trust Fund was established in 2000, with the support of 73% of voters. This trust was initially set at two cents, with 90% of the income from the Trust allocated towards farmland preservation. Prior to the establishment of the dedicated Trust, Sussex County funded farmland preservation through a \$3 million bond issued in 1987. In 2005, the voters of Sussex County approved a second dedicated fund of one and one-half cents. This second source of funding is shared between open space and farmland preservation and is competitive in nature.

Sussex County anticipates approximately \$7 million dollars will be generated for their dedicated Trust Fund this year (2007). A portion of this funding is earmarked for open space preservation, both through the traditional program (where 90% is dedicated for farmland projects and 10% is dedicated for open space) and the competitive program. The competitive program utilized the 1.5 cents approved by the voters in 2005 and generates approximately \$3 million of the total funds set aside for land conservation in Sussex County. These funds can be used for either open space or farmland preservation, depending upon the applications submitted to the County.

County of Sussex Analysis of Open Space Tax Levies 2008 Projected Revenues (in dollars)				
Year	Total Levy	Original Rate(.02)		Additional Rate(.015)
		Dedicated to Farmland Preservation	Dedicated to Open Space	Dedicated to Farmland or Open Space Preservation
2006	\$6,026,531.56	\$3,099,359.09	\$344,373.23	\$2,582,799.24
2007	\$6,940,123.99	\$3,569,206.60	\$396,578.52	\$2,974,338.87
2008	\$7,460,633.33	\$3,836,897.14	\$426,321.90	\$3,197,414.28
Totals	\$20,427,288.88	\$10,505,462.83	\$1,167,273.65	\$8,754,552.39
Levy Allocations2006-08				

Financial Policies Related to Cost-share Requirements Between County and Municipal/ Other Funding Partners/ Installment Purchases

There are currently no formal policies in place regarding cost-share requirements for partnership projects between Sussex County and other funding partners including other government agencies and/or nonprofit organizations. The Sussex CADB is supportive of donation/bargain sales and has not used installment purchases to date, but may consider this tool in the future. Both of these tools serve to leverage limited funding resources and are described below:

Donation and Bargain Sale: This mechanism for preserving a farm involves a 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 County farmland preservation funds. The landowner donation is a reduction in the amount of gain that is subject to the capital gains tax, and the landowner can take a tax deduction for the amount donated against his or her federal and state income taxes.

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

Cost Projections and Funding Plan Associated with Preservation Goals

The Sussex County Open Space and Farmland Preservation Trust Fund generates approximately \$7 million annually, with a portion of this funding earmarked for open space preservation.

Since 2005, the average cost to purchase easements increased from \$2,524.55 per acre in 2004 to \$4,087.67 an acre in 2005 and \$4,230.09 an acre in 2006 (*see Program History Table in Chapter 4*). So far in 2007, the average cost per acre has been less, at \$3,475.00 an acre. On average, the County pays approximately 29% of the cost of an easement with the

State paying the remaining share. Using the 2005, 2006 and 2007 per acre average as a base, it is assumed that the average cost of purchasing a development easement in Sussex County is \$3,931 per acre. Over the same three-year period, there was fluctuation in the average value of an easement, but the average per acre cost increased 38% from 2004 to 2007.

For the 10-year financial analysis, eight assumptions were made regarding the growth of the County’s Open Space Tax Levy, the rate of increases in land prices and the cost-share between Sussex CADB and the SADC. These are described below:

Assumptions for Financial Analysis:

- 1 assume 7.5% funding growth for County Open Space Tax Levy
- 2 assume 10% increase in land cost (average per acre cost)
- 3 assume farmland funding is 90% of two cents
- 4 assume 10% of 1.5 cents is for farmland - NOTE - this funding is on a first come, first serve basis
- 5 assume county funding is reduced 10% for administrative costs (staff and due diligence)
- 6 assume county funding is not encumbered by prior obligations
- 7 assume county funding is used to pay 100% cost of 2 50-acre farms per year
- 8 assume county cost share is on average 29%, but for this analysis a variety of %cost shares are done

For the 1.5 cent Open Space Tax Levy, the funding is available for either open space or farmland preservation on a first come-first served basis. For the purposes of this analysis, a very conservative view was taken by estimating that only 10% of this funding will be available for farmland preservation. According to the Chief Financial Officer in Sussex County, the Open Space Tax Levy is anticipated to grow at a rate of 7.5% each year. It is also estimated that on average, land values will increase by 10% per year. In special cases where a farm is of special interest, the CADB may purchase land without state funding. These figures are derived through the following analysis.

	Year	Estimated Funding for Farmland	Funding Available After Purchasing two 50-Acre Farms	Average per Acre Cost
1	2006	\$ 3,021,875.11	\$ 2,598,866.11	\$ 4,230.09
2	2007	\$ 3,479,976.44	\$ 3,132,476.44	\$ 3,475.00
3	2008	\$ 3,740,974.71	\$ 3,358,724.71	\$ 3,822.50
4	2009	\$ 4,021,547.82	\$ 3,601,072.82	\$ 4,204.75
5	2010	\$ 4,323,163.90	\$ 3,860,641.40	\$ 4,625.23
6	2011	\$ 4,647,401.19	\$ 4,138,626.44	\$ 5,087.75
7	2012	\$ 4,995,956.28	\$ 4,436,304.06	\$ 5,596.52
8	2013	\$ 5,370,653.00	\$ 4,755,035.56	\$ 6,156.17
9	2014	\$ 5,773,451.98	\$ 5,096,272.79	\$ 6,771.79
10	2015	\$ 6,206,460.88	\$ 5,461,563.77	\$ 7,448.97
	2016	\$ 6,671,945.44	\$ 5,852,558.62	\$ 8,193.87

	County Cost <u>Share = 29%</u> (plus 100 ac County direct)	County Cost <u>Share = 40%</u> (plus 100 ac County direct)	County Cost <u>Share = 50%</u> (plus 100 ac County direct)	County Cost <u>Share = 60%</u> (plus 100 ac County direct)	County Cost <u>Share = 70%</u> (plus 100 ac County direct)	County Cost <u>Share = 80%</u> (plus 100 ac County direct)	County Cost <u>Share = 100%</u> (plus 100 ac County direct)
Year	Acres Preserved per year	Acres Preserved per year	Acres Preserved per year	Acres Preserved per year	Acres Preserved per year	Acres Preserved per year	Acres Preserved per year
2006	--	--	--	--	--	--	--
2007	3,208.39	2,353.58	1,902.86	1,602.39	1,387.76	1,226.79	1,001.43
2008	3,129.90	2,296.68	1,857.34	1,564.45	1,355.25	1,198.34	978.67
2009	3,053.21	2,241.07	1,812.86	1,527.38	1,323.47	1,170.54	956.43
2010	2,978.25	2,186.73	1,769.39	1,491.15	1,292.42	1,143.37	934.69
2011	2,905.00	2,133.62	1,726.90	1,455.75	1,262.07	1,116.81	913.45
2012	2,833.41	2,081.72	1,685.38	1,421.15	1,232.41	1,090.86	892.69
2013	2,763.45	2,031.00	1,644.80	1,387.34	1,203.43	1,065.50	872.40
2014	2,695.08	1,981.43	1,605.15	1,354.29	1,175.11	1,040.72	852.57
2015	2,628.27	1,932.99	1,566.39	1,322.00	1,147.42	1,016.50	833.20
2016	2,562.97	1,885.65	1,528.52	1,290.43	1,120.37	992.83	814.26
	28,757.93	21,124.50	17,099.60	14,416.33	12,499.71	11,062.25	9,049.80

Based upon the above analysis, Sussex County, at the current funding rate for the County and State, will preserve approximately 3,000 acres per year. Due to the extreme uncertainty in state funding, the analysis was completed based upon a varied rate in percent participation from the State. If the State does not continue to partner with the County on farmland preservation projects, the ability of Sussex County to purchase farmland will be dramatically affected and the County's ability to preserve land will be one-third of its current capacity.

Farmland Preservation Program CADB Administrative Resources

Staff resources

Currently, there are two people within the Sussex County Department of Planning working in the farmland preservation program. Staff is responsible for farmland preservation program administration, outreach, assistance to farmers in making applications, monitoring easements on an annual basis and promoting the County's Agritourism initiative. They are also responsible for administering the right-to-farm program and receiving assistance from the County Extension Office on right-to-farm issues.

Legal support

Sussex County's Counsel, Dennis McConnell, provides legal support for the County's farmland preservation program.

Database development and Geographic Information System Resources

Sussex County has its own office of GIS Management that is responsible for database development and management of the farmland parcel data. The Office of GIS implements an integrated and cooperative GIS program among the local governments and agencies within Sussex County. Sussex County Government uses GIS technology throughout several Divisions including the Engineering, Planning, Health, Weights and Measures, Mosquito Control. The GIS office is responsible for the design and maintenance of the county's GIS which is used to generate the various geospatial datasets such as parcels, roads, zoning, and district boundaries just to name a few. Additionally, they create custom applications which are used to distribute GIS data to the departments, local governments and citizens of Sussex County.

Typically, the Office of GIS provides the following services:

- GIS technology coordination, consulting and implementation
- GIS application development, support, and training
- GIS data design, automation, documentation, and distribution
- GIS strategic planning and system integration planning
- Database administration

Current Projects include:

- Stormwater Management
- Strategic Growth
- Spatial Data realignment (parcels, roads, hydrology etc.) to aerial photography
- ArcSDE Implementation
- Development of Interactive Mapping Applications
- Conversion of internal CAD/GIS systems to ArcGIS 8.x

Factors Limiting Farmland Preservation Implementation

Funding

As detailed in the above funding analysis, funding is the most critical limiting factor in the success of the County's farmland preservation program. Currently Sussex County pays, on average, 29% of the total project cost to preserve a farm. Due to the lack of State funding and the uncertainty of future funding, Sussex County is facing an uncertain future in terms of its ability to increase the rate of farmland preservation projects over the next ten years.

Projected Costs

Over the past three years, the value of a development easement in Sussex County has increased dramatically. The average cost per acre to purchase easement has increased from \$2,253 an acre in 2004, to \$3,457 an acre in 2007 - a 53% increase in value. This trend is

one that will continue into the future. Much of Sussex County's most productive farmland is outside of the Highlands Preservation Area, and thus susceptible to competing development interests. Increased competition for this limited resource will continue to force land prices up. Wantage Township has already seen an increase in the number of potential development applications to both its Zoning and Land Use Boards.

Land Supply

There are **102,547 acres** of land in Sussex County under farmland assessment. The *2002 Census of Agriculture* identifies **75,496 acres** as agricultural land in Sussex County. Since 1983, the County has preserved 9,468 acres of farmland, with an additional 2,894 acres pending this year, for a total of **12,362 acres** of preserved farmland in Sussex County. Based upon the *2002 Census of Agriculture*, there are 63,134 acres of farmland remaining unprotected in Sussex County, or 84% of the farmland as identified by the *2002 Census of Agriculture*.

There is still land remaining in Sussex County available for farmland preservation. Challenges for the farmland preservation program are limitations placed upon these potential farmland projects based upon the new SADC rules regarding Minimum Eligibility Criteria. As seen in the above section, only **14,050 acres** of farm assessed land meet both the Minimum Eligibility Criteria for soils and tillable land. Of the unpreserved farmland remaining, based upon the *2002 Census of Agriculture*, only **22%** of the farmland in Sussex County would be eligible for farmland preservation using the State's new Minimum Eligibility Criteria. Thus, Sussex County may need to purchase more of its farmland through the County direct program. It is important to note that this analysis was done on a parcel basis and farms with multiple parcels may qualify based on the SADC Minimum Eligibility Criteria, where their individual lots would not.

In addition, there is a general trend in Sussex County toward a greater number of smaller farms. Decreased farm size creates a problem for farmland preservation because the goal is to preserve large contiguous tracts of land, which becomes more difficult when the size of farms grows smaller.

Landowner Interest

In more recent years, with the increased cost of farming, many residents of Sussex County are forced to rely on additional sources of income rather than just on traditional agricultural practices. Farmers often rely on sources of income other than farming to sustain their livelihood. Once one piece of farmland in an area is preserved, the hope is that interest in preserved farmland will be generated among surrounding farms. An increase in landowner interest will advance the goal of preserving large tracts of contiguous land.

¹ Personal communication, Steve Bruder, State Agriculture Development Committee. June 29, 2007.

² State Agriculture Development Committee. New Jersey Farmland Preservation Program Appraiser Handbook. May 24, 2007. <http://www.state.nj.us/agriculture/sadc/appraiserhandbook.pdf>. June 2007.

CHAPTER 6: ECONOMIC DEVELOPMENT IN SUSSEX COUNTY



The business of agriculture and its economic base, supporting infrastructure, marketing, and profitability have gained renewed focus in New Jersey. The success of the farmland preservation program in Sussex County is not only measured by acres preserved, but also by the programs put in place to support the farmers and their businesses. Sussex County has one of the most successful Agritourism programs in New Jersey and is the host of the annual State Fair – a showcase for farmers and their products. The County’s agricultural community and its supporting groups and agencies understand that a farmland preservation program constitutes much more than the act of preserving land. In order to be a full partner in a successful farmland preservation program, agriculture as an industry must be vibrant, self-sustaining, and innovative.

The State of New Jersey offers Sussex County farmers a number of support services and programs ranging from technical advice to farm loans. One of these is the *New Jersey Smart Growth Toolkit* which provides information to support municipal governments, businesses, non-profit groups, and local citizens in their efforts to achieve the goals and objectives outlined in the *Agricultural Smart Growth Plan*. The *Tool Kit* embraces the five components that have been identified by the State as critical for the future of farming: Farmland Preservation, Innovative Conservation Planning, Economic Development, Agriculture Industry Sustainability, and Natural Resource Conservation. (*NJDA Agricultural Smart Growth Tool Kit*)¹

As part of this emphasis on the business of agriculture, the New Jersey Department of Agriculture (NJDA) has issued its 2007 “*Economic Development Strategies*”, which identify and propose methods to expand and enhance various subsets of the agriculture industry in New Jersey, including produce, horticulture, dairy, livestock and poultry, field crops, organic, equine, 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 for those markets has become tougher. New Jersey’s (produce) industry must continually work to rediscover its competitive advantages, improving access to nearby markets and strengthening consumer loyalty.*” (*NJDA 2007 Economic Development Strategies*)² Sussex County taps into its close proximity to the greater metropolitan region and aggressively markets the county’s agricultural products through its successful Agritourism industry. Sussex County farmers continue to look for ways to reinvent themselves and their products, and to explore new markets and new methods for promoting their businesses.

2007 NJDA Economic Development Strategies

Major efforts by the N.J. Department of Agriculture (NJDA) are directed at increasing the demand for New Jersey grown produce through branding, Agritourism, farm direct sales programs, and farm markets. The NJDA *Economic Development Strategies* for 2007 include each of these activities. (*NJDA 2007 Economic Development Strategies*) NJDA is committed to promoting Agritourism through the New Jersey Office of Travel and Tourism, the Jersey Fresh website, the distribution of printed materials, and other forms of advertisement. Sussex County farms with appropriate activities, as well as County farmers markets and ‘u-pick’ farms, benefit from this promotion.

NJDA’s Jersey Fresh and Jersey Grown labels program is continuing to evolve and is working closely with the Jersey Fresh Hospitality Industry Program, to reinforce the marketing of Jersey Fresh produce to the hotel, restaurant, education, and institutional food service industries. The program strongly promotes the use of the Jersey Fresh brand to supermarket chains and other retailers. The Department also promotes New Jersey grown organic products as distinct from and of higher value than competing products by recently establishing the Jersey Organic brand. (*NJDA 2007 Economic Development Strategies*)

Using recommendations outlined in the 2007 “*Economics Development Strategies*” report, Sussex County can build upon its strong agricultural base and continue to direct county programs to ensure sustainable agriculture practices and profitability. The following is a brief discussion of each of the subsets of Sussex County’s agriculture industry as they relate to the 2007 “*Economics Development Strategies*” report. For each the “*Economics Development Strategies*” report indicates that counties and its farmers should continually seek new local, state, and interstate markets to strengthen market share.

Produce which includes vegetables, fruits, grains, oilseeds, beans and dry peas accounted for total crop sales of \$2.5 million in 2002. This same category of products accounted for 27% of total farms in the county for 2002. As 2002 was a drought year, these figures are skewed downward due to drought-related losses. For instance, in 2002 harvested vegetable acreage was 870 acres, down from 1,274 and 1,409 acres in 1997 and 1992, respectively. Measured as acreage farmed, produce is one of the smaller agriculture industries in the county. This is largely due to the fact that much of the county’s farmland base is rocky and sloping, and thus not ideally suited to the needs of produce. However, produce is an important component of the County’s Agritourism industry, with vegetables ranking third in agricultural commodity value in 2002 (*Sussex County Agricultural Profile*)³, at \$1.46 million in sales, or 18% of all crop sales. As such, the county can continue to strengthen and expand this sector of the agriculture economy as opportunities arise. Some strategies Sussex County could follow are:

- Strengthen the *Jersey Fresh Hospitality Program*;
- Promote the *Jersey Fresh* brand;
- Explore “Contract Growing”, that is, growing produce for specific customers on a contract basis; and,
- Promote Farm Markets and Pick Your Own operations.
(*NJDA 2007 Economic Development Strategies*)

Nurseries and greenhouses are an important agricultural commodity in Sussex County, ranking first in the state for production of such products. This agricultural sector accounted for total crop sales of \$3.7 million in 2002, or 46% of total crop sales in the county. This same category of products accounted for 11% of total farms in the county for 2002. Due to drought conditions, these 2002 figures are also down from a peak of nearly \$6.0 million in sales from the previous census of 1997. Sales figures are likely to show a growth from the 2002 census due to moderate rain and temperatures in 2007. One major reason that nursery and greenhouse crops have become so important is due to the continued non-agriculture population growth in the county and region, providing a ready market for these products. As such, the county can continue to strengthen and expand this sector of the agriculture economy as opportunities arise. Some strategies to follow are:

- Support efforts by NJDA to ensure plant health and disease-free material;
- Increase consumer awareness of the *Jersey Grown* brand; and,
- Promote “drive up” operations where consumers can buy directly from the nursery or greenhouse.

(NJDA 2007 Economic Development Strategies)

Dairy has historically been the dominant agricultural sector in Sussex County. Though still accountable for the single largest amount of agricultural sales in 2002 at \$4.6 million, dairy production has steadily trended downward since 1971, when the county produced 138 million pounds of milk. By 2005 this quantity had fallen to 38.4 million pounds. The decrease is further reflected in the number of dairy farms and milk cows in 1982 as compared to 2002. In 1982 there were 137 dairy farms; by 2002 the number had decreased to only 30. In 1982 there were 6,406 milk cows; in 2002 the quantity had fallen to 1,943. A combination of high input costs (land prices and taxes), low milk prices, and unfavorable weather conditions have driven this trend, which may very well continue if strong steps are not taken to reverse it. To sustain and augment the county dairy industry, some strategies Sussex County could follow are:

- Promote *Jersey Fresh* dairy products locally and statewide;
- Explore various additional products and markets for dairy;
- Work to ensure the health of the dairy industry, and the quality of processed milk;
- Work to bring a local processing creamery back to the area;
- Aggressively market value-added dairy products; and,
- Work to lower high input costs such as taxes on dairy farms.

(NJDA 2007 Economic Development Strategies)

Hay is by far the dominant field crop measured by acreage in Sussex County. In great part this is due to the fact that the county’s rolling hills and relatively poor soils are ideal for hay. It is a “natural” crop for Sussex county farmers to grow, requiring relatively less labor and cost inputs than produce, nurseries and greenhouses, and livestock. Hay accounted for \$1.4 million in sales in 2002, or 17.3% of all crop sales. Due to 2002 drought conditions, this amount is lower as compared to most years. In addition, much of the hay is grown as feed on livestock farms, never making it to market, and is therefore not included in census sales figures. Sussex County hay farms account for 43% of all farms in the county and nearly 80% of tilled farmland, or 21,195 acres in 2002. This is actually an increase from

the 19,287 acres tilled in 1997. In addition, the number of hay farms grew from 460 in 1997 to 490 in 2002. To continue and expand its strong market place in the county economy, Sussex County could:

- Explore new markets, and also ways to expand existing markets.
(NJDA 2007 Economic Development Strategies)

Corn for grain is also a dominant field crop in Sussex County, second only to hay in tilled acreage at 4,059 acres in 2002. This is also a “natural” crop for Sussex County farmers due to the county’s rolling hills and relatively poor soils. Like hay, it requires relatively less labor and costs inputs than produce, nurseries and greenhouses, and livestock. It is also grown on livestock farms as feed for animals. Therefore, much of the corn grown never makes it to market, and is not included in census sales figures. In the 2002 drought year sales fell to \$382,000; it was one of the lowest corn yields in recent history at 101,000 bushels. To continue and expand its strong market place in the county economy, a strategy Sussex County could follow is to explore ways to produce renewable fuels, thus adding a ready market for Sussex County corn. (NJDA 2007 Economic Development Strategies)

Livestock and poultry operations include non-dairy cattle, sheep, goats, pigs, and chickens. This has historically been a strong agricultural sector in Sussex County. Due to high land costs, many farmers have opted not to engage exclusively in dairy farming; rather, they are sectoring their farms into various agriculture products such as other livestock or field crops. If land values continue to increase it is likely that the dairy industry may continue to decline, but the county’s farmers can see this as an opportunity to diversify to other agricultural products such as non-dairy cattle, poultry, hogs, and other animals. Non-dairy cattle are the leader in non-dairy livestock agriculture for Sussex County with 4,500 head in 2006, and 182 farms in 2002. Sales of non-dairy cattle exceeded \$1.0 million in 2002 and may expand in coming years, especially if dairy continues to decline. Poultry, hogs, and other animal sales were \$400,000 in 2002, up from \$300,000 in 1997. To strengthen and expand its place in the county economy, some livestock/poultry strategies Sussex County could follow are:

- Ensure animal health;
- Assist farmers with farming techniques, regulatory requirements and the latest research for livestock and poultry. (This could include additional cooperation with the Rutgers Cooperative Extension of Sussex County, NJDA and NRCS); and,
- Promote the Agritourism portion of livestock and poultry, such as petting zoos.
(NJDA 2007 Economic Development Strategies)

Organic Farming, including crops and animals, is a growing niche market in Sussex County. With the increased consumer awareness in food production, organic products and the markets that support them will continue to gain a stronghold on the agricultural economy and become more “mainstream” as people demand high quality, readily accessible, and affordable, organic products. Certification of organic farms is regulated by the U.S. Department of Agriculture via the Organic Food Production Act of 1990, 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 regulated or overseen by

laws or regulations as is organic farming. Natural farming is somewhat less costly and time consuming than “organic”, and as such, may be a viable option for some farmers, and their potential customers. Sussex County is in an excellent position to poise itself to facilitate the growth of these agriculture products, as well as to take advantage of these markets. Sussex County should explore:

- Improve marketing of organic and natural produce;
- Work with NJDA to establish a “Jersey Organic” Brand as a way to promote and market organic products;
- Educate growers about organic and natural regulatory and certification requirements; and,
- Explore ways to support organic food growing, processing and marketing.
(NJDA 2007 Economic Development Strategies)

Equine and Sheep agriculture has grown in recent years. The number of sheep and lambs has risen from 1,673 in 1997 to 1,865 in 2002, while during the same time period sheep and lamb farms increased from 80 to 122. There were 374 equine farms in 2002, and 2,737 horses (figures from earlier years are not available). In 2002 equine and sheep sales were \$700,000, up from \$600,000 in 1997. It is important to note that many of the equine farms in Sussex County consist of pasture and stable horses, and provide riding lessons, a fact which is not reflected in sales figures but contributes greatly to the county’s economy. To continue and retain the County’s market share in the state and region equine and sheep industry, Sussex County farmers should:

- Ensure the health of horses and sheep;
- Promote the industry at shows and festivals, such as the March to November horse shows at the Sussex County Fairgrounds; and,
- Promote the Agritourism aspect of the equine and sheep industry through petting zoos, horse and pony rides, and boarding and riding lessons.
(NJDA 2007 Economic Development Strategies)

Wine is a relatively small part of the Sussex County agricultural industry. At present, the county has one winery (Westfall Winery in Montague Township). As of 2002, there were 48 acres in grape production. (*Sussex County Agricultural Profile*) To encourage the growth of this small, but potentially important market, Sussex County should:

- Encourage increased wine production;
- Encourage county wine festivals and participation in the New Jersey annual wine festivals and tours;
- Coordinate with wineries from other New Jersey counties, and New York and Pennsylvania, to grow a regional wine industry;
- Encourage additional cultural and agricultural events in association with wine festivals; and,
- Market wines to local restaurants.
(NJDA 2007 Economic Development Strategies)

Agritourism is a critical link in the long-term sustainability of Sussex County and New Jersey’s agriculture industry. According to the 2007 NJDA “Economic Development Strategies”, “*Agricultural tourism draws upon two great strengths of the Garden State, a*

rich agricultural heritage and a large population of affluent consumers” ... Agritourism is critical to ensuring the future viability of agriculture in the state.” Agritourism should be not only county and state wide, but also interstate to draw visitors from the neighboring states of New York and Pennsylvania.

Sussex County is the state leader in developing Agritourism. This is evidenced by the success of a Farmer’s Market held weekly at Olde Lafayette Village which the county was instrumental in starting, its pre-eminence as the host of the New Jersey State Fair, and its highly successful brochure entitled “Enjoy Four Seasons of Agriculture in Sussex County”. This brochure lists names, addresses, and telephone numbers of farms within the county, broken down by type of farm, and the types of activities (such as hayrides). The brochure also lists ancillary facilities for tourists to enjoy, such as camping, hotels, bed and breakfasts, and state parks and forests. A similar, subsequent market spearheaded by Sussex County is the brochure entitled “Enjoy Four Seasons of Agriculture in the New Jersey Skylands”. This brochure includes the seven counties of Bergen, Hunterdon, Morris, Passaic, Somerset, Sussex and Warren. The brochures are available at www.sussexfarmvisits.com.

A highlight of the County’s Agritourism program is the popular ten day Sussex County Farm and Horse Show/New Jersey State Fair held yearly at the Sussex County Fairgrounds in Frankford Township. A farmer’s market sells a wide variety of local agricultural products, including vegetables, fruits, and flowers to fair visitors, and has been extremely popular and successful since its inception. Additionally, the Sussex County Division of Planning is partnering with the Sussex County Board of Freeholders and Sussex County Farm and Horse Show Board of Directors, to establish a permanent, three season Farmers Market at the County Fairgrounds. The start-up of the permanent market is being financed by a \$300,000 Economic Development Grant from the federal government, and will also highlight Agritourism in the County. *(Donna Traylor)*⁴

Included within the Appendix is a list of County farm stands and pick-your-own farming establishments. Establishing a permanent signage program to alert and direct tourists and local residents to these local markets will help increase their business and profitability.

In addition, the New Jersey Highlands Council recently awarded the Sussex County Agriculture Development Board a \$50,000 grant to further develop and grow Agritourism initiatives within Sussex County and the Highlands. Through the Sussex County Division of Planning, the Board is to develop an agriculture marketing plan by the Spring of 2008. *(Kim Ball Kaiser)*⁵

Agricultural Industry Retention, Expansion and Recruitment

By providing key strategies and techniques, the NJDA 2007 *Economic Development Strategies* endorses the expansion and strengthening of all areas of the agriculture industry. Diversity of agricultural commodities to broaden the County’s agricultural base now dominated by hay, corn, dairy, and horticulture would help to ameliorate any economic downswing in either the general economy or a specific sector of the County’s agriculture

industry. Some key items that the Sussex County agriculture community may consider for economic development are:

- **“Sell” agriculture as part of the Sussex County “landscape”.** To many county and state residents not familiar with the business of agriculture and its importance to Sussex County’s economy and lifestyle, Sussex County farms are less well known than they otherwise could be. *(Tim Brill)⁶* These county and state residents may feel it is a matter of time before Sussex County’s (as well as other counties in New Jersey) farmland becomes commercially or residentially developed. This perception, though highly unlikely to become a reality, is grounded in the decline of farmland acreage in Sussex County (141,223 acres in 1959 as compared to 75,496 acres in 2002 per the *2002 Census of Agriculture*), due in large part to residential subdivisions and retail stores. As more and more Sussex County farmland becomes preserved through the Farmland Preservation Program, this lack of awareness should fade. It is important that the county’s agricultural community join in coordinated efforts to “sell” agriculture as a way of life that is enduring and significant to the county and its economy. Area residents must be aware of preserved farmland either through signage on preserved farms (supplied by SADC), and other outreach mechanisms, such as the Agritourism brochures, adult and youth farmer education, the New Jersey State Fair in Frankford Township, farm stands and pick your own operations, and Community Supported Agriculture operations.
- **Supply products, including farming equipment such as tractors and diskers, seeds, fertilizers, herbicides, fungicides, pesticides, etc.** Large scale agriculture suppliers, which supply medium to large size agriculture operations, no longer exist in Sussex County. The only suppliers in the area are several small, local suppliers. *(Donna Traylor)* Without an adequate amount of suppliers within reasonable driving distances of farms, the business of farming can become expensive and time consuming, and not profitable. The county agricultural community may pursue a variety of options, including tax incentives, to entice suppliers to return to Sussex County. As agriculture in Sussex County becomes more “permanent” through increased preservation efforts, former suppliers who have left the area may return if they sense that a profitable supply business can be operated in the area.

Some farmers now receive equipment parts from suppliers via United Parcel Service, Federal Express, or similar delivery services. This is becoming more of a necessity, as less supply stores are located in the area. However, since delivery prices are relatively low, and farmers do not have to take the time to physically drive and pick up parts and supplies, this can actually be a very economical way to receive certain parts and supplies. However, mail order will not work for delivery of bulk supplies such as feed or fertilizer, which must be picked up at distant locations, or delivered for a fee.

Equipment and supply stores in the area include:

- Gro-Mart in Bloomsbury, Hunterdon County
- D&R Equipment in Ringoes, Hunterdon County
- New Holland Equipment in Washington Township, Warren County

- Tractor Supply in Sussex County
 - Farmside Supplies in Sussex County
- ***Inter-county cooperation and healthy competition among New Jersey counties with strong agricultural economies and heritages should be the norm, not the exception.*** The more broad-based (i.e. multi-county or state-wide) agriculture is, the better chance it has to succeed long term. This cooperation to strengthen the agricultural base is evidenced by the County's Agritourism brochure. Regular cooperation among the County Agriculture Development Board, Board of Agriculture, and local Chamber of Commerce is critical, and is reported to occur on a regular basis within Sussex County. *(Donna Traylor)*
 - ***Farmers need to be adaptable to farm for, and supply, emerging markets in and out of the County.*** Farms in the County, while increasing in total number from 1982 (613) to 2002 (1029), have decreased in average size during that same time period (119 acres in 1982, down to 73 acres in 2002). *(Sussex County Agricultural Profile)* This decrease in farm size, also typical of other New Jersey farming counties, is due in large part to the decline of dairy farms (which require large acreage). Subsequently, farms are being subdivided to facilitate the increase in beef cattle, equine, nursery and greenhouse, sheep and goat farms, which require less acreage. *(Donna Traylor)* The county's larger farms for example, can (and do) grow hay for the rising equine and beef cattle industries within the county. Smaller farms mean more opportunity to focus on specialized farm products for designated customers. As agriculture is indeed a business, farmers will need to continue to be adaptable and change with the needs and wants of its customer base.
 - ***Market Research*** – Working closely with Rutgers University Food Policy Institute and the Rutgers Cooperative Extension of Sussex County, the County's agriculture community may identify and integrate market research on agriculture and economic trends. In this way, Sussex County will remain a leader in New Jersey's agriculture community. The Food Policy Institute can be reached at (732) 932-1966.
 - ***Promote in-state, permanent markets*** – Working with the Department of Agriculture, Sussex County can seek contracts with other state agencies to sell and market their products. This includes the Department of Corrections for prison use, and schools, to supply healthy, fresh farm products for use in their cafeterias. Area hospitals and senior/nursing homes are also possible customers. Since all of these are permanent institutions, once established these markets can be considered as "permanent customers" and revenue sources for the Sussex County agriculture community.
 - ***Flexible regulatory programs with various agencies*** – The 2006 *Agricultural Smart Growth Plan* for New Jersey, prepared by the New Jersey Department of Agriculture, identified flexibility in government regulation as an important component relative to farm viability. *(Agricultural Smart Growth Plan 2006)*⁷ Working with the New Jersey Department of Agriculture, and through advocacy groups such as the New Jersey Farm Bureau and Sussex County Board of Agriculture, the local farming community can

ensure regulatory flexibility to the greatest extent possible. Examples where regulatory flexibility is important are the Department of Environmental Protection's Freshwater Wetlands Protection Act Rules" (N.J.A.C. 7:7A-et. seq.), which grant exemptions for agricultural activities, and also the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13). The latter, recently re-adopted, include numerous agriculture permits-by rule and general permits, which allow the continuation of agriculture activities in otherwise regulated flood prone areas.

The New Jersey Farm Bureau (Bureau) is an advocacy group for New Jersey farmers. Its mission "*is to represent agricultural producers and enterprises at all levels of government - local, state, federal and international. This representation includes the influence of regulations and laws, the creation of positive public relations, and the seeking out of initiatives, activities and ventures to help the profitability of the producer members. This organization will remain faithful to the democratic process managed by representatives from every part of the state*" Dave Klemm is the Director for the Sussex County Chapter, and Brian Hautau is the alternate.

Discussions with the Bureau indicate that farming is extremely difficult in Sussex County and the state due to three major factors. The first of these is due to high property taxes, high land values, and high insurance costs; farming in New Jersey is extremely expensive relative to other parts of the country, which in turn reduces profit margins for New Jersey farmers. Simply put, it is extremely difficult to make money as a farmer in Sussex County. Second, the regulatory environment in New Jersey is extremely harsh, mostly due to NJDEP regulations. Examples are required stream buffers, which reduce acreage which can be farmed, and also protection for threatened and endangered species. Third, is that commodity prices in New Jersey are lagging behind other parts of the country, and a farmer's time is therefore not adequately compensated. Suggestions to make farming more profitable for New Jersey farmers include:

- A moratorium on downzoning, since this lowers a farmer's land equity;
 - An immigration bill with a guest worker program;
 - More regulatory flexibility;
 - Full funding for open space; and,
 - Full funding for Transfer of Development Rights, especially in the Highlands Region. (*Peter Furey*)⁸
-
- ***Sussex County has more cropland devoted to corn, switchgrass, and other farm products, which could be used to produce ethanol.*** At present, there are no plans to build an ethanol plant in the northern part of New Jersey. However, there is potential that such a plant could be built in the southern part of New Jersey, or in Delaware State. Closely following developments relative to such a plant will allow farmers to poise themselves to sell "raw materials" to an ethanol plant. Such a plant could prove to be an economic engine for Sussex County farmers. Perhaps Sussex County farmers could, in conjunction with farmers from adjacent counties, form a cooperative to share the cost and logistics of shipping raw materials to an ethanol plant. The county can also

encourage state and local governments, as well as constituency groups, to encourage the development and building of an ethanol plant.

It should be noted that switchgrass utilizes less of the groundwater resource, and fewer pesticides and other chemicals, than corn. (*Kent Hardmeyer*)⁹ As such, the county can consider encouraging the appropriate entities to develop an ethanol plant that utilizes more switchgrass than corn. Such a plant could not only aid the economic development of Sussex County, but would also add to the long term goal of natural resource conservation.

- ***Sussex County should work closely with municipalities to encourage towns to include agriculture in economic development plans, municipal master plans, and local zoning, and to engage towns to support locally grown agriculture and Agritourism.*** This “bottoms up” approach would foster a broad base for agriculture within the county, helping to assure economic viability. One way for towns to support locally grown agriculture is to pass and enforce right to farm ordinances. Thirteen of the 24 municipalities in Sussex County have such ordinances, which are presented in *Chapter 8* of this plan.
- ***Minimum wage impact on farm businesses*** – In January 2006, the “*Agriculture Transition Policy Group*” (Group), composed of government and industry representatives, submitted a report to then Governor-elect Corzine, with recommendations to keep agriculture strong and viable in the Garden State. The Group reported a serious problem facing New Jersey farm employers. This was the State minimum wage, which was raised to \$6.15 per hour in October 2005, followed by a second increase to \$7.15, effective October 2006. Many farm employers struggle to cope with the multiple financial effects of these legislated mandates. The minimum wage is frequently used in agriculture as an “indicator wage,” the basis to peg other wage rates, year-end bonuses and a host of other non-wage benefits that are part of the employee’s remuneration. (*Report of the Agriculture Transition Policy Group*)¹⁰ With production costs in New Jersey higher than in most other areas, due in part to high labor costs, it is more costly and less profitable to produce commodity items in New Jersey than elsewhere. A comparison of neighboring states indicates New York with a minimum wage of \$7.15 per hour, and Pennsylvania with a minimum wage of \$6.25 per hour, putting Pennsylvania farmers at a labor price advantage over Sussex County farmers.

However, the impact of this labor price advantage is somewhat mitigated by the fact that Sussex agriculture is limited in the amount of labor it utilizes. Generally, the production of vegetables and fruits (produce) require the highest amount of hired farm labor, mainly at harvest time, to pick and process the vegetables and fruits. Sussex County has relatively little production of these products. Other products such as hay, corn, dairy, beef cattle, etc., which are more prevalent in Sussex County, require little or no hired farm labor (most labor is done by farm families). As such, farm labor costs are not as large a problem for Sussex County farmers as they are for other parts of the state which have major produce agriculture industries.

- ***The Rutgers Cooperative Extension (RCE) of Sussex County and the Rutgers University Agricultural Experiment Station*** are vital to the long term economic sustainability of agriculture in Sussex County, and the State of New Jersey. Farmer education programs keep the Sussex County agriculture industry apprised of the most recent farm research and techniques, which helps Sussex County farmers to remain competitive. The Future Farmers of America (FFA) organization trains young people in agriculture practices, preparing them to be future Sussex County farmers. Both the RCE and FFA are discussed in detail in *Chapter 8*.

Sussex County Economic Development Programs

Sussex County has an active economic development program to assist the county's agricultural community to stay strong and vibrant. The following is a listing and brief discussion.

- ***“Commercial Kitchen”*** – A pilot program is underway to allow use of the Sussex County Vocational & Technical School's certified kitchen, for production of value-added farm products. So, for example, a raspberry farmer could use the Vo-Tech kitchen to produce raspberry jams for sale at a local farm stand. Production of such value-added products allows county farmers to effectively lengthen their “selling season”, increasing income and making their farm operation more economically viable.
- ***Goat Project*** – This is a technical assistance statewide program run by RCE of Sussex County, which advises interested farmers on the production and marketing of goat products.
- ***Sussex County Dairy Project*** – This is an effort to increase profitability for the dairy industry by adding value to the milk produced in Sussex County. The RCE of Sussex County, New Jersey Department of Agriculture (NJDA), and the Sussex County Board of Agriculture embarked on this initiative in 1999. The project sought and subsequently received funds to study the feasibility of processing local milk products in Sussex County. The Interim Report on the Dairy Project, published in June of 2001 by Rutgers Center for Management and Entrepreneurship, indicated that establishing such a processing plant would be feasible. The Sussex County Cooperative Milk Producers Association has initiated a second study to further this effort. Use of funding from the United States Department of Agriculture, the NJDA, and Rutgers University will help to explore the possibilities associated with Sussex County milk producers owning and operating their own processing plant to create value-added dairy products produced in Sussex County. (*Sussex County*)¹¹
- ***Community Supported Agriculture*** – Economic support of the 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; and,
- Generally, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.
(*National Agricultural Library*)¹²

A local, grass-roots group supporting community agriculture is The Foodshed Alliance (FSA). The FSA is a non-profit group devoted to “promoting profitable, sustainable farming and locally-grown, fresh, healthy food in northwestern New Jersey”. The FSA closely links the health of land and communities with the existence of local farms, believing that farmers are the key in connecting people with “food, the land, and our sense of place”. These tenets foster a “self-sustaining “foodshed” that supports farmers, nourishes people, respects the land, and strengthens (our) communities.”
(*Food Shed Alliance*)¹³

An extension of the FSA’s work is the Northwest Jersey “Buy Fresh, Buy Local” Campaign. This is an effort by FSA, local farmers, and community leaders to build connections between farmers and consumers through food guides, food and farming events, and community outreach, and therefore encourage local residents to buy fresh, local produce. As part of the “Buy Fresh, Buy Local” campaign, the FSA sponsored the 2nd annual “Farm and Food Open House” on Saturday, September 8, 2007. This event featured farm tours, tastings at local farms, and special family oriented events at the farms. Participating Sussex County farms included the Pittenger, Snoep Winkel and Wind Brow Farms. (*Buy Fresh*)¹⁴

- **Farmer’s Market** – The Sussex County Division of Planning is working to establish a permanent, three season farmers market at the New Jersey State Fairgrounds in Frankford Township. (*Donna Traylor*) Such a market would provide an outlet for local farmers to sell their products, and local residents to purchase fresh produce and related farm products.
- **Lusscroft Farm** – The farmland-preserved 577 acre Lusscroft Farm in Wantage Township is an extremely important link in the history of Sussex County agriculture. Most notably, it is the site where artificial insemination for dairy cows was developed. The governments of both Sussex County and New Jersey, along with the Sussex County Heritage and Agriculture Association, Inc., are working to establish the farm as

a permanent agriculture and environmental education facility, as well as a facility to promote Agritourism and ecotourism. (*Donna Traylor*) Establishment of the Lusscroft Farm as an agriculture education facility would be an important step in cementing Sussex County's reputation as a leader in state agriculture.

Additional Resources

There are numerous other resources which can be used by the Sussex County Agriculture industry to assist it in expanding and solidifying its economic base in the county and region wide. Several are listed below.

- The New Jersey Department of Agriculture lists various Agriculture Economic Development Services at its website. Examples include Agriculture Credit and Finance, Business Development for Agriculture, Food Manufacturing, and Related Industries. This website and its related links should be utilized by the Sussex County agriculture industry, as necessary and appropriate. The information can be found at www.state.nj.us/agriculture/divisions/md/prog/agriculturaleconomic.html#top.
- To help solidify Agritourism and the agriculture business in the county, the New Jersey Department of Agriculture lists on its website over 30 Sussex County roadside markets and pick your own farms. The lists indicate farm or market name, contact information, location, and products available. (*Roadside Markets, Pick Your Own Farms and Community Farmers Markets*)¹⁵ The Sussex County agriculture community can work with NJDA to keep the lists updated and current. The *Appendix* contains these tables, as well as tables with cut your own Christmas Tree operations (*Choose & Cut Christmas Tree Guide*)¹⁶, and equine operations. Sussex County farmers also occasionally participate in out of state farmer markets. However, due in large part to the limited produce sector of the county, most farmers sell produce locally, or from roadside stands. The aforementioned County Agritourism brochure lists over 110 local farms open to the public.
- Sustainable Agriculture Research and Education (SARE) is a “United States Department of Agriculture competitive grants program with regional programs and regional leadership. SARE supports research and education that helps build the future economic viability of agriculture in the United States. SARE funding is authorized under Subtitle B of Title XVI of the Food, Agriculture, Conservation and Trade Act of 1990.” (*SARE*)¹⁷ SARE funds are used for:
 - *Farmer/Grower 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.
 - *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.
Additional information can be found at www.uvm.edu/~nesare/.
- The Agricultural Marketing Resource Center (AgMRC) brings together agriculture experts from Iowa State University, Kansas State University and the University of California “ ... to create and present information about value-added agriculture. The center draws on the abilities, skills and knowledge of leading economists, business strategists, and outreach specialists to provide reliable information needed by independent producers to achieve success and profitability in value-added agriculture.” AgMRC provides information to help farmers “assess value-added market opportunities, investigate processing options and understand business and production issues” for such agricultural commodities and products as Agritourism, renewable energy, livestock, specialty crops, and numerous others. (*Agricultural Marketing Resource Center*)¹⁸ In general, the goals of AgMRC are to:
 - “Create an electronic, Web-based library with powerful search capabilities to make value-added market, economic and business information and other resources available to producers”. The library can be accessed at <http://www.agmrc.org>.
 - “Provide value-added business and economic analysis tools, including information on business principles, legal, financial and logistical issues”.
 - “Conduct research and analysis on economic issues facing producers involved in value-added business ventures”.
 - “Link producers with electronically available information and resources”. (*Agricultural Marketing Resource Center*)

¹ New Jersey Department of Agriculture. Agricultural Smart Growth Tool Kit “Planning for Agriculture. <http://www.state.nj.us/agriculture/toolkit.htm>. Accessed June 2006.

² New Jersey Department of Agriculture. 2007 Economic Development Strategies.

³ New Jersey Department of Agriculture, State Agriculture Development Committee. Agriculture Census Data, Sussex County Agricultural Profile. April 13, 2007.

⁴ Personal communication with Donna Traylor, Agriculture Resource Specialist, County of Sussex, Division of Planning, Office of Conservation and Farmland Preservation. May 15, 2007.

⁵ Personal communication with Kim Ball Kaiser, Staff Attorney, New Jersey Highlands Council. September 19, 2007.

⁶ Personal communication with Tim Brill, New Jersey Department of Agriculture, State Agriculture Development Committee. May 10, 2007.

⁷ New Jersey Department of Agriculture. Agricultural Smart Growth Plan 2006 <http://www.state.nj.us/agriculture/pdf/smartgrowthplan.pdf> Accessed March 2007.

⁸ Personal Communication with Peter Furey, New Jersey Farm Bureau. June 18, 2007.

⁹ Personal communication with Kent Hardmeyer, United States Department of Agriculture, Natural Resources Conservation Service. May 15, 2007.

¹⁰ Report of the Agriculture Transition Policy Group, Final Report, January 10, 2006. <http://www.state.nj.us/governor/home/pdf/agriculture.pdf>. Accessed March 2007.

¹¹ Sussex County New Jersey. <http://www.sussex.nj.us/documents/planning/farmland/FPP%20Chapter%204.PDF>. Accessed June 2007.

¹² United States Department of Agriculture, National Agricultural Library, Alternative Farming Systems Information Center, Community Supported Agriculture. <http://www.nal.usda.gov/afsic/pubs/csa/csa.shtml>. Accessed June 2007.

¹³ Food Shed Alliance, <http://www.foodshedalliance.org/Foodshed%20WebPages/Foodshed%20Pages/whatweareabout.htm>. Accessed June 2007.

¹⁴ Buy Fresh, Buy Local. <http://www.buyfreshnj.org/WebPages/OurCampaign.htm>. Accessed June 2007.

¹⁵ New Jersey Department of Agriculture. Roadside Markets, Pick Your Own Farms and Community Farmers Markets. <http://www.state.nj.us/jerseyfresh/searches/index.html>. Accessed May 2007.

¹⁶ New Jersey Christmas Tree Growers Association, 2006 Choose & Cut Christmas Tree Guide, <http://www.njchristmastrees.org/>. Accessed May 2007.

¹⁷ New Jersey Department of Agriculture. Sustainable Agriculture Research and Education (SARE). <http://www.state.nj.us/agriculture/grants/sare.html>. Accessed May 2007.

¹⁸ Agricultural Marketing Resource Center, Mission and Goals. <http://www.agmrc.org/agmrc/About+mission++goals.htm>. Accessed May 2007.

CHAPTER 7: NATURAL RESOURCE CONSERVATION



Preservation of farmland is the cornerstone of the New Jersey Department of Agriculture's (NJDA) *Agricultural Smart Growth Plan* and the Farmland Preservation Program. However, there is more to farmland preservation than merely the retirement of development rights or the outright purchase of farms. One of the cornerstones to a successful, long term Farmland Preservation Program is the conservation of natural resources on farms, without which the long term sustainability and viability of New Jersey's preserved farmland would be in doubt.

Natural Resource Protection Agencies

There are numerous entities, both public and private, which administer, fund, and provide technical guidance for Sussex County farmers relative to natural resource conservation. These entities are in place to assist farmers with natural resource conservation issues, and should be called upon by farmers for appropriate assistance.

Natural Resource Conservation Service

An important partner in support of natural resource conservation for the agricultural community is the United States Department of Agriculture's (USDA), Natural Resources Conservation Service (NRCS). The NRCS "provides assistance to private land owners (including farmers) in the conservation and management of their soil, water, and other natural resources. Local, state, and federal agencies and policymakers also rely on (its) expertise." The NRCS provides technical assistance suited to the natural resource issues that are specific to a farmer's needs, with ample opportunity for cost shares and financial incentives. (*Information For Farmers*)¹

The local NRCS office serving Sussex, Warren, and Morris Counties is located at 101 Bilby Road, Suite 1H in Hackettstown, Warren County. Sussex County farmers may utilize this local NRCS office for assistance. NRCS will also reach out directly to landowners if they know of a farmer who is in need of technical assistance, or can use the guidance of the NRCS staff. The local NRCS office also helps to prepare Conservation Plans for Sussex County Farmers. These Conservation Plans include strategies to conserve soil and water, and may also include conservation practices for flora, fauna, and clean air. If all five elements are included, they are referred to as Resource Management Plans. (*Kent Hardmeyer and/or Ron Phelps*)²

Within one year of selling their development easement, owners of preserved farms are required to enter into a Conservation Plan. The Plans are also a prerequisite to apply for natural resource conservation program grants such as the Wildlife Habitat Incentive Program (WHIP) and Environmental Quality Incentive Program (EQIP). The local NRCS office administers these conservation program grants, which offer financial incentives to support conservation projects, including stream riparian buffers and wildlife habitat. Administration of these grant programs includes field visits to prepare the Conservation Plans, preparation of grant program contracts, assistance with installation of contract conservation practices, and inspection of farms to verify contract conservation practices are implemented and maintained. It should be noted that the Sussex County Soil Conservation District gives final approval on all Conservation Plans and program contracts (*Kent Hardmeyer and/or Ron Phelps*), and the USDA, Farm Service Agency (FSA) assists NRCS in administration of an additional natural resource conservation program entitled Conservation Reserve Enhancement Program (CREP). (*Ken Bingham*)³

Discussions with the local NRCS office indicate the following strategies would strengthen natural resource conservation efforts for Sussex County farms:

- The federal government needs to replenish funding for natural resource conservation grant programs via the proposed 2007 Farm Bill. Currently, all funds are depleted.
- Owners of preserved farms are required to enter into a Conservation Plan within one year of selling their development easement. However, implementation of this requirement is inconsistent. 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.
- Owners of preserved farms have an obligation to conserve natural resources on their farms. Implementation of a Conservation Plan is a good first step towards fulfilling this obligation.
(*Kent Hardmeyer and/or Ron Phelps*)

The phone number for the local NRCS office is (908) 852-2576, and the District Conservationist is Ronald Phelps. He can also be reached at ron.phelps@nj.usda.gov. (*New Jersey*)⁴ Mr. Phelps and his staff (listed below) can be contacted by Sussex County farmers for assistance, and more information on the availability of NRCS programs in the county.

- Kent Hardmeyer - Resource Conservationist, Highlands Planning Specialist
- Madeline Dean - Program Assistant
- Jim Kleindienst - Civil Engineering Technician
- Jill Koehler - Natural Resource Specialist, Grazing Lands
- Jim Wick - Resource Conservationist

An additional resource for Sussex County farmers is the “*Field Office Technical Guide*” (Guide), which is published by NRCS. 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 Plans. Each state has its own Guide, which lists and discusses conservation practices particular to a state. These conservation practices improve water and soil quality, improve plant condition, and in some instances can improve air quality. Conservation practices discussed in the Guide that are pertinent for, and used in, Sussex County include:

- Riparian Buffers, including necessary buffer widths and plant species
 - No till and minimum till practices
 - Prescribed grazing and pasture rotation
 - Nutrient management, including manure and fertilizers
 - Animal waste disposal
- (*Kent Hardmeyer and/or Ron Phelps*)

Sussex County Soil Conservation District

Another partner in the conservation of agricultural resources is the New Jersey Department of Agriculture, Division of Agricultural and Natural Resources. Among its responsibilities, the Division implements the natural resource conservation programs, administered by the State Soil Conservation Committee (SSCC). These programs “provide engineering services and regulatory guidance to soil conservation districts, homeowners, engineers, planners and virtually all development activities. The Division provides technical standards applicable to construction and mining sites regulated by the Soil Erosion and Sediment Control Act program ...” (*Agricultural and Natural Resources*)⁵

The SSCC coordinates and supports the work of the state’s 15 local soil conservation districts (SCD), one of which is the Sussex County SCD. The Sussex County SCD is charged with reviewing and approving natural resource conservation and assistance program grants, implementing 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. (*Agricultural and Natural Resources*)

The Sussex County SCD office is located at 186 Halsey Road, Suite 2 in Newton. Sussex County farmers may approach this local SCD office with a Request for Assistance (RFA), to apply for funds from natural resource conservation grant programs such as WHIP and EQIP. If approved, the RFA is forwarded to the local NRCS office in Hackettstown for processing. The administration of the RFA includes preparation of a Conservation Plan and grant program contract, as previously described. The Sussex County SCD is involved in review of Conservation Plans and grant program contracts, and must give final approval to both. (*Kent Hardmeyer and/or Ron Phelps*)

The phone number for the Sussex County SCD office is (973) 579-5074, and the District Manager is Wini Straub. She can also be reached at Sussex@sussexscd.org. Ms. Straub

and her staff (listed below) can be contacted by Sussex County farmers for assistance. (*New Jersey*)

- Joseph Baysa - Erosion Control Inspector
- Jeff Eckert - Erosion Control Inspector
- Cathy Williams - Administrative Assistant
- Peggy Zvalaren - District Clerk

Rutgers Cooperative Extension of Sussex County

The Rutgers Cooperative Extension (RCE) of Sussex County was established in 1912. RCE of Sussex County provides both field and technical research which is focused on finding the best management practices for farmers, to ensure the long term viability of both the agricultural economy and the natural resources upon which it is based.

Relative to natural resource conservation, the RCE offers the Agriculture and Natural Resource Management program. This education program provides “non-biased, research-based educational programs and services for both homeowners and commercial producers. Services offered by extension personnel include soil testing, insect identification, plant disease diagnosis, and pest management recommendations for agricultural operations”, as well as “educational publications covering a wide range of agricultural topics”. Staff members offer programs that are, among other things, designed to “reduce environmental impact.” (*N.J. Agricultural Experiment Station*)⁶ An example is helping to prepare animal waste management plans, so as to reduce impacts to watersheds.

The RCE of Sussex County is located at 129 Morris Turnpike (County Rt. 655), in Frankford Township (mailing address of Newton), in the Homestead Complex. Extension agents include Steve Komar, specializing in commercial plant and animal agriculture, and preparation of animal waste management plans. Brian Oleksak specializes in commercial and consumer horticulture. (*N.J. Agricultural Experiment Station*) They may be contacted with any questions or concerns, or for information on educational programs or services. Mr. Komar can be contacted via e-mail at skomar@njaes.rutgers.edu, while Mr. Oleksak’s e-mail is oleksak@njaes.rutgers.edu. Both can be contacted via phone at 973-948-3040.

The SSCC, NRCS, Sussex County SCD, and Rutgers Cooperative Extension (RCE) of Sussex County, are part of the New Jersey Conservation Partnership. This partnership of agencies strives to further soil and natural resource conservation efforts. (*Agricultural and Natural Resources*)

New Jersey Department of Environmental Protection

The New Jersey Department of Environmental Protection’s (NJDEP), Division of Parks and Forestry, oversees the “Private Lands Management Program”. The aim of this program is to foster wise stewardship and management of the state’s 270,000 acres of private woodlands currently under Farmland Assessment. (*Division of Parks and Forestry*)⁷ Many properties in Sussex County that are farmland assessed include extensive

woodland tracts. Such tracts were added as “farm products” in the 1970’s. These woodland tracts, which must be utilized by the farmer as a sustainable “product”, require Woodland Management Plans (WMPs) to receive reduced local property taxes accorded properties in the farmland tax assessment program. (*Jim Barresi*)⁸

The NJDEP's Division of Parks and Forestry, Bureau of Forest Management (BFM), reviews applications for WMPs, which are prepared for farmers by private consultants. Once a WMP is in place, a “Woodland Data Form” must be submitted yearly to certify that the WMP is being complied with. However, the NJDEP, BFM, also inspects each site once every three years to verify compliance with WMP conditions. (*Jim Barresi*) Since reduced local property taxes are often critical in keeping active agricultural lands economically viable, the NJDEP is an important partner for Sussex County’s farmland preservation efforts.

Non-appurtenant woodlands are acreage on a farm over and above total farmed acreage (tilled and pasture). So, for example, if 50 acres of a farm are tilled or pastured, and there are 125 acres of woodlands on the farm, 75 acres of woodlands would be non-appurtenant (125 woodland acres minus 50 farmed acres). Non-appurtenant woodlands require a WMP. In Sussex County in 2006 there were 33,498 acres of non-appurtenant (or unattached) woodland acres in farmland assessment, (*N.J. Department of Treasury*)⁹ up slightly from 2004 when there were 32,877 acres. However, both these figures are down from the peak of 36,006 acres in 2002. In 1990 there were only 26,927 non-appurtenant acres in farmland assessment. (*Sussex County Agricultural Profile*)¹⁰ Appurtenant woodlands are woodland acreage on a farm, equal to or less than, farmed acreage. So, in the preceding example, 50 of the 125 woodland acres would be appurtenant since the example farm had 50 tilled or pastured (farmed) acres. Appurtenant woodland acres do not require a WMP. (*Jim Barresi*) In Sussex County in 2006 there were 21,717 acres of appurtenant woodland acres in farmland assessment, (*N.J. Department of Treasury*) up from 2004 when there were 20,449 acres of appurtenant (or attached) woodlands in farmland assessment. The total steadily decreased from 1990 (25,633 acres) to 2003 (19,447 acres), until the increase from 2003 to 2004, and again in 2006. (*Sussex County Agricultural Profile*)

The New Jersey Department of Environmental Protection’s Nongame and Endangered Species Program also administers the Landowner Incentive Program (LIP). LIP works to improve habitat, habitat management, and habitat protection for threatened and endangered species on private lands, some of which are agricultural lands. Project durations must be for a minimum of five years, and the property owner contributes a minimum 25 % cost share. Some grain farmers have expressed concern over the use of LIP. This is because it not only provides habitat for threatened and endangered species, but also for such nuisance wildlife as deer and turkey, which are known to cause severe loss to farm products including corn.

In Sussex County there are a total of 53 acres enrolled in LIP on four farms. Of this, 15 acres are planted in warm season grasses, while on the remaining 38 acres delayed mowing is utilized to satisfy LIP habitat requirements. LIP has been in existence for three years,

and funding for the program is competitive due to available funds not being equal to funding requests. (Kim Korth)¹¹

USDA, Forest Service's Forest Stewardship Program

The United States Forest Service sponsors the Forest Stewardship Program. This program supports landowners whose property has a woodland management plan that recognizes and manages the wetlands, wildlife, aesthetics, soil and water in addition to the woodlands on the property. This program, when fully funded, offers landowners cost-share initiatives to allow the landowners to fully follow the guidelines in their woodland management plan. In New Jersey, the state farmland tax program and the U.S. Forest Service program have merged to allow one planning document for the landowner where the stewardship plan meets the state tax code and eliminates conflicts between the two. Increasing enrollment of landowners in this merged state-federal program will ensure increased protection of the natural resources for an extended period. The minimum is a ten-year management plan. This does not ensure preservation of the land in perpetuity, but it does allow recognition of the importance of the land value and stewardship of the property for a longer period of time.

In Sussex County, as of 2007 there are 5,153 acres of farmland on 73 different properties enrolled in the Forest Stewardship program. This has steadily increased since 2003, when there were 4,048 acres on 54 properties. (Jim Haase)¹²

Private Non-profit Groups and Private Citizens

Agriculture needs not only the broad support of state, county, and local governments to help preserve agriculture resources, but also the help of private non-profit groups and citizens. Indeed, 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. These groups and citizens spend countless hours providing and sharing their expertise, as well as raising and contributing money. They are invaluable in assisting with all phases of farmland preservation for Sussex County, including natural resource conservation and stewardship.

The Sussex County agriculture community has the support of a variety of organizations, including the Sussex County Board of Agriculture, New Jersey Farm Bureau, 4-H, Future Farmers of America, and the Sussex County Farm and Horse Show/The New Jersey State Fair.

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

An excellent example of private organization-government cooperation is the Muckshaw Ponds (Andover Township) purchase by The Nature Conservancy. This purchase was

made with the help of a non-profit farmland preservation grant to The Nature Conservancy from the State Agriculture Development Committee. (*Donna Traylor*)¹³

Resource Protection Programs and Funding

2002 and 2007 Farm Bills

The Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) is landmark legislation, with much of its focus on conservation funding and environmental issues. Conservation provisions are designated to assist farmers in being good stewards of the land through grants and technical assistance programs. Voluntary programs relevant to New Jersey, and Sussex County, include 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). (*Conservation Programs*)¹⁴ These programs, administered by the local NRCS office in Hackettstown and the Sussex County Soil Conservation District, are discussed in this section.

The proposed 2007 Farm, Nutrition, and Community Investment Act (Farm Bill) would authorize approximately \$7.8 billion nationally to protect natural resources through conservation programs similar to those mentioned above. However, as proposed, the Bill may consolidate most or all of these programs into one program, tentatively titled The Environmental Quality Incentives Program. In addition, the acreage limit on the Wetlands Reserve Program would increase nationally from 2.3 to 3.5 million acres. (*Farm Bill Proposals*)¹⁵

The Mid-Atlantic Region, of which New Jersey is part, is generally underserved by federal farm programs, including the 2002 Farm Bill. The Northeast/Mid-Atlantic region receives on average less than two cents in commodity payments for every dollar in farm sales, in stark contrast to over fifteen cents in some Midwest and Western states. With smaller than average farms, lower profit margins, varied crops, and development pressure, New Jersey has unique farm and food policy needs, which do not match other, larger agricultural states who receive the bulk of commodity payments. (*American Farmland Trust*)¹⁶ However, the commodity payment system may change in the 2007 Farm Bill from price supports to revenue support, with a revenue insurance system if projected revenues for farm(s) are not met. Revenue support with an insurance system would hopefully have a positive effect for Sussex County farmers, since it would help specialty crops and niche markets receive their fair share of commodity payments. (*Jim Baird*)¹⁷

The 2002 Farm Bill expired on September 30, 2007, but was extended via Congressional resolution, and the President's signature. The 2007 Farm Bill was passed by the House of Representatives in early August, 2007. The Senate version of the Farm Bill was passed by the Senate Agriculture Committee on October 25, 2007, with the full Senate expected to vote on the bill in early to mid-November, 2007. Assuming passage by the Full Senate, the 2007 Farm Bill would then be referred to a House-Senate Conference Committee to rectify

any discrepancies between the two Bills. If the Committee cannot rectify the two Bills, or if the Bill is vetoed by the President, it is likely that a two year extension of the 2002 Farm Bill would be enacted into law. (*Jennifer Morrill*)¹⁸ However, if the 2007 Farm Bill is signed into law, the resulting farm and food policy promises to strengthen New Jersey's agriculture and ensure fresh, healthy food supplies while serving to better protect the environment. Some highlights of 2007 Farm Bill, as it relates to natural resource conservation, include:

- Expanding working lands conservation programs and an improved farmland protection program;
- Increasing focus on energy efficiency and on-farm renewable energy production; and,
- Increasing access for the region's producers by providing a minimum base allocation of conservation funding for every state.

(*American Farmland Trust*)

The following is a synopsis of the natural resource conservation programs funded by the 2002 Farm Bill. They are implemented by NRCS and the Sussex County SCD, and also to a minor degree the Farm Service Agency, which is also part of USDA. These programs are the backbone of natural resource conservation efforts in Sussex County.

Conservation Reserve Enhancement Program (CREP) and Conservation Reserve Program (CRP)

Through CREP and CRP, agricultural producers voluntarily retire land to protect environmentally sensitive areas, decrease soil erosion, provide and restore wildlife habitat, and protect ground and surface water. (*New Jersey NRCS Conservation Programs*)¹⁹ Examples of conservation practices include riparian buffers and filter strips for water quality, and contour buffer strips to reduce soil erosion. With incentive payments for farmers to fully implement a CREP contract, payment for this program may be fully funded by NRCS and NJDA. (*Ken Bingham*) Statewide, CREP was most recently funded with \$100 million for the 2004 to 2007 timeframe, and has been used successfully in Sussex County. It is used mostly along streams and rivers to protect water resources. (*Kent Hardmeyer and/or Ron Phelps*)

It is important to note that though funded with \$100 million since 2004, it is reported that only \$12 million of this has been spent, and the remaining \$88 million will revert back to the federal government if not spent by the end of 2007 (such spending is unlikely). There may be numerous reasons for this sub-optimal use of CREP and CRP funding. However, one of the main reasons is due to requirements of other USDA farm land payment programs that require a minimum number of acres in active agricultural production to receive USDA payments. CREP and CRP acres do not count towards these "base acres", and therefore farmers may be reluctant to enter in CREP or CRP since they may lose funding for the agriculture production programs. (*John Parke*)²⁰

Conservation Innovation Grant Program (CIG)

The aim of the CIG program is to stimulate the development and adoption of conservation approaches and technologies which are innovative, in conjunction with agricultural production. Funds are awarded as competitive 50-50 match grants to non-governmental organizations, tribes, or individuals. (*New Jersey NRCS Conservation Programs*) CIG is a component of EQIP, and its grants are generally funded through EQIP (see below). (*Kent Hardmeyer and/or Ron Phelps*)

In Green Township, the AG Choice, LLC compost facility has a CIG grant. Ag Choice is the first NJDEP approved compost facility permitted to collect and receive agricultural waste, such as animal and stall waste, spoiled haylage, and silage, and then compost it for off-farm use. Ag Choice composts agricultural waste into high quality organic, humified compost, which can be safely reintroduced into the environment. (*AG Choice*)²¹

Environmental Quality Incentive Program (EQIP)

EQIP is a conservation program in which farmers receive financial and technical assistance with structural and management conservation practices that address soil, water, and grazing land concerns. (*New Jersey NRCS Conservation Programs*) EQIP is the most popular and widely used conservation program in Sussex County, and is the most well funded of all the programs, receiving approximately \$4 million statewide on an annual basis. In Sussex County, between 2005 and 2007 there are 1,106 contracted acres, with 13 active contracts. (*Janice Reid*)²²

Recently, emphasis in the county has been put on approving grants to replace old, polluting diesel engines, with cleaner burning diesel engines for farm equipment. (*Kent Hardmeyer and/or Ron Phelps*) Nationally, the proposed 2007 Farm Bill would raise authorized EQIP funding to \$1 billion. (*Jim Baird*)

Farm and Ranch Land Protection Program (FRPP)

FRPP provides up to 50% matching funds to purchase development rights and conservation easements to keep farm and rangeland in agricultural use. The USDA partners with state, tribal, or local governments, and non-governmental organizations. (*New Jersey NRCS Conservation Programs*) Farmers accepting funds through this program must adhere to strict impervious surface limitations. Due to these impervious limitations, the Sussex CADB generally does not support FRPP funding for preserved farms. (*Donna Traylor*) In New Jersey, this program receives approximately \$500 thousand to \$1 million annually, most of which goes to the State Agriculture Development Committee or private conservation groups. (*Kent Hardmeyer and/or Ron Phelps*) Nationally, the proposed 2007 Farm Bill would raise authorized FRPP funding to \$300 million. (*Jim Baird*)

Grassland Reserve Program (GRP)

GRP was a program which offered landowners the opportunity to protect, restore, and enhance grasslands, which play a vital role in protecting water quality and providing wildlife habitat on their property. This program was coordinated through several federal agencies (*New Jersey NRCS Conservation Programs*), but has recently become inactive in Sussex County. (*Kent Hardmeyer and/or Ron Phelps*) The proposed 2007 Farm Bill would provide only minimal funding for GRP. (*Jim Baird*)

Wetlands Reserve Program (WRP)

WRP offers farmers payments for restoring and protecting wetlands on their property that had been previously drained for agricultural use. Wetlands help reduce flooding, filter pollutants from water, provide critical wildlife habitat, and protect open space. (*New Jersey NRCS Conservation Programs*) Payment by NRCS is based upon appraised agricultural land value. With appraised values from \$100 to \$2,000 per acre, many farmers are not willing to restore wetlands on otherwise productive agricultural lands. As a result, the WRP is not widely used in Sussex County. (*Tim Dunne*)²³

Wildlife Habitat Incentives Program (WHIP)

WHIP provides technical and financial assistance for creating, enhancing, and maintaining wildlife habitat. The State Technical Committee for WHIP in New Jersey awards project contracts for designated wildlife habitat categories such as for migratory and declining wildlife species, and for pollinators that benefit agriculture. Since its inception in 1998, WHIP has been a popular program for non-federal landowners interested in wildlife habitat management in New Jersey. (*New Jersey NRCS Conservation Programs*) This is second only to EQIP in use for Sussex County, with 193 contracted acres and seven active contracts since 2005. (*Janice Reid*)

SADC Soil and Water Conservation Grants

The New Jersey Department of Agriculture, State Agriculture Development Committee (SADC) provides grants to farms that are permanently preserved, or are enrolled in the eight year preservation program, with priority for preserved farms. (*Wini Straub*)²⁴ Cost share grant funding for fiscal year 2008 has been approved. The purpose of the grants and program is to provide funding for soil and water conservation practices.

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 agri-chemical 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). (*Soil and Water Conservation Grants*)²⁵

These grants fund soil and water conservation projects approved by the Sussex County Soil Conservation District (District), with the program administered by both the District and the local NRCS office in Hackettstown. Both the District and the local NRCS office also provide technical assistance for eight year program projects. Once the District deems the conservation project necessary and feasible, applications are forwarded to the N.J. State Soil Conservation Committee, which recommends projects to the SADC for funding approvals. (*Soil and Water Conservation Grants*) Traditionally 50 % of the costs of approved soil and water conservation projects are paid with grant funds, but up to 75 % has been approved in the past. (*Wini Straub*)

Monitoring visits are an opportunity to accomplish a variety of objectives. In addition to ascertaining that all requirements of the deed of easement are being met, the overall condition of the farm can be viewed. Questions are asked regarding the farmer's Farm Conservation Plan and whether any funded projects under the Soil and Water Conservation Cost Share program are being utilized. If not, the protocols of that program are described by staff. In addition, current brochures and program information provided by the Natural Resource Conservation Service are distributed at the time of monitoring. Farmers are also asked to describe any potential right to farm issues or trespass violations being encountered. Finally, farmers are reminded that should they ever need assistance of any kind, the Office of Farmland Preservation is there for them.

Water Resources

The Importance of the Water Resource

The protection of the water resource as it relates to agriculture and farmland preservation in Sussex County cannot be overstated. Quite simply, without a consistent, plentiful, adequate and clean water source, agriculture cannot exist. In addition, farms are critical as open space areas to provide aquifer water recharge. To a certain extent, some aspects of ensuring clean and plentiful water can be controlled at the individual farm level. These include:

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

The necessity of clean and plentiful water is emphasized in the 2007 *Sussex County Strategic Growth Plan*. The plan begins with a multilayered vision statement for Sussex

County, with one of the visions being a place where “The water is pure”. Critical development issues are also listed, with two pertaining to the water resource. These include “resource conservation with emphasis on water supply”, and “water quality, emphasizing the importance of stream buffers, wetlands protection, and upgraded individual discharges”. (*Sussex County Strategic Growth Plan*)²⁶ These goals are in line with clean and plentiful water for agriculture.

This necessity of clean and plentiful water, the importance of agriculture to the water resource, and the importance of the water resource to agriculture, is stated in the 2003 *Sussex County Comprehensive Farmland Preservation Plan*. The Plan states that “Agricultural use of land contributes food and fiber, clean air, stormwater management, groundwater recharge, wildlife habitat, and valued open vistas”. The Plan also states that “The goals that are being considered for adoption as part of the Sussex County Open Space and Recreation Plan are also consistent with the goals and mission statement of the Sussex County Agriculture Development Board”. One of the proposed goals is “protection of water quality and quantity”. Finally, relative to the importance of the water resource, the Plan states that “The land resources are the basis of water quality and quantity, habitat, vistas, and rural character”. As with the 2007 *Sussex County Strategic Growth Plan*, these goals are in line with clean and plentiful water for agriculture. (*Sussex County Comprehensive Farmland Preservation Plan*)²⁷

In addition, the *State Development and Redevelopment Plan* also discusses the importance of the water resource. The Plan states:

All of Sussex County’s farmland is found in areas mapped as Rural Planning Area, Rural Environmentally Sensitive Planning Area or Environmentally Sensitive Planning Area in the *State Development and Redevelopment Plan*, where the goals include support for maintenance and improvement of the agricultural industry’s economic viability. The goal of the Rural Planning Area for agriculture is to “guide development to ensure the viability of agriculture and the retention of farmland in agricultural areas; encourage farmland retention and minimize conflicts between agricultural practices and the location of Centers; ensure the availability of adequate water resources and large, contiguous tracts of land with minimal land-use conflicts ...” (*New Jersey State Development and Redevelopment Plan*)

Agricultural goals in Rural Environmentally Sensitive Planning Areas and Environmentally Sensitive Planning Areas include, “... guiding development away from agriculture, minimizing conflict between agriculture and Centers, ensuring adequate water supply, protecting large tracts of land, and promoting more intensive, new-crop agriculture.” (*New Jersey State Development and Redevelopment Plan*)²⁸

Finally, emphasis is given to the importance of the water resource, via the New Jersey Department of Agriculture which “... is working with Rutgers Cooperative Extension, the Natural Resources Conservation Services, the United States Geological Survey, the New Jersey Department of Environmental Protection and the farm community to assess the water needs of agriculture and to assist in the development of essential rules, policies and

guidelines to ensure an adequate water supply to meet the current and future needs of the agricultural industry.” (*Agricultural Smart Growth Plan 2006*)²⁹

Physical Features and Water Aquifer Supply Characteristics

The physiographic and geologic layout of Sussex County dictates water supply, availability and recharge, as discussed in the *2003 Comprehensive Farmland Preservation Plan: (Sussex County’s Comprehensive Farmland Preservation Plan)*

Much of Sussex County is located within the Appalachian Ridge and Valley physiographic province, a large geologic formation extending for about 1,200 miles between Alabama and the St. Lawrence Valley in Canada. Geologic pressures during the Precambrian Era folded and compressed the upper layers of the earth producing these ridges and valleys, which in more recent times, have been shaped by glaciers, wind, and streams.

The Appalachian Mountains in Sussex County are called Kittatinny Ridge. This is actually a chain of mountains, between 1,600 and 1,800 feet in height, with a ridge-like appearance. High Point, at 1,803 feet, is the highest point in this chain. It is located in the northernmost part of the County. The Kittatinny Valley, which is east of the ridge, and the northern portion of the Upper Delaware Valley (also called the Minisink Valley), that is west of the ridge, are the locations of most of the farms in Sussex County. Other mountains in Sussex County, east of the Kittatinny Valley, are part of the Highlands physiographic province. These include the Sparta Mountains and Waywayanda Mountain, along with an outlier, Pochuck Mountain.

It was the valleys, however, with their rolling hills, which attracted the early settlers leaving the more densely populated areas to the south and east. These valleys are the areas where the prime soils are located that farmers have found very suitable for pasture, cropland, and the farming of fruits and vegetables.

Portions of the Kittatinny Valley are underlain with Kittatinny and Jacksonburg limestones creating the potential for sinkhole ponds and limestone fens. Although they can occur on other geologic units, the greatest extents of these unique features are found where glacial till overlies limestone formations in the Appalachian Ridge and Valley Region. This unique environment supports plants that tolerate alkaline conditions and other species associated with these plants. The bog turtle and several grassland bird species are of special interest here because agriculture plays a role in the creation of their unique habitat as well. The bog turtle lays its eggs in the hoof prints of cattle or horses roaming in the pasture. The bobolink and the savannah, grasshopper and Vesper sparrows forage for food in the plowed fields and nest in the grasslands.

The Delaware Valley and the southern portion of the Kittatinny Valley are within the Upper Delaware River Watershed where streams flow to the Delaware River. The northern portion of the Kittatinny Valley is in the Wallkill River Watershed. Both of these watersheds contain streams or portions of streams that are classified as trout production streams and trout maintenance streams.

The climate associated with this landscape is very suitable for agriculture. There are however, periods of drought that occur in cycles, historically, about every fifteen or so years. According to the National Climatic Data Center in Asheville, North Carolina, the average annual rainfall for Newton, New Jersey is 47.22 inches. This is based on data from the years 1971-2000 and includes the August 2000 storm.

Water Conservation Strategies

An adequate water supply is important to successful agriculture operations in Sussex County. 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.

The State Agriculture Development Committee and the NJDA, through the *Agricultural Smart Growth Plan*, encourage farmers to "... work to accelerate the use of efficient water conservation technologies, such as drip irrigation. Identify and promote new and efficient methods to conduct water distribution on farms, utilizing farm ponds and water reuse options." (*Agricultural Smart Growth Plan 2006*)

The dominant crops in Sussex County are hay and corn which rely on rain, and to some extent groundwater, for water needs. Hence, water conservation strategies per se are difficult to implement in the county. With the more water intensive vegetable and fruit farming, and nursery agriculture, it is possible to implement conservation strategies such as drip irrigation, water reuse, or watering crops in the cooler parts of the day. However, since vegetable, fruit and nursery agriculture are minor (in acreage) to corn and hay, the positive effects of water conservation efforts for the county are minimized. This is evidenced by the fact that the amount of irrigated farmland in Sussex County is relatively small. In 2002, 642 acres were irrigated on 93 farms, which is less than 1% of the farmland and 10% of the county's farms. There has been very little public concern expressed regarding future availability of groundwater for irrigation.

However, water intensive agriculture and processes may become more prevalent in the future. This is suggested by the fact that irrigated acres in the county has nearly doubled from 1982 to 2002. This is partly attributable to the increase in nursery and vegetable farms since 1982, and also the fact that 2002 was a drought year, with some agriculture operations using additional water resources. Therefore, water conservation strategies may become more important, and should be maximized where possible.

Waste Management and Recycling

Management of livestock waste has important implications for the quality of ground and surface waters. Unchecked, or poorly managed, these wastes can cause serious water quality problems by the introduction of unwanted microorganisms into natural systems. Poor management of animal waste can also cause disease among farm animals. Proper animal waste management is not only required, but is environmentally responsible, as is

recycling of farm by-products whenever possible. Therefore, a discussion of animal waste management and recycling efforts in Sussex County is warranted.

Waste Management in Sussex County

Discussion with the local NRCS office in Hackettstown indicates the following regarding animal and crop waste management in Sussex County:

- Many farmers have “Nutrient Management Plans” to manage the manure generated on their farms.
- Ag Choice, LLC in Green Township is operated by Jay and Jill Fisher. Ag Choice picks up or accepts, and then composts, horse waste. It is then available as bulk pickup, is sold to landscapers, garden centers, or is bagged and sold at retail outlets. This type of operation not only helps control the problem of horse waste on farms (see below), but is also a good revenue source for the Fishers. Other Sussex County farmers can review the Ag Choice operation to ascertain if similar operations might be beneficial to them. The Ag Choice website is <http://www.ag-choice.com/>.
- Horse waste on farms can be a problem. This is due in part to the relatively small land area of horse farms, making the manure more difficult to effectively and safely distribute on fields. This can spread diseases from the horse manure. Sussex County is aware that more needs to be done to control this problem.
- Relative to disease, cattle manure is not as serious a problem as horse manure. This is due in part to the relatively large land area of dairy farms, making it easier to safely and effectively distribute the manure on fields. This helps to control the spread of disease. *(Kent Hardmeyer and/or Ron Phelps)*

Concentrated Animal Feeding Operations & Animal Feed Operations

Concentrated Animal Feeding Operations (CAFO) as defined at N.J.A.C. 7:14A-2.13 (New Jersey Pollutant Discharge Elimination System (NJPDES)) are:

- Operations with more than 1,000 slaughter or feeder cattle, 700 dairy cattle, 2,500 swine, 500 horses or other animal populations. Sussex County does not have any livestock operations of this size; or
- Operations with more than 300 slaughter or feeder cattle, 200 dairy cattle, 750 swine, 150 horses or other animal populations, and which discharge pollutants directly to state waterways either through manmade devices or as a result of water passing through the facility or having direct contact with confined animals. *(New Jersey Discharger)³⁰*

A number of Sussex county farms do fit into this latter category, and are required to have waste management plans to ensure that animal wastes are properly managed. In addition, any livestock operation receiving EQIP funds must have a waste management plan.

Concentrated Animal Feeding Operations (CAFOs) and Animal Feeding Operations (AFOs) have the potential to, or currently do, cause water pollution through the collection

of large amounts of animal waste in relatively small areas. Mismanagement of the animal waste has the potential to cause large amounts of soil and groundwater contamination via introduction of the bacteria, fecal coliform, a known contaminant from animal farming operations. The state's agricultural community bears a responsibility to help protect and restore natural resources for which they are the stewards.

The New Jersey Department of Environmental Protection (NJDEP) has outlined a statewide strategy to manage and regulate these operations. The strategy calls for NJDEP to administer CAFO permits, and NJDA to administer the appropriate measures for AFOs. (*Agricultural Smart Growth Plan 2006*) The permits and measures require development and implementation of comprehensive waste management plans, utilizing "animal waste standards", proposed by NJDA for adoption in late 2007, or early 2008. (*Monique Purcell*)³¹ The strategy emphasizes the use of cost-effective voluntary measures, limiting the need for permits. (*Agricultural Smart Growth Plan 2006*) It is important to note that the Rutgers Cooperative Extension agent from Sussex County is one of the few individuals in New Jersey certified to develop comprehensive waste management plans.

NJDEP, Division of Water Quality - Concentrated Animal Feeding Operations

To protect the quality of surface and groundwater in and around animal farming operations, the NJDEP has adopted a general permit for managing and regulating Concentrated Animal Feeding Operations (CAFOs). The permit is administered through the New Jersey Pollutant Discharge Elimination System (NJPDES) regulations at N.J.A.C. 7:14A-2.13, under authority of the Water Pollution Control Act. In general, the permits require CAFOs to comply with the federal effluent limitation guidelines that prohibit discharge to state waters. (*New Jersey Discharger*)

The New Jersey Department of Agriculture, State Soil Conservation Committee, Natural Resources Conservation Service and New Jersey Soil Conservation Districts have partnered with NJDEP to implement the general permit as part of a statewide strategy to control pollution from CAFOs. (*New Jersey Discharger*)

Recycling

Recycling is an important part of natural resource conservation for the agriculture industry. Recycling saves natural resources, and can also save farmers money through creative reuse, such as using leaves and grass clippings to mulch and fertilize farm fields, and saving on solid waste disposal costs. Recycling reduces the amount of refuse finding its way to limited landfill space. The NJDA has a strong commitment to ensuring compliance with New Jersey's mandatory recycling regulations. Additional information on New Jersey's various agricultural recycling programs can be obtained by contacting the Recycling Program Manager at NJDA, at (609) 292-5536. (*New Jersey Agricultural Recycling Programs*)³²

Corn and hay, the dominant farm product by acreage in Sussex County, use limited products which can be recycled, and as such limits recycling opportunities. However, the

expanding and important nursery industry in Sussex County can recycle such items as nursery film. To this end, the Sussex County Municipal Utilities Authority (MUA) is currently working with the NJDA to develop a program for recycling nursery film in the county. The source for recycling materials would be plastic film coverings for greenhouses, which have to be replaced often, and shrink wrap used to wrap supplies while shipping or storing. If the program is successful, potting and pesticide containers may be added at a later date. The MUA is hoping to establish the program by the end of 2007. The MUA Commissioners, who must approve any recycling program, are reported to be receptive to this idea of recycling nursery film, which would be a self financing program via a drop-off charge. (*Renee Casapulla*)³³

Energy Conservation

Energy conservation makes economic sense for Sussex County agriculture businesses. The less energy a farmer uses, the less money spent on energy, and the more money that can be invested elsewhere, or realized as profit. However, energy conservation and the use of alternate technologies also make environmental sense. They help keep the air, water, and soil clean, and minimize or eliminate further pollution to these critical agricultural resources. Also, with global warming due to excessive carbon dioxide emissions in the atmosphere, energy conservation and the use of alternate energy sources can help to slow this warming trend.

In its 2006 “*Agricultural Smart Growth Plan*”, the New Jersey Department of Agriculture emphasizes the importance of energy conservation and alternative energy use. The Plan indicates that it is important to:

“Promote the use of innovative technologies, recycling, energy conservation and renewable energy systems on New Jersey’s farms” and to “promote, provide technical assistance for, and inform the agricultural community about new and existing energy conservation and renewable energy programs by promoting the financial and environmental benefits of implementing these programs.” Also, the NJDA indicates that *“Through (these) numerous efforts coordinated between the state and federal levels, New Jersey’s agricultural community is proving itself to be an important player in protecting our state’s natural resources. Clearly, there is more work to be done, and the agricultural community has shown initiative in pursuing alternative energy sources, such as solar, wind and bio-gas in running farm operations, and by being a leader in the pursuit of ethanol and bio-diesel fuel markets.”* (*Agricultural Smart Growth Plan 2006*)

The SADC does not have a formal policy for the use of wind and solar energy on commercial farms. However, discussions with the SADC indicate:

- SADC is supportive of solar and wind energy use on commercial farms as long as the main purpose of the produced energy is for use on the farm. This does not preclude the sale of excess energy production back to the power grid; and,

- Installation of solar panels, wind turbines and other appurtenant equipment must not negatively impact production of the agricultural land, and agricultural land must not be taken out of production. (*Steve Bruder*)³⁴

At present, there is only minimal effort to initiate energy conservation at the county level. The EQIP natural resource conservation program pays for some energy production programs, such as the aforementioned replacement of older, dirty polluting diesel engines, with newer, more efficient, cleaner burning engines. EQIP also pays rebates to farmers for the use of bio-diesel, and is also used to rebate farmers who have installed solar panels. (*Kent Hardmeyer and/or Ron Phelps*) Energy conservation and renewable energy is one area that Sussex County agricultural entities such as the Sussex County Board of Agriculture and N.J. Farm Bureau, along with the wider agriculture community, could explore to assist farmers in saving money, and subsequently provide ecological benefit.

Solar Energy

Solar energy can be harnessed via the installation of solar panels. This harnessed or stored energy can then be used to create electricity and provide heat. If excess electricity is generated, it can be sold back to the electric grid for a profit. The overall use of solar panels has greatly increased in New Jersey. (*Agriculture and Green Energy*)³⁵ EQIP does provide some funding for solar panels, and farmers interested in using this alternate energy source can contact the local NRCS office in Hackettstown for more information.

Other programs available to help agricultural producers take advantage of this technology include the U.S. Department of Energy, “Solar Energy Technology Program”, <http://www1.eere.energy.gov/solar/> and the “Solar Energy for New Jersey Agriculture” work and information sheet at <http://www.state.nj.us/agriculture/pdf/solarenergyguide.pdf>. (*Agriculture and Green Energy*) Solar energy is one of the fastest growing sectors in the alternative energy market, and Sussex County farmers can take advantage of this money and energy saving technology.

Wind Energy

The power of a strong wind can be captured by turbines or windmills, turning such power into electricity. Expanding and evolving technology is making this option more attractive to farmers as a way to cut energy costs. According to the NJDA the northwestern part of New Jersey, which includes Sussex County, has ample and consistent enough wind power to make turbine energy feasible. (*Agricultural Smart Growth Plan 2006*) One possible roadblock to the use of wind turbines, is that few, if any, municipal ordinances allow the use of wind turbines. (*Eric Snyder*)³⁶ If this is indeed the case, then the Sussex County CADB should work with the county planning department and local towns to study and approve wind turbines as an allowed use.

Ethanol

Ethanol is a renewable fuel “made by distilling the starch and sugar in a variety of plants.” (*Agriculture and Green Energy*) It can then be blended into gasoline as an “oxygenate”, reducing air pollution. Its use also reduces dependence on foreign oil, and the harmful environmental effects of oil drilling. Also, unlike the gasoline additive MTBE, ethanol does not contaminate groundwater. (*Agriculture and Green Energy*) Corn, the dominant field crop in Sussex County (along with hay), could position Sussex County farmers to financially capitalize on the spreading movement towards ethanol-blended fuels. More study would need to be done on whether this would be profitable for county farmers, and how it would affect other local agriculture industries (for instance, how it would affect the dairy industry’s supply of, and price for, feed corn). The feasibility of using Sussex County corn for ethanol production is also somewhat dependent on the proximity of any future ethanol plants, and this aspect should be included in any future studies.

Renewable Energy Grant Programs

The NJDA provides the following information on renewable energy grant programs, which can help encourage the use of these energy sources:

- *New Jersey Clean Energy Program*: Administered by the New Jersey Board of Public Utilities, this program provides financial incentives to install clean energy systems, including fuel cells, solar energy, small wind and sustainable biomass equipment. Financial incentives are in the form of rebates, grants, and loans. Additional information is available at www.njcep.com/.
- *Renewable Energy Systems and Energy Efficiency Improvements Program*: As part of the 2002 Farm Bill, this program “funds grants and loan guarantees to agricultural producers for assistance with purchasing renewable energy systems and making energy efficiency improvements”. Final rules for loans and grants were adopted by the U.S. Department of Agriculture in July 2005. The proposed 2007 Farm Bill would continue this funding. Additional information can be found at www.rurdev.usda.gov/rbs/farmbill/index.html.
- *Biomass Research and Development Initiative Grants*: The United States Departments of Agriculture and Energy support the development of biomass energy. Grants are available for research, development, and demonstrations on bio-based products, bio-energy, bio-fuels, bio-power and additional related processes. In the recent past, grants have focused on development and demonstration projects that led to greater commercialization. Additional information is available at the following website: <http://www.state.nj.us/agriculture/news/hottopics/topics060222.html>. (*Agriculture and Green Energy*)

¹ United States Department of Agriculture, Natural Resources Conservation Service. Information For Farmers. <http://www.nj.nrcs.usda.gov/farmers.html>. Accessed April 2007.

² Personal Communication with Kent Hardmeyer and/or Ron Phelps, United States Department of Agriculture, Natural Resources Conservation Service, May 15 and 16, 2007; June 6 and 22, 2007.

³ Personal Communication with Ken Bingham, United States Department of Agriculture, Farm Service Agency. June 11, 2007.

⁴ United States Department of Agriculture, Natural Resources Conservation Service, New Jersey. <http://www.nj.nrcs.usda.gov/>. Accessed March 2007.

⁵ New Jersey Department of Agriculture, Agricultural and Natural Resources. <http://www.state.nj.us/agriculture/divisions/anr/>. Accessed April 2007.

⁶ New Jersey Agricultural Experiment Station, Rutgers Cooperative Research & Extension of Sussex County. <http://sussex.rcrc.rutgers.edu/>. Accessed April 2007.

⁷ New Jersey Department of Environmental Protection, Division of Parks and Forestry, Private Lands Management Program. http://www.nj.gov/dep/parksandforests/forest/njfs_private_lands_mgt.html. Accessed April 2007.

⁸ Personal Communication with Jim Barresi, Assistant Director, New Jersey Department of Environmental Protection, Division of Parks and Forestry. June 12, 2007.

⁹ New Jersey Department of Treasury, Division of Taxation. Farmland Assessment Act of 1964, Chapter 48, Laws of 1964, Revised, Thirty Eighth Report Of Data From FA-1 Forms For 2006 Tax Year. December 2006.

¹⁰ New Jersey Department of Agriculture, State Agriculture Development Committee, Sussex County Agricultural Profile, April 13, 2007.

¹¹ Personal communication, Kim Korth, New Jersey Department of Environmental Protection, Non-game Endangered Species Program. July 24, 2007.

¹² Personal communication, Jim Haase, New Jersey Department of Environmental Protection, New Jersey Forest Service. July 20, 2007.

¹³ Personal Communication with Donna Traylor, Sussex County Division of Planning, Office of Conservation and Farmland Preservation. June 9, 2007.

¹⁴ United States Department of Agriculture. Conservation Programs Offered In New Jersey, Programs Available in 2006. ftp://ftp-fc.sc.egov.usda.gov/NJ/programs/Conservation_Programs_Offered_in_New_Jersey.pdf. Accessed April 2007.

¹⁵ United States Department of Agriculture, Fact Sheet, USDA'S 2007 Farm Bill Proposals. http://www.usda.gov/wps/portal/!ut/p/_s.7_0_A/7_0_1UH?contentidonly=true&contentid=2007/01/0019.xml Accessed April 2007.

¹⁶ American Farmland Trust, The Farm, Nutrition and Community Investment Act. http://www.farmland.org/programs/states/me/documents/AFT_FNCIA_S-D-G_Northeast_WebApr07.pdf. Accessed June 2007.

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- ¹⁷ Personal Communication with Jim Baird, Mid-Atlantic Region Director, American Farmland Trust. June 2007.
- ¹⁸ Personal communication with Jennifer Morrill, Director of Media Relations, American Farmland Trust. October 29, 2007.
- ¹⁹ United States Department of Agriculture, New Jersey NRCS Conservation Programs. <http://www.nj.nrcs.usda.gov/programs/>. Accessed April 2007.
- ²⁰ Personal Communication, John Parke, New Jersey Audubon Society. September, 7, 2007.
- ²¹ AG Choice, LLC. <http://www.ag-choice.com/index.html>. Accessed June 2007.
- ²² Personal Communication with Janice Reid, Assistant State Conservationist, USDA, NRCS. June 26, 2007.
- ²³ Personal Communication with Tim Dunne, USDA, NRCS. June 25, 2007.
- ²⁴ Personal Communication with Wini Straub, District Manager, Sussex County Soil Conservation District. June 19, 2007.
- ²⁵ New Jersey Department of Agriculture, Soil and Water Conservation Grants. <http://www.state.nj.us/agriculture/grants/soil.html>. Accessed April 2007.
- ²⁶ Sussex County, Sussex County Strategic Growth Plan. <http://www.sussex.nj.us/documents/planning/6%20sgp.pdf>. Accessed April 2007.
- ²⁷ Sussex County Agriculture Development Board, Sussex County's Comprehensive Farmland Preservation Plan. <http://www.sussex.nj.us/cit-e-access/webpage.cfm?TID=7&TPID=5513>. Accessed March 2007.
- ²⁸ New Jersey Department of Community Affairs, Office of Smart Growth. New Jersey State Development and Redevelopment Plan. <http://www.nj.gov/dca/osg/plan/stateplan.shtml>. Accessed June 2007.
- ²⁹ New Jersey Department of Agriculture, Agricultural Smart Growth Plan 2006 <http://www.state.nj.us/agriculture/pdf/smartgrowthplan.pdf>. Accessed April 2007.
- ³⁰ New Jersey Department of Environmental Protection, New Jersey Discharger, Volume 11, No. 2, Fall 2003. New Stormwater General Permit for Concentrated Animal Feeding Operations. <http://www.state.nj.us/dep/dwq/discharg/v11n2h.htm>. Accessed April 2007.
- ³¹ Personal communication with Monique Purcell, NJDA, Division of Agriculture and Natural Resources.
- ³² New Jersey Department of Agriculture, New Jersey Agricultural Recycling Programs. <http://www.nj.gov/agriculture/divisions/md/prog/recycling.html>. Accessed, April 2007.
- ³³ Personal Communication, Renee Casapulla, Recycling Coordinator, Sussex County Municipal Utilities
- ³⁴ Personal Communication, Steve Bruder, State Agriculture Development Committee.
- ³⁵ New Jersey Department of Agriculture, Agriculture and Green Energy. <http://www.state.nj.us/agriculture/news/hottopics/topics060222.html>. Accessed April 2007.
- ³⁶ Personal Communication, Eric Snyder, Director, Sussex County Division of Planning.

CHAPTER 8: AGRICULTURAL INDUSTRY SUSTAINABILITY, RETENTION AND PROMOTION



Existing Agricultural Industry Support

Right to Farm

To ensure farmers have the ability to continue accepted agricultural operations, the Right to Farm Act (RFA) was enacted by the State Legislature in 1983 and amended in 1998. The Act provides “protection of commercial farm operations from nuisance action, where recognized methods and techniques of agricultural production are applied, while, at the same time, acknowledging the need to provide a proper balance among the varied and conflicting interests of all lawful activities in New Jersey.” (*SADC Right to Farm Program*)¹ Another critical piece of legislation to support agriculture was the 1983 Agriculture Retention and Development Act. This Act created the State Agriculture Development Committee (SADC), and eighteen County Agriculture Development Boards (CADB’s). Both the SADC and CADB implement the RFA on the State and local levels. (*New Jersey’s Great Northwest Skylands*)²

The SADC works to maximize protections for commercial farmers under the RFA by developing 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. In order to qualify for Right to Farm protection, a farm must meet the definition of a “commercial farm” as detailed in the RFA, and operate in conformance with federal and state law, comply with agricultural management practices recommended by the SADC or site specific agricultural management practices, not be a direct threat to public health and safety, and be located in an area where agriculture was a permitted use under municipal zoning ordinances as of December 31, 1997, or thereafter; or must have been an operating farm as of December 31, 1997. (*Eligibility Criteria for RTF Act Protection*)³

All right to farm complaints or issues that are brought before the Sussex CADB are first researched and then differences between the parties are attempted to be resolved amicably. Mediation can be informal or, if the parties agree, the SADC will provide a formal mediation or conflict resolution at no cost to the participants through its Agricultural Mediation Program. If a formal complaint is filed with the Sussex CADB, it is sent to the SADC for a determination as to whether the farm falls within the parameters established by

the RFA for Right to Farm protection. Once the complaint is returned to the Sussex CADB from the SADC, additional fact finding and technical review occurs and the issue is given a public, quasi-judicial hearing at the county level. After all information has been considered, the Sussex CADB will make a determination as to whether the agricultural activity is protected by the RFA or whether changes to the operation will be required. If the issue is not resolved by the Sussex CADB determination, either party in the dispute may take the matter for a subsequent appeal and determination to the New Jersey Office of Administrative Law. (*Resolving Agricultural-Related Conflicts*)⁴

Municipalities can and should limit the number of Right to Farm complaints and encourage farming as an industry by:

- Adopting comprehensive Right to Farm Ordinances as outlined by the SADC.
- Making agriculture a permitted use in all appropriate zones.
- Requiring notification of homeowners purchasing a home in a new subdivision where active agriculture occurs on adjacent property.

The following table lists municipalities within Sussex County that have Right to Farm Ordinances, along with summary information on the Ordinance. Thirteen of the 24 municipalities in Sussex County have established a Right to Farm Ordinance. The model ordinance, as developed by the State Agriculture Development Committee, is included in the *Appendices. (Model)*⁵

Right to Farm Ordinances are a necessary item if a municipality, or property owner, wishes to enter into the Farmland Preservation Program. Therefore, all municipalities within Sussex County with commercial farms are encouraged to adopt a Right to Farm Ordinance, and to update their existing ordinances to be consistent with the SADC model ordinance.

Municipal Right to Farm Ordinances

<i>Municipality</i>	<i>Code#</i>	<i>RTFO</i>
Andover Township	190-29	The right to farm is recognized as a natural right and a permitted use on all parcels defined as a farm in the Andover Township Zoning Ordinance. 10 agricultural activities are identified as covered by this right to farm protection including priority water use, second only to human consumption. Farming operations may be conducted on holidays, Sundays and weekdays, in the evening and during the day. Right to farm excludes intensive hog operations, or extensive animal feedlot operations.
Frankford Township	99-1	7 activities are given right to farm protection if in conformance with the agricultural management practices recommended by the SADC. This ordinance acknowledges the need to “provide a proper balance among the varied and sometimes conflicting interests of all lawful activities...”.

<i>Municipality</i>	<i>Code#</i>	<i>RTFO</i>
Franklin Borough	161-37 to 161-39	Seven agricultural activities are recognized so long as the operation conforms to agricultural management practices recommended by SADC. These include on-site distribution of organic agricultural wastes, production of agricultural and horticultural groups, trees, etc., processing and packaging of agricultural output of the commercial farm, operation of farm stands and markets, and the control of pests and predators. The ordinance also presumes that approved agriculture operations shall not constitute a public or private nuisance.
Fredon Township	2004-01	The ordinance seeks "... the continuation and expansion of commercial and home-based agricultural pursuits ...". 14 agricultural activities are identified as covered by this right to farm protection including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, use of public roadways for transportation of slow-moving farm vehicles, and grazing of animals. Farming operations may be conducted on holidays, Sundays and weekdays, in the evening, and during the day. Buyers in new subdivisions must be notified of any adjacent agricultural activities.
Green Township	5-97	The right to farm is recognized as a natural right and a permitted use on all parcels defined as a farm in the Green Township Zoning Ordinance. These rights include use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.
Hampton Township	107-1 to 107-4	7 agricultural activities are recognized as a "natural right", including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.
Hardyston Township	97-6	8 agricultural activities are recognized as a "natural right", including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.
Lafayette Township	8-6-96	8 agricultural activities are recognized as a "natural right", including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.

<i>Municipality</i>	<i>Code#</i>	<i>RTFO</i>
Montague Township	14-1	8 agricultural activities are recognized. These include use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, farm markets and “u-pick” farms, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.
Sandyston Township	02-01	8 agricultural activities are recognized as a “natural right”, including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.
Stillwater Township	179-1 to 179-6	The ordinance seeks “... the continuation and expansion of commercial and home-based agricultural pursuits ...” 12 agricultural activities are identified as covered by this right to farm protection including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and use of public roadways for transportation of slow moving farm vehicles. Farming operations may be conducted “... at any time and all times when necessary”. Buyers in new subdivisions must be notified of any adjacent agricultural activities.
Vernon Township	240-1 to 240-3	8 agricultural activities are recognized as a “natural right”, including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.
Wantage Township	13-13.19	8 agricultural activities are recognized as a “natural right”, including use of irrigation pumps and equipment, on-site distribution of organic agricultural wastes, and grazing of animals. The right to conduct agricultural operations on Sundays and holidays, or in the evening, is also included.

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.

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;
 - Gross sales of products from the land must average at least \$500 per year for the first five acres, plus an average of \$5 per acre for each acre over five. In the case of woodland or wetland, the income requirement is \$.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 of time; and,
 - The property owner must represent that the land will continue in agricultural or horticultural use to the end of the tax year.
- (NJDA Informational Guide)⁶*

The Farmland Assessment program does not, however, apply to farm structures, such as barns and storage facilities. It has been proposed that additional tax incentives which encourage farmers to maintain their buildings in good working order as part of active farm operations, and which do not financially penalize them for renovating, or replacing, old or unsafe structures, are necessary. Maintained buildings are not only critical to the farmer but also add to farm “aesthetics” for the larger community, helping to support Agritourism, a pillar of agricultural sustainability in Sussex County.

Sussex County is 535 square miles, and contains 333,603 acres of land area (total does not include 8,719 acres of water, and 867 acres of unconsolidated shore). Of this land area 105,365 acres, or 31.6 % of the county, are under farmland assessment. General trends indicate:

- A downward trend in overall farmland assessed acreage;
- Harvested cropland accounted for 36,706 acres in 1983 and, except for a slight increase from 2003 to 2004, has steadily decreased to 30,360 acres in 2004;
- Pastured cropland is also down, from 10,055 acres in 1983 to 5,894 acres in 2004. Between 2000 and 2003 pastured cropland acreage increased, before again declining in 2004 to the 5,894 acre figure;
- Permanent pasture acreage also decreased in the 1983 to 2004 time period, from 22,130 acres to 15,324 acres. There was a slight acreage increase in 2002 for permanent pasture acreage, before again declining in 2003 and 2004;
- Equine acreage has actually increased since it was first measured in 2000, from 369 acres to 461 acres in 2004. However, the 2004 figure is down slightly from the 2003 figure of 488 acres. The 461 acres includes all equine uses (boarding, rehabilitating, training, and general use);
- The total county acreage (for active agricultural use, woodlands and equine) in farmland assessment mirrors these downward trends. In 1983 there were 120, 847 acres, while in 2004 there were only 105,365 acres, a nearly 13% reduction of farmland assessed acreage.

(Sussex County Agricultural Profile)⁷

It is important to sustain and expand tax incentives such as farmland assessment to keep land in farms, and to encourage the development or extension of other tax incentives for the agricultural industry. By making agriculture more profitable and viable, tax incentives will help ensure a steady, permanent source of agricultural lands for the County's farmland preservation efforts.

Additional Strategies to Sustain, Retain and Promote Agriculture in Sussex County

Regulatory Flexibility

Municipalities play a key role in the preservation of farming as an industry. In municipalities with a sizable acreage of assessed farmland, zoning powers can be utilized to require buffers between agriculture and other uses to minimize conflict. The Right to Farm Ordinances are an active example of municipalities' support for agriculture. Such actions create an atmosphere favorable to agriculture, its economics and profitability.

The viability of farming in New Jersey is affected 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 Sussex County's strong agricultural base requires support on many fronts, one of which is flexibility in government regulation. (*Agricultural Smart Growth Plan 2006*)⁸ It is essential that the Sussex CADB, Division of Planning, Board of Agriculture, County Freeholders, Soil Conservation District, Natural Resource Conservation Service, Rutgers Cooperative Extension of Sussex County, municipal planning and zoning boards, chambers of commerce, private farm preservation groups, and other interested entities and individuals, work together to present a united front in issues regarding government regulation and permits as they relate to agriculture. The 2006 *Agricultural Smart Growth Plan* for New Jersey identified the following as important relative to regulatory flexibility and priority, and which the aforementioned entities must work to ensure proper advantage for agriculture in Sussex County:

- *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). These need to be strengthened and modified if, and when, necessary;
- *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. Pertinent examples are the strong Right to Farm Ordinances in thirteen of the twenty four municipalities within the county. At a state level, the Department of Environmental Protection's "Freshwater Wetlands Protection Act Rules" (N.J.A.C. 7:7A-et. seq.) and the "Flood Hazard Area Control Act Rules" (N.J.A.C. 7:13) grant exemptions, permits by rule, or general permits for agricultural activities. In addition, for the

- Department of Environmental Protection's "Highlands Water Protection and Planning Act Rules" (N.J.A.C. 7:38), exemptions are allowed for activities conducted in accordance with an approved Woodland Management Plan issued pursuant to the Farmland Assessment Act. The Sussex County agriculture community must work to ensure that exemptions are adequate and reasonable;
- *Flexibility*: State agencies such as the Department of Environmental Protection, Department of Transportation, Department of Community Affairs, Department of Labor, and New Jersey Commerce Commission, should consider the NJDA Agricultural Smart Growth Plan when making important 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, programs, etc. are attuned to the needs of Sussex County farmers; and,
 - *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. In other words, it seeks to harmonize potentially conflicting land use policies. This strategy would be done mostly at the local and county levels.
(*Agricultural Smart Growth Plan 2006*)

Farm Labor

An adequate labor supply is integral to harvesting vegetables, fruits, and berries. Measured in farmed acreage, Sussex County has a relatively small industry for these products compared with field crops such as corn and hay, and also dairy, goat, sheep, and nursery products. Harvesting of these farm products is more mechanized, and/or not as labor intensive as produce, with most work being done by farm family members. (*Kent Hardmeyer*)⁹ Fruits, berries, and vegetables occupy approximately 95% less land in Sussex County than field crops and nursery products. As of 2004, 1,509 acres were devoted to fruit, berries, and vegetables, while 29,226 acres were devoted to field crops and nursery products. (*Sussex County Agricultural Profile*) Farm laborers in Sussex County generally live at the farms where they work. (*Kent Hardmeyer*) Therefore, housing and other issues concerning farm labor are, for the most part, not of high concern for Sussex County farmers.

The U.S. Census of Agriculture reports that in 1992 hired farm labor costs in New Jersey were \$115.2 million, which rose to \$142.9 million in 1997, representing 26.7% and 27.8% of total farm production costs respectively, an increase of 1.1%. In Sussex County hired farm labor costs for 1992 were \$2.1 million, decreasing to \$1.8 million in 1997, representing 12.5% and 11.2% of total farm production costs respectively, a decrease of 1.3% (more recent county figures are not available). (*U.S. Census of Agriculture*)¹⁰ This lowering of farm labor costs in Sussex County is, at least partially, likely the result of the trend from 1983 to 2004 of a larger percentage decrease in vegetable acreage (36%), as compared to a 14% decrease in field crops. (*Sussex County Agricultural Profile*) Rising

farm labor costs in Sussex County are not currently impacting agriculture sustainability. However, as this trend may change over time, a brief discussion of the topic is warranted.

Hired farm workers continue to be one of the most economically disadvantaged groups in the United States due to low wages, seasonal employment, and limited participation in the non-farm labor market. Therefore, as an important statewide resource to the agricultural industry, the New Jersey Department of Labor recommends that more must be done to ensure a well-trained, educated farm labor workforce that has adequate living and working conditions, and is trained in worker safety. (*Agricultural Smart Growth Plan 2006*)

The New Jersey Department of Labor recommends the following:

- Work with the U.S. Department of Agriculture’s Rural Development program to reexamine program criteria to enable New Jersey’s rural communities to qualify for more programs. The current focus of the program, such as rural area infrastructure, is not applicable to Sussex County (and New Jersey).
 - Link neighborhood revitalization efforts with housing opportunities for farm workers and, where appropriate, establish on-site housing, to ensure a safe and stable workforce.
 - Develop and promote comprehensive and ongoing training opportunities for farm workers.
 - Work with the New Jersey Department of Labor, Rutgers Cooperative Extension and others to provide farm safety training.
 - Join other agricultural stakeholders in supporting ongoing efforts at the federal level to streamline and modernize the immigration process.
- (*Agricultural Smart Growth Plan 2006*)

In January 2006, the Agriculture Transition Policy Group, composed of government and agriculture industry representatives, submitted a report to then Governor-elect Jon Corzine, with recommendations to keep agriculture strong and viable in the Garden State. The Group reported many serious problems facing New Jersey farm employers. Two of these are the impacts of the new State minimum wage (now \$7.15 per hour), and the ever-looming issue before the U.S. Congress regarding immigration and undocumented workers. The Group reports that the sponsor of the minimum wage legislation (name not provided) has promised to “re-visit the issue for agriculture to find some off-sets that will protect farm viability and keep the industry at a competitive level.” (*Report of the Agriculture Transition Policy Group*)¹¹

The New Jersey Department of Agriculture has specified the identification and posting of new markets as a specific strategy in its 2007 Economic Development Strategies report. This effort is a necessary outgrowth of the report’s finding that due to the State’s high labor rates (in addition to high land values and property taxes) production costs in New Jersey are higher than in most other areas. With commodity prices based on national production costs, yields and demand, it is less profitable to produce commodity items in New Jersey than elsewhere. (*Economic Development Strategies*)¹²

Finally, agriculture labor education and training funding may be available through the New Jersey Department of Labor and Workforce Development Programs. These programs can help to assist in upgrading the skills and productivity of the agricultural workforce. (*Training*)¹³ Some of the programs which may be applicable include Customized Training Initiative, Basic Skills Program, and Occupational Safety and Health Training Program.

Agriculture Labor Training and Farmer Education

To sustain a modern, diverse, and stable food and agricultural industry, education and progressive, ongoing training for workers will promote a more efficient and productive business environment. This includes programs covering “farmer risk management education, labor education including worker safety, agricultural leadership training, secondary school and college agricultural education.” (*Agricultural Smart Growth Plan 2006*)

One educational link for Sussex County agricultural land owners and operators is to collaborate with the Rutgers Cooperative Extension (RCE) of Sussex County. The RCE of Sussex County assists with traditional forms of agriculture (hay and corn, for example), as well as niche markets and new markets. RCE lends assistance to all farm sizes. During the growing season, RCE of Sussex County provides one on one, on-site consultations with farmers to assist with control of insect infestations, weed control in pastures, and plant diseases for fruits, vegetables, greenhouse, nurseries and ornamentals. Assistance is also provided for field crops, and similar farm animal consultation is provided on a year round basis. One example is the “goat project”, which advises particular farmers on the production and marketing of meat goats. During these one on one consultations, technical scientific research is relayed to the farmer in a useful and applicable manner. Additional topics that RCE of Sussex County assists with are marketing of farm products, and advising on value-added agriculture products. (*Steve Komar*)¹⁴

In the winter months, regional and local classes are conducted by the RCE on a diverse set of agriculture topics. Two of special significance are conducted with the North Jersey Vegetable and Fruit Growers Association. A class on vegetable growing is conducted at the Snyder Farm in Pittstown, Hunterdon County, while a similar class on fruit growing is held at the Warren Grange in Franklin Township, Warren County. The RCE of Warren County provides vegetable referral services for Sussex County farmers, and in this way information from the aforementioned classes is utilized on Sussex County farms.

Finally, the RCE of Sussex County performs applied research on area farms to further knowledge on a wide range of issues pertaining to agricultural plants, animals and commercial horticulture. Results of any research are used to advise local farmers on an as needed basis. (*Steve Komar*) All of the aforementioned 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.

Discussions with Sussex County Community College indicate that at present agriculture education courses are not offered at the College. However, the College would be willing to

explore the possibility of setting up college level or continuing education course(s) if requested to do so by the Sussex County Agriculture Development Board, Sussex County Board of Agriculture, Sussex Chapter of the N.J. Farm Bureau, or the wider agriculture community. If such a request was made, the College would perform an analysis to determine the necessary resources to begin a class, and also to gauge if there is enough interest and prospective students to sustain a class. Any college level class would need to be fully transferable to a four year college institution. (*Anthony Balzano*)¹⁵ The Sussex County Agriculture Development Board can inquire, and also coordinate, with CADB's from neighboring counties on the interest level for agricultural college and continuing education courses. It is noteworthy that in the last several years the College has presented several panel discussions, including farmland preservation, agricultural grants, and the bear hunt.

Through its Division of Agriculture and Natural Resources, Natural Resource Conservation Program, the New Jersey Department of Agriculture offers technical, financial and regulatory assistance, and provides educational outreach to landowners throughout the State. The Department also offers, in conjunction with the U.S. Department of Agriculture, farm risk management and crop insurance education programs to assist farmers in understanding what assistance is available to reduce agricultural risks. (*Agricultural Smart Growth Plan 2006*)

Finally, as a form of "education", government agencies at the Federal, State and County levels can provide continuous outreach information to farmers, to ensure they take full advantage of all federal and state loan, grant, education, and technical assistance programs. This is especially important, since these programs are meant to aid the farming business to thrive and survive. Due to the complexity and vast array of the programs, they may be unknown to many farmers.

Youth Farmer Education Programs

Due to the aging farmer population in Sussex County (average age was 49.2 years in 1982, as compared to 55.3 years in 2002), (*Sussex County Agricultural Profile*) the next generation of the County's farmers need to become interested in, and exposed to, the business of agriculture and be prepared to enter the industry. Education programs in agriculture, offered as an optional and viable opportunity for the youth of Sussex County, will assist those who are interested in pursuing such careers. Students need to be ensured of new opportunities via secondary and post secondary education programs in Agriculture, Food and Natural Resources. (*Agricultural Smart Growth Plan 2006*) There are a number of ways to accomplish this.

The National Future Farmers of America (FFA) Organization "operates under a Federal Charter granted by the 81st Congress of the United States, and is an integral part of public instruction in agriculture." (*National FFA Organization*)¹⁶ The National FFA Organization was founded in 1928, and currently has 7,242 chapters and nearly 500,000 members. (*National FFA Organization*) Through the local FFA and New Jersey Department of Agriculture's Office of Agriculture, Food, and Natural Resource Education,

Sussex County offers agriculture education programs at the Sussex County Vocational Technical High School in Agricultural Business Management, and at Newton High School in Ornamental Horticulture, and Conservation and Natural Resources. (*Office of Agriculture, Food, and Natural Resource Education*)¹⁷ These same high schools also have local FFA chapters. Robin McLean is the local FFA representative and can be contacted at 1-877-243-3332 for information.

Youth agriculture education classes or programs are not offered at any elementary schools within the county, but are an opportunity to cultivate young people's interest in the field of agriculture.

The national Agriculture in the Classroom Program helps K-12 students become aware of the importance of agriculture. 4-H is an informal, practical educational program for youth, which assists young people interested in farm animals through livestock projects. The New Jersey Agricultural Society's Agriculture Leadership Program provides young professionals in agriculture with leadership development skills and opportunities. (*Agricultural Smart Growth Plan 2006*)

In addition, the New Jersey Department of Agriculture offers an "Agricultural Education" program. This is "a systematic program of instruction available to students desiring to learn about the science, business, and technology of plant and animal production and/or about the environmental and natural resources systems. A complete Agricultural Education program is composed of three components: class/lab instruction, supervised agricultural experience (SAE), and FFA, which provide a well-rounded and practical approach to student learning." (*Agricultural Education*)¹⁸

Public Outreach

Over the last 50 years, New Jersey has been transformed away from a largely rural and agricultural landscape, to a more urban and suburban landscape. However, farming remains strong and viable in many portions of the state, especially in Sussex County. If the County's remaining agricultural areas are to survive and prosper, the non-farming public needs to be aware of the continuing financial, cultural, scenic and agricultural contributions made by Sussex County.

Public outreach continues to be front and center in Sussex County through its highly successful Agritourism industry. Agritourism activities increase the recognition of the farm industry's importance to the non-agriculture resident, and should be continued and expanded whenever possible. Sussex County is the state leader in Agritourism, and should work to continue this extremely successful public outreach to the non-agriculture community (discussed in detail in *Chapter 6*).

Management of Nuisance and Crop Damaging Wildlife

Management of nuisance and crop damaging wildlife is critical to the short and long term sustainability of Sussex County's agriculture industry. Crop damage from wildlife leads to

economic loss for the farmer and/or land owner, and is an extremely serious problem in Sussex County, causing up to 90 % crop loss in certain instances. (*Donna Traylor*)¹⁹ Most damage is caused by a multitude of insects, as well as deer, bear, turkey, and other wildlife. This has been ascertained by aerial wildlife studies and bear damage surveys conducted through the Sussex County Board of Agriculture and RCE. (*Donna Traylor*) It is imperative to not only control and manage damage to crops, but also to do it in a manner which causes the least amount of collateral natural resource damage (i.e. limit pesticide use to the greatest extent possible, using natural pest control). State, County and local government units must be sensitive to the negative economic impacts caused by crop damage, and support efforts to control it through education, technical and financial assistance, and regulatory flexibility.

One key way for Sussex County farmers to control damage from deer, bear and turkey is through the harvesting of crop damaging animals. This is allowed through depredation permits, issued by the New Jersey Department of Environmental Protection's (NJDEP) Fish and Wildlife Program. (*Donna Traylor*) In many instances, this is the only short term solution to control damage of crops by what is widely considered an excessive deer population in the county. Sussex County farmers continue to work with the NJDEP and NJDA, as well as other counties and municipalities, to implement wildlife control strategies on privately and publicly owned land. (*Agricultural Smart Growth Plan 2006*)

The New Jersey Department of Agriculture's Division of Plant Industry works to safeguard New Jersey's plant resources from injurious insect and disease pests. The Division implements several programs for detection, inspection, eradication, and control of insect pests, which help to ensure that the public can enjoy high quality, pest-free agricultural products. (*Division of Plant Industry Programs*)²⁰ In addition, "the Division oversees programs that certify plant stock for interstate and international shipments, protects forested communities from tree loss caused by the gypsy moth and Asian longhorned beetle, inspects honeybees for harmful bee diseases and pests, regulates the quality of plant seeds, and produces and releases beneficial insects to reduce crop and environmental damage and decrease dependence on chemical pesticides." (*Division of Plant Industry Programs*) Protection of forest resources is important to Sussex County farmers who harvest wood as part of woodland management plans on their farmland assessed properties.

One example of the Division of Plant Industry's work is in control of the gypsy moth. The gypsy moth is considered the most destructive defoliation forest insect pest in New Jersey. 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. The Division promotes an integrated pest management approach, which "encourages natural controls to reduce gypsy moth feeding and subsequent tree loss." (*Gypsy Moth Suppression*)²¹ However, 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. (*Gypsy Moth Suppression*)

Gypsy moth infestation has been especially heavy the last several years in parts of Sussex County, requiring aerial spray treatments. In spring and summer 2007, 789 acres were

sprayed in Hampton Township, while 249 acres were sprayed in Sandyston Township. (*Gypsy Moth Suppression*)

Agriculture Vehicle Movement

As many portions of the rural New Jersey landscape become developed with residential subdivisions and shopping malls, the sometimes conflicting lifestyles of farmers and suburban residents clash. Farmers need to move heavy, slow moving agricultural equipment over local, county, and sometimes state roads to access unconnected fields. Residents also need to commute to workplaces, or drive to area destinations for shopping, town sports and social activities, at a pace much faster than the slow moving agricultural equipment. These different needs can cause conflict between farmers and suburban dwellers, while creating unsafe road conditions as residents and farmers “compete” for road space. The public needs to be educated that agriculture vehicle movement is part of the agricultural environment.

Since many farm vehicles travel over local roads, municipalities should continue to support local agricultural business’s right to do so. The SADC model Right to Farm Ordinance recognizes as a specific right the operation and transportation of large, slow moving equipment over roads. However, of the 12 Sussex municipalities with Right to Farm Ordinances, only Fredon and Stillwater specifically protect the right to transport tractors and slow moving farm equipment on local roads. All Sussex County towns should consider changing their ordinances to specifically protect the movement of farm equipment on local roads.

Signs alerting fast moving cars to the possible movement of slow moving farm equipment is an additional, effective tool to protect farmer (and automobile passenger) safety. Signage also informs the public at large that agriculture is an important, equal, and permanent fixture of Sussex County life. Local Sussex County governments may consult with farmers where signage should be posted.

If local non-agriculture residents are to enjoy the scenic vistas, fresh produce, clean air and limited traffic congestion that Sussex County’s agriculture provides, they need to be tolerant of the farming community. Local, county, and state government can advertise the contributions of the farming community via public outreach at local schools and various community activities. The annual New Jersey State Fair/Sussex County Farm and Horse Show is a prime example of advertising the importance and permanence of agriculture in Sussex County.

The federal government is an important partner in supporting Sussex County agriculture. There are several federal programs that support, or could support, the agricultural industry in Sussex County. As such a discussion of each is warranted, and follows below.

USDA Rural Development Program

Known as the Rural Development Program, the United States Department of Agriculture (USDA) has an extensive array of loans and grants 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. Through the program, the USDA offers technical assistance and information to agricultural cooperatives, as well as to communities for empowerment programs. With a multi-billion dollar portfolio of loans, loan guarantees, and grants, the USDA can be an effective partner to assist with agriculture sustainability. (*Rural Development*)²²

Grants and loans are available in three key areas: Rural Business-Cooperative Service, Rural Housing Service, and Rural Utilities Service. Unfortunately, many of New Jersey's rural municipalities may not qualify for many of the program's loans and grants because most are unavailable to cities with more than 50,000 residents, or municipalities with more than 10,000 residents. While the population criteria for these programs may make sense in a large portion of the country, they do not make sense for New Jersey. (*Agricultural Smart Growth Plan 2006*)

The New Jersey Department of Agriculture, State Agriculture Development Committee, and Sussex County Agriculture Development Board, along with other relevant Sussex County agriculture entities, can work with and lobby the USDA to reexamine program criteria to enable New Jersey's rural communities to qualify for more program dollars.

Income Averaging for Farmers

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. (*United States Department of the Treasury*)²³

In the New Jersey Legislature, New Jersey Senate Bill 1425 is presently being considered by the Senate Economic Growth Committee, while Assembly Bill 1692 is being considered by the Assembly's Agriculture and Natural Resources, and Appropriations Committees. (*Ben Kurtzman*)²⁴ These bills would provide income averaging similar to the federal program described above. The New Jersey Department of Agriculture, State Agriculture Development Committee, Sussex County Freeholders, and Sussex County Agriculture Development Board can work with, and encourage, the New Jersey Legislature to adopt income averaging legislation. This would greatly assist Sussex County farmers, and farmers statewide, to remain economically viable.

USDA Farm Service Agriculture Program

Farming is a business which can be extremely cyclical and unpredictable with factors, such as weather and market conditions, out of the farmer's control. As such, farmers often need assistance to make ends meet, to stay profitable, and to stay in business. Many times federal government programs are available, and Sussex County farmers can take advantage of these loans as a tool in running their farm business.

The United States Department of Agriculture (USDA), Farm Service Agency (FSA) makes “... *guaranteed farm ownership and operating loans to (beginning farmers), family-size farmers and ranchers who cannot obtain commercial credit from a bank, Farm Credit System institution, or other lender*”, often due to financial setbacks from natural disasters, or whose resources are too limited to maintain profitable farming operations. FSA loans can be used for most agriculture necessities such as purchasing land, livestock, equipment, feed, seed, supplies, and also for construction of buildings, or to make farm improvements. *(Farm Service Agency)*²⁵

The FSA also makes "Direct" farm loans. These loans include supervision and credit counseling for farmers so they have a better chance for success. Under this program, farm ownership, operating, emergency and youth loans are the main types of loans available, but there are also minority applicant and beginning farmer loans. *(Direct Farm Loans)*²⁶ In Sussex County farm loans have been as follows:

- Fiscal year 2007 had three loans, with an average loan of \$61,000. They were used to buy dairy cows and refinance operating debt.
- Fiscal year 2006 had 5 loans, with an average loan of \$234,000. They were used to buy farms and cows, and refinance operating and real estate debt.
- Fiscal year 2005 had 2 loans, with an average loan of \$42,500. They were used to buy equipment and for operating expenses. *(Virginia Brophy)*²⁷

The FSA office for Sussex County is located at 101 Bilby Road, Suite 1H in Hackettstown, Warren County, at the same location as the NRCS office discussed in Chapter 7. The County Executive Agent is Ken Bingham, and he may be reached at (908) 852-2576, ext. 109, or at Kenneth.Bingham@nj.usda.gov. This FSA office also administers the financial aspect of the CREP program, which was discussed in *Chapter 7*.

Sussex County's Vision for Farmland Preservation

The Mission Statement of the Sussex County Agriculture Development Board:

The Sussex CADB's mission in implementing the farmland preservation program in Sussex County is to preserve both farmland and farmers. In accomplishing these goals, the Board seeks to preserve farms that are highly productive due to soil types, proximity to other preserved farms, farm size, as well as the effort and efficiency of the farmer.

Goals of the Sussex County Agriculture Development Board:

The Sussex CADB seeks to preserve all of the productive farms in the County where the farmer is interested in participating in the program and where the land is currently in agricultural production or has a strong potential for sustained agricultural production in the future. To date **12,362 acres** will remain in agricultural use in perpetuity due to the work of the Sussex CADB.

¹ New Jersey Department of Agriculture. New Jersey State Agriculture Development Committee. “Right to Farm Program.” <http://www.state.nj.us/agriculture/sadc/rtfprogram.htm>. Accessed March 11, 2007.

² New Jersey’s Great Northwest Skylands, Farmland Preservation, <http://www.njskylands.com/fmpres.htm>. Accessed May 2007.

³ New Jersey Department of Agriculture, State Agriculture Development Committee, Right to Farm (RTF) Program: Eligibility Criteria for RTF Act Protection www.state.nj.us/agriculture/sadc/rtfcriteria.htm Accessed March 2007.

⁴ New Jersey Department of Agriculture, State Agriculture Development Committee, Right to Farm Program: Resolving Agricultural-Related Conflicts <http://www.state.nj.us/agriculture/sadc/rtfconflictres.htm>. Accessed March 2007.

⁵ New Jersey Department of Agriculture, State Agriculture Development Committee, SADC Model Right to Farm Ordinance <http://www.state.nj.us/agriculture/sadc/modelrtfordinance.pdf>. Accessed March 2007.

⁶ New Jersey Department of Agriculture, New Jersey’s Farmland Assessment Act, An Informational Guide on Basic Requirements. July 2006.

⁷ New Jersey Department of Agriculture, State Agriculture Development Committee, Sussex County Agricultural Profile. April 13, 2007.

⁸ New Jersey Department of Agriculture, Agricultural Smart Growth Plan 2006 <http://www.state.nj.us/agriculture/pdf/smartgrowthplan.pdf>. Accessed March 2007.

⁹ Personal communication with Kent Hardmeyer, United States Department of Agriculture, Natural Resources Conservation Service. May 2007.

¹⁰ United States Census of Agriculture, 1987, 1992, 1997, Ag Census. [http://agcensus.mannlib.cornell.edu/county.php?st\[\]=34&imgmap=agri_state](http://agcensus.mannlib.cornell.edu/county.php?st[]=34&imgmap=agri_state). Accessed May 2007.

¹¹ Agriculture Transition Policy Group, Final Report, January 10, 2006. <http://www.state.nj.us/governor/home/pdf/agriculture.pdf>. Accessed March 2007.

¹² New Jersey Department of Agriculture, Economic Development Strategies, January 2006. <http://www.nj.gov/agriculture/conventions/2006/06ecostrat.pdf>. Accessed March 2007.

¹³ New Jersey Department of Agriculture, Training. www.state.nj.us/agriculture/grants/training.html. Accessed April 2007.

¹⁴ Personal communication with Steve Komar, Rutgers Cooperative Extension of Sussex County, May 30, 2007.

¹⁵ Personal communication with Anthony Balzano, Professor, Sussex County Community College. June 8, 2007.

¹⁶ National FFA Organization, Agricultural Science Education. <http://www.ffa.org/>. Accessed May 2007.

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- ¹⁷ New Jersey Department of Agriculture, Office of Agriculture, Food and Natural Resource Education, 2006-2007 Directory of New Jersey Agriculture, Food & Natural Resources Education Programs and Related Organizations. <http://www.jerseyageducation.nj.gov/0607dir.pdf>. Accessed May 27, 2007.
- ¹⁸ New Jersey Department of Agriculture, Agricultural Education <http://www.jerseyageducation.nj.gov/>. Accessed April 1, 2007.
- ¹⁹ Personal communication with Donna Traylor, Agriculture Resource Specialist, County of Sussex, Division of Planning, Office of Conservation and Farmland Preservation. May 15, 2007 and/or September 4, 2007.
- ²⁰ New Jersey Department of Agriculture, Division of Plant Industry, Programs <http://www.state.nj.us/agriculture/divisions/pi/prog/>. Accessed April 1, 2007.
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- ²² United States Department of Agriculture, Rural Development, About Us. www.rurdev.usda.gov/rd/index.html. Accessed April 3, 2007.
- ²³ United States Department of the Treasury, Internal Revenue Service, Farmers May Harvest Lower Taxes by Averaging Income. www.irs.gov/businesses/small/article/0,,id=123985,00.html. Accessed April 3, 2007.
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Virginia Brophy, USDA, Farm Service Agency. July 31, 2007.

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Eric Snyder, Planning Director, Sussex County Division of Planning. June 11, 2007.

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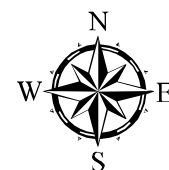
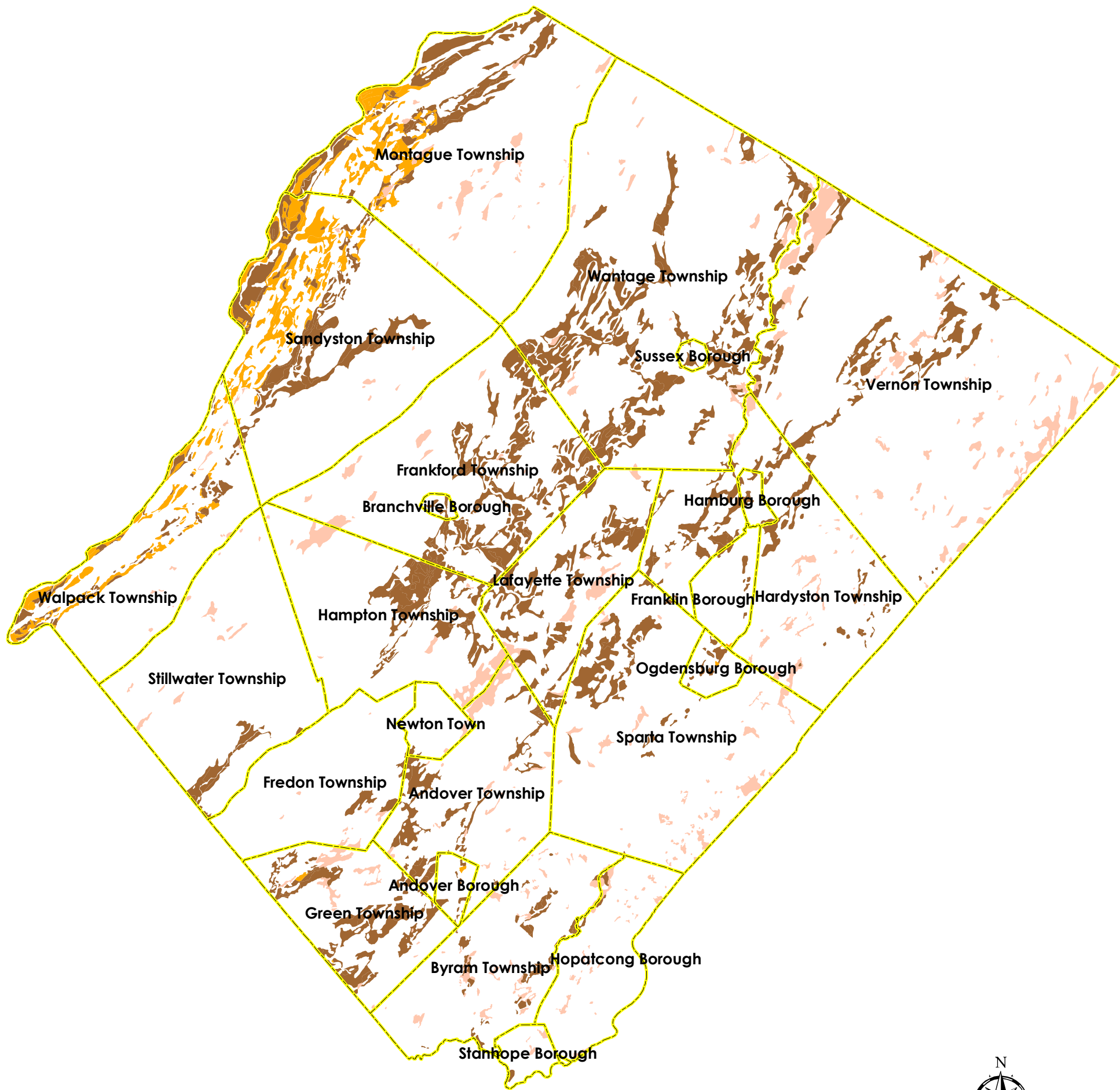
Donna Traylor, Agriculture Resource Specialist, County of Sussex, Division of Planning, Office of Conservation and Farmland Preservation. May 15, 2007; June 9 and 28, 2007.

MAPS

- a. Farmland Soils
- b. Agriculture Development Areas (ADA)
- c. Proposed Project Areas
- d. Candidate QFarm Qualified Parcels

FARMLAND SOILS

Sussex County, New Jersey



- Prime Farmland Soils
- Soils of Statewide Importance
- Soils of Unique Importance
- Municipal Boundaries

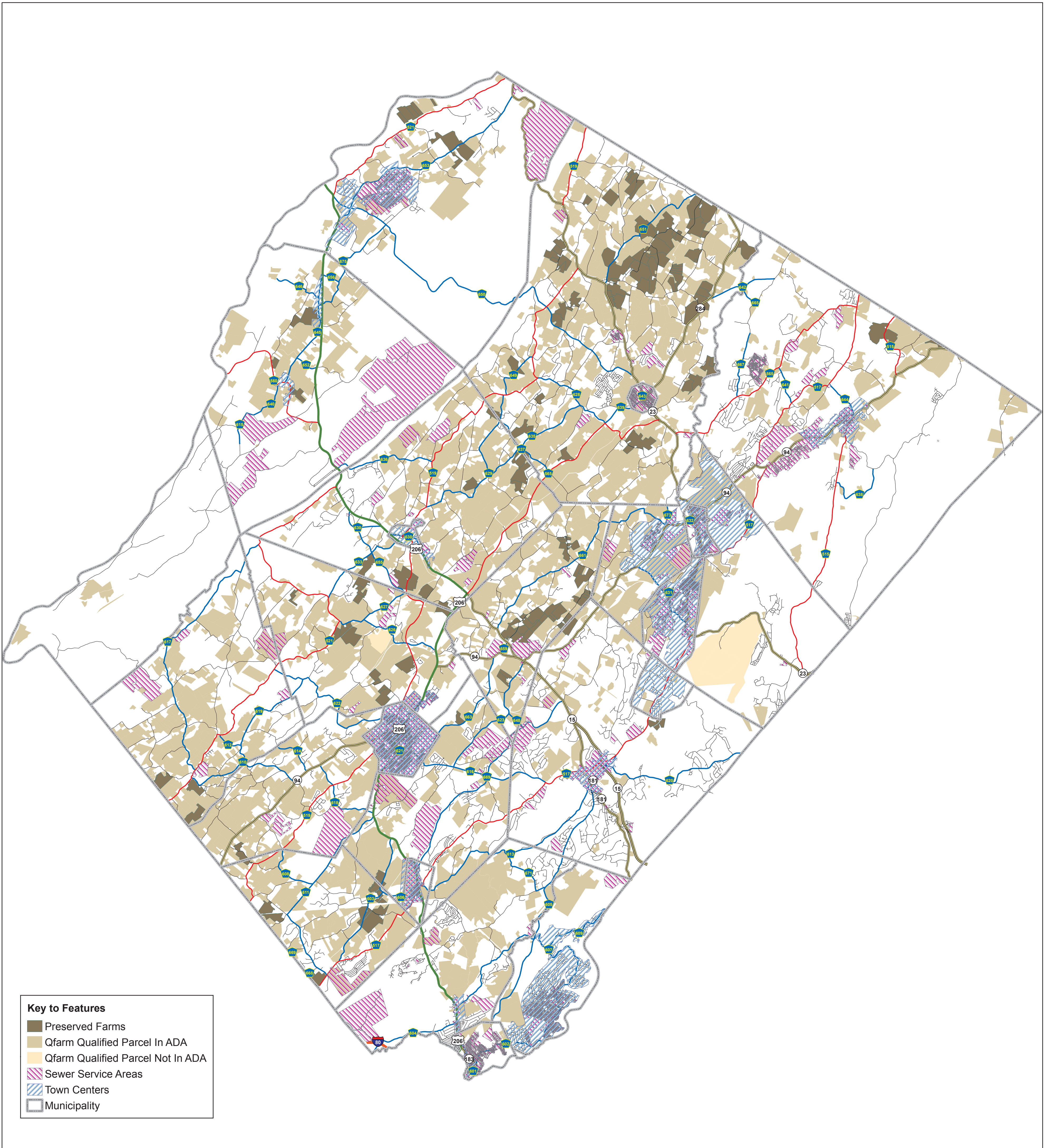


ARESTY MAPPING CENTER
 MORRIS LAND CONSERVANCY
 19 Boonton Ave.
 Boonton, NJ 07005
 Map Prepared July 10, 2007

Data Source: Office of GIS Management, County of Sussex;
 NJDEP, NRCS Soil Survey


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

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

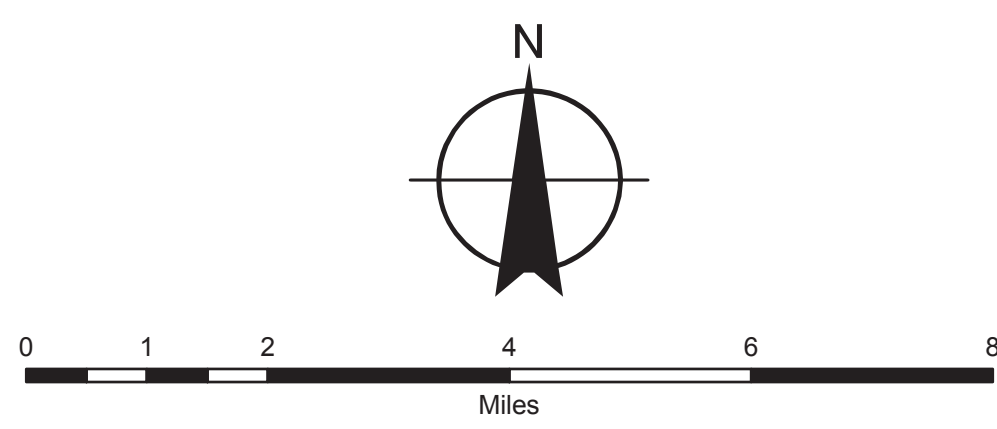


This map was created using data developed by Sussex County, NJDCA, and NJDOT. Information contained within this map has not been verified or authorized by any of the secondary parties.

Due to inconsistencies in the parcel data and origin of data sources, the data on this map may not identify all q-farm assessed properties, preserved farms, or accurate town center boundaries.



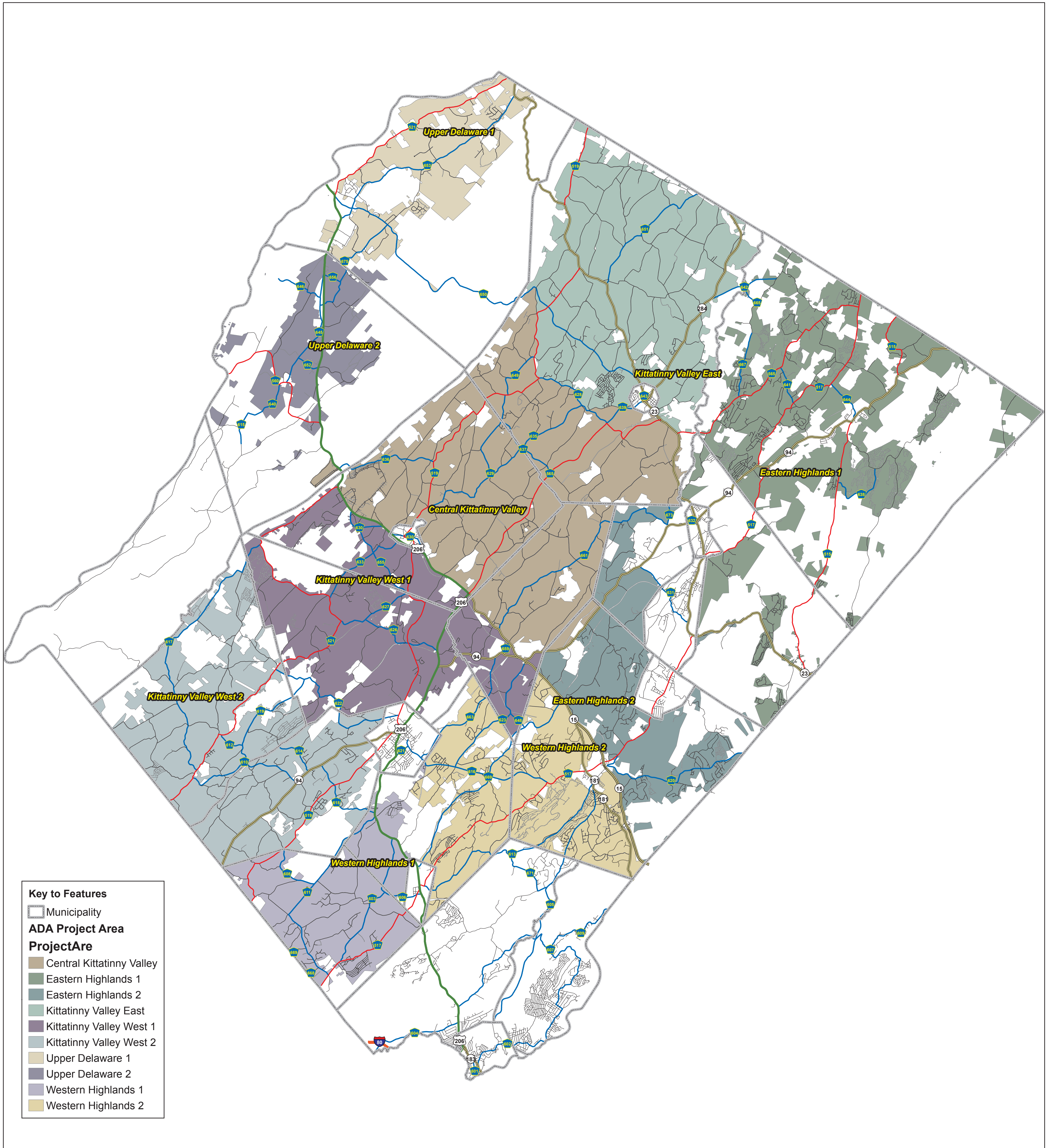
Office of GIS Management
Division of Engineering
Department of Engineering and Planning




Sussex County -- People & Nature Together


**Comprehensive Farmland
Preservation Plan**

Agriculture Development Areas

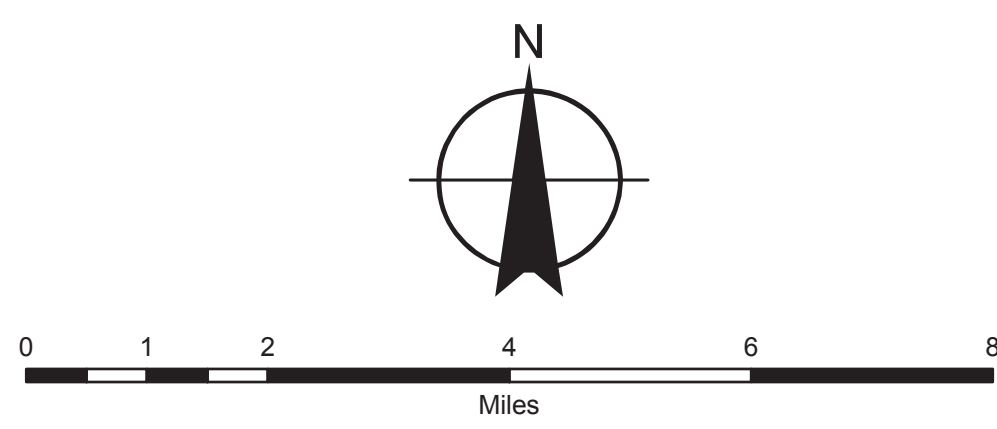


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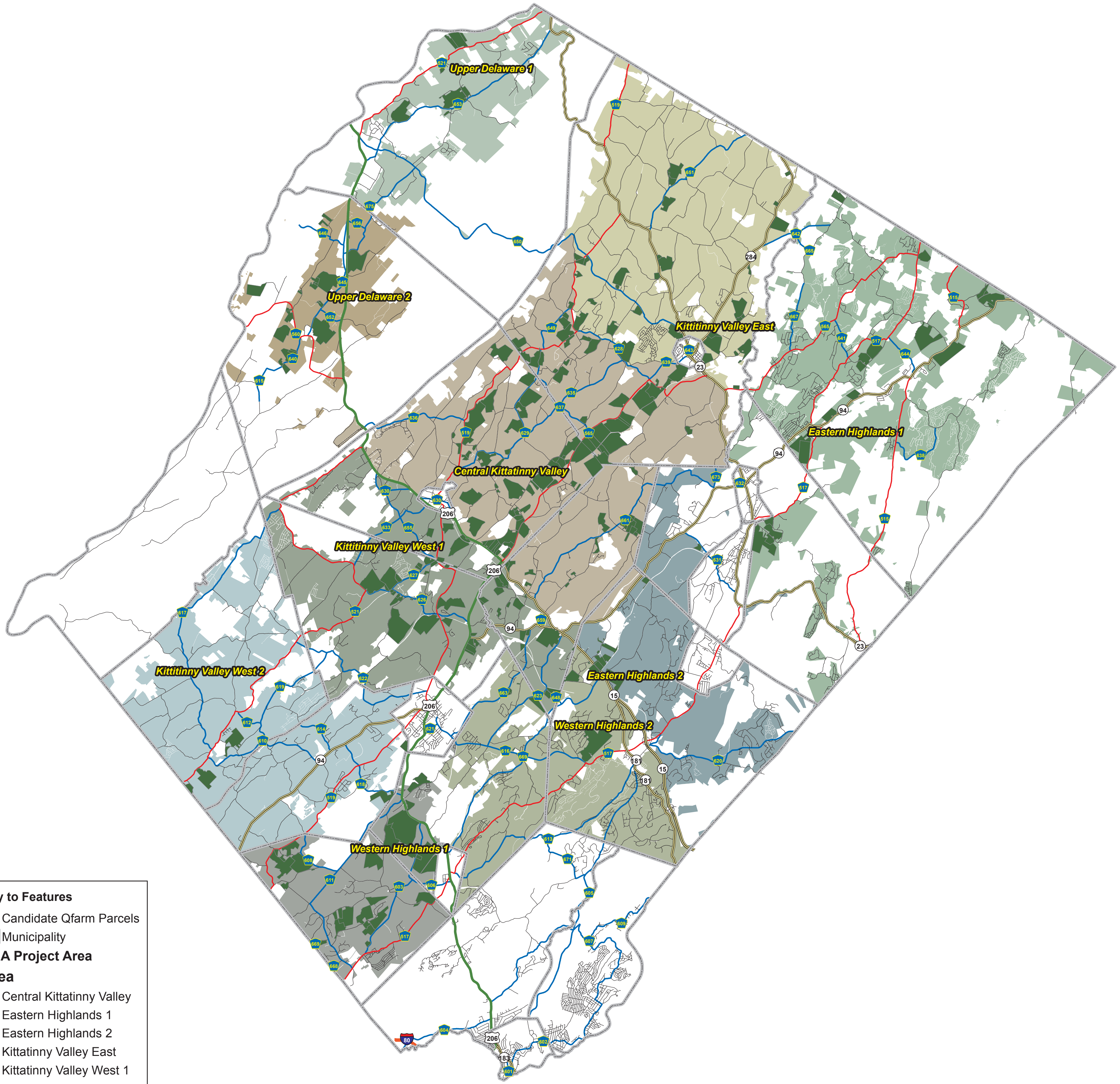
Office of GIS Management
Division of Engineering
Department of Engineering and Planning




Sussex County -- People & Nature Together

Comprehensive Farmland Preservation Plan

Proposed Project Areas



Key to Features

- Candidate Qfarm Parcels
- Municipality

ADA Project Area

Area

- Central Kittinginny Valley
- Eastern Highlands 1
- Eastern Highlands 2
- Kittinginny Valley East
- Kittinginny Valley West 1
- Kittinginny Valley West 2
- Upper Delaware 1
- Upper Delaware 2
- Western Highlands 1
- Western Highlands 2

This map was created using data developed by Sussex County and NJDOT. Information contained within this map has not been verified or authorized by any of the secondary parties.

Due to inconsistencies in the parcel data and origin of data sources, the data on this map may not identify all q-farm assessed properties, preserved farms, or accurate town center boundaries.



Office of GIS Management
Division of Engineering
Department of Engineering and Planning



**Comprehensive Farmland
Preservation Plan**

**Candidate Qfarm
Qualified Parcels**

September 13, 2007

APPENDICES

- a. Public Hearing #1 – May 21, 2007 –
Invitation and Agenda
- b. Public Hearing #2 – October 15, 2007 –
Agenda
- c. Directory of Sussex County Farm Markets
and Farm Stands
- d. SADC Ranking Form
- e. SADC Model Right-to-Farm Ordinance
- f. SADC Deed of Easement

To: Sussex County Agricultural Boards and Agencies

From: Donna M. Traylor, Director
Sussex County Office of Farmland Preservation and Conservation

Re: Meeting to discuss Sussex County Farmland Preservation Plan

Date: May 3, 2007

The Sussex County Agriculture Development Board (CADB) invites you to a meeting of municipal agricultural representatives and farmland owners to discuss the Comprehensive Farmland Preservation Plan for Sussex County. This Plan, first done in 2003, is in the process of being updated and the County is looking to you for guidance and direction for the future of agriculture in the County.

While developing the Comprehensive Farmland Preservation Plan, the CADB will be seeking information from municipal officials, agricultural entities and farmers concerning agricultural viability issues, farmland preservation and agritourism. This may include land use trends, planning and zoning issues, right to farm ordinances, effectiveness of the farmland preservation program, and expansion of the agritourism program. The CADB wants the Plan to complement existing programs and meet the preservation needs of the municipalities.

As part of this effort, we are hosting a public meeting on Monday, May 21st. The meeting will be held at the Sussex County Administrative Center, Freeholder Meeting Room (1st floor), 1 Spring Street, Newton, New Jersey, 07860. It will begin at 7:00 pm. We look to you, or your representative, to attend this meeting and help us coordinate our planning initiatives.

Please respond to www.dtraylor@sussex.nj.us or call 973-579-0500, ext. 1329 (Antoinette) to let us know who will be attending. We look forward to working with you on the Sussex County Comprehensive Farmland Preservation Plan. Thank you for your assistance.

County of Sussex

Farmland Preservation Plan

Public Meeting:

A Vision for Farmland Preservation in Sussex County

Freeholder Meeting Room, Sussex County Administrative Center
One Spring Street, Newton

Monday, May 21, 2007 - 7:00 pm

Hosted by Sussex County Board of Chosen Freeholders
and Sussex County Agriculture Development Board

AGENDA

I. Welcome and Introductions

Sussex County Agricultural Development Board

- Sussex County Agricultural Development Board is in the process of updating its 2003 Farmland Preservation Plan.
- The goal for this evening is to listen and learn how to continue to protect agriculture in our County.

II. The Farmland Preservation Plan: What is it and why is Sussex County doing it?

Barbara Heskins Davis, Morris Land Conservancy

- The plan will prioritize land for preservation based upon input from the community, existing planning documents, local and county boards.
- The plan will conform to the updated SADC guidelines and will be used by Sussex County to apply for funds from the SADC.

III. The Farmland Preservation Program in Sussex County: A Conversation

Barbara Heskins Davis, Morris Land Conservancy

- How can the County's program continue to protect farmland?
- In what direction should the Program be headed?
- In what ways is the Farmland Preservation Program helping to address the needs of farmers and agriculture generally?
- Is the Farmland Preservation Program assisting municipalities and helping to coordinate community goals of preserving farmland?
- What does your community need to accelerate its efforts?
- How can the County help your community address those needs?
- How do you recommend farmland easements be monitored?
- What solutions do you recommend to the CADB?

- Wrap up: What do you want the Farmland Plan to include that has not been discussed?

IV. Concluding Remarks

Sussex County Agricultural Development Board

The Mission Statement of the Sussex County Agriculture Development Board: The Sussex CADB's mission in implementing the farmland preservation program in Sussex County is to preserve both farmland and farmers. In accomplishing these goals, the Board seeks to preserve farms that are highly productive due to soil types, proximity to other preserved farms, farm size, as well as the effort and efficiency of the farmer.

Goals of the Sussex County Agriculture Development Board: The Sussex CADB seeks to preserve all of the productive farms in the County where the farmer is interested in participating in the program and where the land is currently in agricultural production or has a strong potential for sustained agricultural production in the future. To date **12,242 acres** will remain in agricultural use in perpetuity due to the work of the Sussex CADB.

Why draft an Updated Farmland Preservation Plan?

The primary purpose of updating the Farmland Preservation Plan for Sussex County is to provide a vision and strategy for the preservation of our agricultural resources. This Plan will prioritize farmland for preservation based upon input local farmland owners, residents, municipal officials, county board and committees. The Plan will conform to the updated State Agriculture Development Committee (SADC) guidelines and can be used by Sussex County to apply for a Planning Incentive Grant from the SADC. The Plan is a requirement for eligibility into this Program.

Anticipated Timeline:

May 21, 2007: Public Meeting #1: Vision Meeting for Updated Farmland Plan

July 16, 2007: Draft Farmland Preservation Plan delivered to County

September 17, 2007: Draft Farmland Preservation Plan released to the public

October 22, 2007: *Public Meeting #2: Public Comments on the Draft Plan*

November 14, 2007: Final Farmland Preservation Plan delivered to County

December 15, 2007: SADC deadline for submittal of County Plan

For further information please contact:



Morris Land Conservancy
19 Boonton Avenue
Boonton, NJ 07005
(973) 541-1010
Fax (973) 541-1131
www.morrislandconservancy.org

Sussex County
Office of Conservation and Land Preservation
Sussex County Administrative Center, One Spring Street
Newton, NJ 07860
(973) 879-0500
Fax: (973) 579-0513

Sussex County Agriculture Development Board

Invites the Public

To Provide Comment on the

Draft Sussex County Comprehensive Farmland Preservation Plan Update

Monday, October 15, 2007
7:30 pm

Freeholder Meeting Room
Sussex County Administrative Center
One Spring Street, Newton

Agenda

- Goals of Preservation Plan and Public Meeting
- Overview of the Sussex County Farmland Plan and Maps
- Identification of Project Areas and Land Preservation Goals
- Issues impacting Sussex County's Farmland Initiative
- Public Comment on Draft Plan and Maps

Hosted by:

Jane Brodhecker, Chair, Sussex County Agriculture Development Board

Freeholder Liaison:

Glen Vetrano, Sussex County Board of Chosen Freeholders

State Representatives: *(invited)*

Tim Brill and Steve Bruder, State Agriculture Development Committee

Meeting Facilitated by Morris Land Conservancy

Directory of Sussex County Farm Markets and Farm Stands

Vegetables, Fruit, Berries, Corn		
<i>Farm</i>	<i>Description</i>	<i>Address</i>
<i>Anderson Farms, Sparta</i>	Many varieties of tomatoes including cherry, plum, and heirloom; pumpkins and gourds; flowers, herbs, jams; Seasonal Farmstand	20 Davis Road, Branchville, NJ 07826; (973)875-4384
<i>Bear Creek Berry Patch, Tranquility</i>	PYO Raspberries; Summer Late June-July 9:00AM-6:00PM, 7days a week, Fall Labor Day Weekend-October 10:00AM-5:00PM, Friday-Monday	1087 Dark Moon Road, Newton, NJ 07860; (908)979-1451
<i>Beemerville Orchards</i>	Open 6 days a week 9:00 AM - 6:00 PM Closed Sundays	73 Lusscroft Road, Wantage, NJ 07461; (973)875-3729
<i>Berry Hill Farms</i>	blueberries, blackberries, currants, red & purple raspberries, strawberries, eggs, pumpkins; 6 Days a week, Closed Sundays, 9:00AM-5:00 PM	130 Rose Morrow Road, Wantage, NJ 07461; (973)875-7150
<i>Csippan Farm</i>	Farm Fresh Eggs; April-November, Call for pickup	17 Mudcut Road, Lafayette, NJ 07848; (973)383-9276
<i>Everitt's Fruit Farm & Cider Mill</i>	Farmstand, apples, cider; Weekends October-May, Noon-Dark	Post Office Box 52, Lafayette, NJ 07848; (973)383-5463
<i>Fairview Farm, Hampton</i>	Fruitstand, Apples; October-December, 7 Days-a-week	91 Route 206 North, Newton, NJ 07860; (973)383-5832
<i>Flower Creek Farms, Hampton</i>	Assorted Vegetables, raspberries; Self-Serve Farmstand	39 Halsey Road, Newton, NJ 07860; (973)300-5589
<i>Fresh Farms</i>	May 1-Halloween, 7 Days-a-week 9:00AM-7:30PM	209 Newton-Sparta Road, Andover, NJ 07821; (973)579-3204
<i>Hillcrest Farm, Frankford</i>	PYO Apples, Dairy; Call for Information	PO Box 1245, Denville, NJ 07834; (973)703-5148
<i>Hillcrest Orchard, Frankford</i>	PYO Apples; Weekends in Spetember and October 9A.M.-6P.M.	160 Casterline Road, Denville, NJ 07834; (973)366-0440
<i>Lentini Produce, Newton</i>	Honey, Jersey Fresh Tomato's, specialty foods & pies,10 acre Corn Maze (Rt. 94 Newton); Farmstand:(Rt. 206, Culver Lake and Corner of N. Park Dr. & Rt 519 Newton) 7 days a week, 8AM-8PM; 10 Acre Corn Maze	143 Route 521, Newton, NJ 07860; (973)579-2424
<i>Libertyville Farm</i>	Farmstand, Tomato's, Sweet Corn; July-Labor Day 10:00AM-6:00PM (Closed Sunday)	35 Old Clove Road, Sussex, NJ 07461; (973)875-6122
<i>Luceys Berry Farm, Lafayette</i>	Jams & Jellies; July-September 7 days-a-week 11:00AM-7:00PM	41 Beaver Run Road, Lafayette, NJ 07848; (973)383-4309
<i>MV Farms</i>	PYO Red Raspberries, Call Ahead; June-October, Weekends, 9:00AM-5:00PM	418 Route 515, Vernon, NJ 07462; (973)764-6137
<i>Pequest Valley Farms, Green Twp.</i>	Raspberries & Asparagus; Call in Advance	239 Pequest Road, Andover, NJ 07821; (973)786-6953

<i>Plumbsock Farm</i>	Dairy Farm; 7 Days-a-week, 9:00AM-3:00PM, call in advance	425 Route 519, Wantage, NJ 07461; (973)875-5607
<i>Pochuck Valley Farm</i>	PYO Apples (seasonal), Wagon Tours of Orchard, Homemade Cider, Homemade Baked goods; 6:00AM-6:00PM Year Round	Post Office Box 2, Glenwood, NJ 07418; (973)764-4732
<i>Ritzer Farm, Vernon</i>	Farmstand, Saw Mill, Maple Syrup; Hours: 7 Days-a-week in season	245 Barret Road, Vernon, NJ 07462; (845)986-3974
<i>Roseline's Farm</i>	Asian vegetables, Herbs, Baked and Canned goods; July-October, Friday- Sunday	553 Route 565, Augusta, NJ 07822; (973)579-1238
<i>Sunny Ridge Farm</i>	All Natural Vegetables April-November, Farm Fresh Eggs Year Round	47 Hampton Heights Road, Lafayette, NJ 07848; (973)383-8707
<i>Sussex County Strawberry Farm, Andover</i>	PYO Strawberries (June Daily) PYO Raspberries - September; PYO Pumpkins - (October); Weekends 10:00AM-5:00PM, Call for Information	565 Route 206 North, Newton, NJ 07860; (973)579-5055
<i>The Farmers Wife & Windy Flat Dairy</i>	Homegrown produce & local picks, fresh flowers, fresh eggs year round, petting area, tours by appt., school & community groups welcome; Call for Information	383 County Route 519, Wantage, NJ 07461; (973)702-7614
<i>The Goodhand Farm</i>	Heirloom Tomatoes & garlic; Self Serve Market	110 Brighton Road, Andover, NJ 07821; (973)786-0135
<i>Tranquillity Farms, Green Twp.</i>	PYO Flowers, Fall Fest (weekends in October); Easter-Christmas, Daily 9:00AM-6:00PM	10 Tranquillity Farms Lane, Andover, NJ 07821; (908)813-0892
<i>Valley Brook Farm, Sandyston Twp.</i>	Self-serve Farmstand and Honey!; Open Daily July-October	42 Bevans Road, Layton, NJ 07851; (973)948-5781
<i>Valley View Farms, Newton</i>	PYO Strawberries & Raspberries, 100 Different Varieties of Vegetables! Located at 290 Rt. 206S, Newton; Easter-Christmas, 10:00AM-5:00PM	Post Office Box 60, Augusta, NJ 07822; (973)579-7271
<i>Windy Brow Farms, Fredon Twp.</i>	PYO Apples, school groups welcome; March-December, closed Tuesdays	359 Ridge Road, Newton, NJ 07860; (973)579-9657

Bedding Plants, Nursery, Fire Wood

<i>Farm</i>	<i>Description</i>	<i>Address</i>
<i>Augusta Hill Farm, Frankford</i>	Wholesale/retail, annuals, perennials, hanging baskets, herbs & veggies; Year Round, Monday-Saturday 8:00AM-5:00PM	47 Augusta Hill Road, Augusta, NJ 07822; (973)948-6012
<i>Cahill Farm, Green Twp.</i>	PYO Plum tomato's, pumpkins & misc veggies, landscaping services, hayrides on special request; Call for hours	311 Pequest Road, Andover, NJ 07821; (973)786-5429
<i>Cerbo's Hampton Nursery, Hampton Twp.</i>	Located at 86 Rt 519, Newton; Shade & Flowering Trees, Shrubs, Flowering Plants; Open April - December, Friday:8AM-5PM & Saturday: 8AM-1PM	440 Littleton Road, Parsippany, NJ 07054; (973)579-5518

<i>D'Angelo's Nursery, Andover Twp</i>	Open Year Round, April-September 8:00AM-6:00PM; September-April 9:00AM-5:00PM	240 Newton-Sparta Road, Newton, NJ 07860; (973)383-7070
<i>Fair Acres Farm</i>	Perennials & annuals, trees, shrubs, container gardening -- unique plant containers; April 1-Novemeber, Daily 9:00AM - 6:00PM (including holidays)	1343 Route 23, Wantage, NJ 07461; (973)875-6613
<i>Fredon Farm</i>	Hanging baskets, vegetable flats; Week before Thanksgiving-Christmas -- Poinsettias; April-June, 9:00AM-5:00PM	396 Route 94, Newton, NJ 07860; (973)579-5561
<i>Glenn Brook Nursery</i>	Perenials, ornamentals grasses, herbs & shrubs. Specializing in deer resistant plants.; 8-5 Mon – Fri and 8-6 Sat & Sun	83 Decker Rd, Lafayette, NJ 07848; (973)383-9908
<i>Hard Rock Nursery, Inc</i>	Perennials & Landscaping Services; 6 Days-a-week, 9:00AM-5:00PM	19 Birchtree Road, Montague, NJ 07827; (973)293-7951
<i>Hilltop Greenhouses, Hampton Twp.</i>	Spring bedding plants and Fall garden mums; April-May & August-September, Monday-Saturday, 8:00AM-4:00PM	156 Hampton House Road, Newton, NJ 07860; (973)383-8565
<i>Ideal Farm and Garden Center</i>	Seasonal Produce, Full Service Garden Center, Seasonal Activities, PYO Pumpkins; Winter Thursday-Sunday 9:00AM-4:00PM, Summer 7 Days-a-week 9:00AM-5:00PM	222 Route 15 North, Lafayette, NJ 07848; (973)579-3893
<i>Kuperus Farmside Gardens & Supplies, Sussex Borough</i>	Extensive Selection of Perenials, trees, shrubs; Open Year Round, Closed Sundays, Call for Hours	19 Loomis Avenue, Sussex, NJ 07461; (973)875-3160
<i>Pochuck Valley Farms of Augusta</i>	7 Days-a-week (In Season), 9:00AM-6:00PM	Route 206 South, Augusta, NJ 07822; (973)948-6511
<i>Windover Lake Farm</i>	Dried Flower Arrangements; Open Year Round Call for Hours	81 Gemmer Road, Wantage, NJ 07461; (973)875-3801

Dairy, Meats, Hay, Farm Animals, Eggs

Farm	Description	Address
<i>Bobolink Dairy</i>	100 % Grass Fed Raw Milk Cheeses, rustic wood fired breads, pasture raised meat when available. Check website for classes, e-mail for tours; Saturday-Sunday 9:00AM-5:00PM, Wednesday-Friday 12:00PM-6:00PM (check website)	42 Meadowburn Road, Vernon, NJ 07462; (973)764-4888
<i>Brickyard Farm, Andover</i>	Spring lamb, raw fleece & wool; Call for Appointment	50 Greendale Road, Newton, NJ 07860; (973)383-4028
<i>Brodhecker Farms, Hampton Twp.</i>	Beef and pork, freezer-ready; Livestock feeds, corn, straw, oats; 8:00AM-5:00PM Daily	2 Branchville Lawson Road, Newton, NJ 07860; (973)383-3592
<i>By-Acres</i>	Dairy Tours Available, Straw, Cornstalks, Fall Mums & Greenhouse; Call for Information and Appointment	601 County Route 519, Wantage, NJ 07461; (973)875-7445
<i>Cowling Farm</i>	Sheep Shearing Services, Breeding Stock - Polled Herefords	29 Judge Beach Road, Wantage, NJ 07461; (973)875-5804

<i>Dana Ray Farm</i>	Dairy Goats, Handmade Soap, Farmstand; 7 Days a week, call for hours or appt.	349 Mattison Reservoir Avenue, Branchville, NJ 07826; (973)948-0906
<i>Far View Farms, Frankford</i>	Beef Cows For Sale, Year Round -- Hay, May-October, Firewood	65 George Hill Road, Branchville, NJ 07826; (973)875-6615
<i>Farmside Supplies, Sussex Borough</i>	Horse & Livestock Feed and Supplies, Pet Store; Monday-Saturday, 8:00AM-6:00PM	15 Loomis Avenue, Sussex, NJ 07461; (973)875-3777
<i>Frog Pond Farm</i>	Farm Fresh Brown, White & Green Eggs, Old English Game Birds; Year Round, weekends 8:00AM-5:00PM	908 Owassa Road, Stillwater, NJ 07875; (973)579-7656
<i>Green Valley Farmstand & Livestock</i>	Local strawberries & blueberries, honey, jams & jellies, pies, mums, round hay bales; 9Am-6PM Monday-Saturday	997 Route 23 North, Wantage, NJ 07461; (973)875-5213
<i>HSP Farm</i>	Simmental cattle, natural beef for sale; Call for Hours	154 Meadows Road, Lafayette, NJ 07848; (973)875-3164
<i>Hubbard Hill Farm, Wantage</i>	Pig Roasts, homegrown hogs, pork for freezer, turkeys for Thanksgiving-- Just below High Point State Park	811 Greenville Road, Sussex, NJ 07461; (973)875-6206
<i>Little Farm</i>	Hay, straw; Seasonal -- Cornstalks; Open Year Round	56 Haggerty Road, Branchville, NJ 07826; (973)875-9691
<i>Miller Farm, Fredon</i>	Open Year Round -- Call for Appointment	46 Fairview Avenue, Newton, NJ 07860; (973)383-4260
<i>Needmore Farm</i>	Goat Dairy, Cheese, Milk, Fudge, Soap, Yogurt, Jams & Jellies; Open Year Round	24 Wantage School Road, Wantage, NJ 07461; (973)875--0565
<i>Oasis Alpacas</i>	Raw fleece, rovings for spinning and spun yarn from our animals for sale.; Visitors always welcome- please call ahead	530 Rt. 517, Sussex, NJ 07461; (973)827-7350
<i>Skyland Farm</i>	Llama sales and breeding services; Call for Appointment	299 Route 284, Wantage, NJ 07461; (973)875-2696
<i>Space Farms Zoo and Museum</i>	100 Acre Zoo, 500 Wild Animals, Americana Museum Complex, educational programs -- www.spacefarms.com or call for information; May-October, daily 9:00AM-5:00PM	218 Route 519, Wantage, NJ 07461; (973)875-5800
<i>Stonehedge Farm, Beemerville</i>	Draft Horses, Sleighrides; Call for Appointment	65 Fredonia Road, Newton, NJ 07860; (973)579-7429
<i>Stoney Croft Farm</i>	Farm store, cheese making facility (Colby & Cheddar cheeses available); Monday-Saturday 11:00AM-5:00PM (seasonal, call ahead)	163 Beaver Run Road, Lafayette, NJ 07848; (973)875-5611
<i>Swanbro Farm</i>	Raise Registered Holsteins, White Pine Shavings for Bedding; Year Round, 7 Days-a-week	46 Sunset Inn Road, Lafayette, NJ 07848; (973)383-4491
<i>Westby Farms, Andover</i>	Firewood, cords or small bundles; September-November -- Freezer Beef Available; Open Year Round, Call Ahead	Post Office Box 617, Gladstone, NJ 07934; (973)786-5794

<i>Wild West City, Byram</i>	Western Heritage Theme Park, Group Rates Available, call for information; May 1-Mid October, 10:30AM-6:00PM	50 Lackawanna Drive, Stanhope, NJ 07874; (973)347-8900
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Certified Organic, Specialty Foods

<i>Farm</i>	<i>Description</i>	<i>Address</i>
<i>Flatbrook Farm, Sandyston Twp.</i>	Bronze & Heritage Turkeys, Grass Fed Chicken's & Eggs, Naturally Grown Meats, Farm Products; Year Round, Call for appt.	2 DeGroat Road, Montague, NJ 07827; (973)948-2554
<i>Fountain House of New Jersey & High Point Farm</i>	Tours by Appointment, Alpacas; Email for Appointment	61 Old Mashipacong Road, Montague, NJ 07827; (973)293-3739
<i>Fox Hill Honey</i>	Honey, Beeswax Candles, Handcreme; Call for Information	23 Fox Hill Road, Lafayette, NJ 07848; (973)875-5770
<i>Klimek Family Farm, Stillwater</i>	Fresh Brown Organic Eggs; 7 days a week, year round	904 Owassa Road, Newton, NJ 07860; (973)383-4256
<i>Stephens Farm</i>	Wholesale Organic Food Buying Club, Country Crafts & Tours on Request; Wednesday - Sunday 1:00PM - 6:00PM (seasonal)	467 Route 284, Wantage, NJ 07461; (973)875-2849
<i>The Family Farm</i>	Herbs, Flowers, Vegetables, Baked Goods; May-October 9:00AM-6:00PM	136 Pelletown Road, Lafayette, NJ 07848; (973)875-1447
<i>The Honey Lady, Green</i>	Honey, Beeswax Ornaments, Beeswax Candles, Gifts; Year Round, 7 Days-a-week, Call for Appointment	21 Hunts School Road, Newton, NJ 07860; (973)579-5864
<i>Upper Meadows Farm</i>	Farm Market, All Products Certified Organic, Eco-Tours by appt.; Thursday 3:00AM-6:00PM, other hours by appt. only	16 Pollara Lane, Montague, NJ 07827; (973)293-8171
<i>Walnut Grove Farm</i>	Hours: November 25-December 11, Friday-Sunday 10:00AM-4:00PM for Christmas trees-- June-October, Friday-Sunday 10:00AM-6:00PM for Veggies	665 Augusta Hill Road, Augusta, NJ 07822; (973)383-5029
<i>Webb Farm, Hampton</i>	Honey, beeswax candles; Your Round, 7 Days-a-week, call for hours	920 Route 519, Sussex, NJ 07461; (973)875-3889
<i>Westfall Farm & Winery</i>	Wine School and Winery, Assorted Berries, Boarding, Breeding & Lessons; Tasting Room: Friday-Sunday 12PM-5PM; Winery Tours :Call for Appointment	141 Clove Road, Montague, NJ 07827; (973)293-3428

Pumpkins, Harvest, Halloween, Hayrides

<i>Farm</i>	<i>Description</i>	<i>Address</i>
<i>Heaven Hill Farm</i>	Seasonal Produce and Activities, Bakery, Honey, Jams & Jellies, Ice Cream, Haunted Halloween Hay Rides; Call for Hours	451 Route 94, Vernon, NJ 07462; (973)764-5144
<i>Kattermann Farms</i>	Full Season Garden Center; Year Round, 7 Days-a-week (In season)	212 Route 23 South, Wantage, NJ 07461; (973)875-8171

Christmas Trees		
Farm	Description	Address
<i>AM-JAC Tree Farm, Frankford</i>	Choose & Cut Norway and Blue Spruce, Douglas Fir; Weekends in December 8:00AM-4:00PM	26 Plains Road, Augusta, NJ 07822; (973)948-4222
<i>Bar-Ral Farm, Stillwater</i>	Christmas Trees; Year Round 9:00AM - 5:00PM, 7 days a week	936 Owassa Road, Newton, NJ 07860; (973)383-5232
<i>Cedar Hill Nursery, Andover</i>	40'-45' Norway Spruce; -- By Appointment Only --	Post Office Box 179, Newton, NJ 07860; (973)383-3260
<i>Country Heritage Farm, Frankford</i>	Honey, eggs, & pumpkins. Holiday Gift Shop!; November & December, Friday-Sunday, 9:00AM-4:30PM	129 Plains Road, Augusta, NJ 07822; (973)875-5590
<i>Giordano's Tree Farm, Fredon</i>	White, Blue, Norway Spruce, Douglas Fir -- All Sizes! Located on Rt. 94.; Weekends in December 8:00AM-4:30PM	Post Office Box 6813, Bridgewater, NJ 08807; (908)231-8847
<i>Holiday Tree Farm, Frankford</i>	Christmas Wreathes; Weekends 9:00AM-5:00PM Thanksgiving Weekend until trees run out	30 Deerfield Drive, Franklin, NJ 07416; (973)827-3844
<i>Myrtle Grove Tree Farm, Hampton Twp.</i>	CYO Blue Spruce, Douglas Fir, White Pine; Saturday & Sunday's in December 9:00AM-4:00PM	50 Route 521, Newton, NJ 07860; (973)383-2666
<i>Owassa Tree Farm, Frankford</i>	Colorado Blue Spruce, Douglas Fir, Conclover Fir; Thanksgiving-Christmas, open daily	144 W. Owassa Turnpike, Newton, NJ 07860; (973)948-4037
<i>Rocky Point Christmas Tree Farm, Frankford</i>	CYO Blue Spruce, Douglas Fir; Thanksgiving-December 18, Daily 10:00AM-4:00PM	260 Meyer Road, Branchville, NJ 07826; (973)875-5349
<i>Saint Paul's Abbey</i>	December 9:00AM-4:00PM, Cut Your Own Christmas Trees -- April-October, Monday-Friday 9:00AM-5:00PM, Live Evergreens - Dug on Order	Post Office Box 7, Newton, NJ 07860; (973)383-2470
<i>Shale Hills Farm</i>	Pines, Spruce, Firs, Refreshments; Weekends after Thanksgiving 10:00AM-Dark	98 Pond School Road, Wantage, NJ 07461; (973)875-4231
<i>Shuflat Farm</i>	Colorado Blue Spruce, Call for directions; Year Round, Monday-Friday 5:00AM-9:00PM, Saturday & Sunday 6:00AM-6:00PM	150 Brooks Flat Road, Ogdensburg, NJ 07439; (973)827-4260
<i>Spring Brook Farm/Wild Meadow Plantation, Hampton</i>	Blue spruce; Call During the Week	20 Kent Road, Newton, NJ 07860; (973)948-3823
<i>Stehli Trees</i>	Cut Your Own Trees!; Weekends in December 9:00AM-dusk	455 Route 515, Vernon, NJ 07462; (973)764-4789
<i>Stonerow Tree Farm, Frankford</i>	Blue Spruce, Douglas Fir, Holiday Gift Shop; December, Friday-Sunday 9:00AM-4:00PM	242 Wykerton Road, Branchville, NJ 07826; (973)875-6399
<i>Sunny Hill Farm</i>	Cut Your Own Trees!; December 1-Christmas (on weekends 10:00AM-4:00PM or by appointment)	719 Route 519, Wantage, NJ 07461; (973)875-5496
<i>Willow Brook Christmas Tree Farm, Frankford</i>	Choose N' Cut Douglas Fir; November-December, Weekends, 9:00AM-4:00PM (Weekdays by appointment)	138 Wykertown Road, Branchville, NJ 07826; (973)875-3304

<i>Wintergreen Farm</i>	Blue spruce, Norway spruce, Douglas-Fir, Fraser-Fir, and Cannan-Fir	Statesville Quarry Road, Lafayette, NJ 07848; (973)875-8387
Equine		
<i>Farm</i>	<i>Description</i>	<i>Address</i>
<i>5 \$ Ranch</i>	Breeding, training, showing; Hours: 7 days-a-week, 8:00AM-8:00PM	33 Pelletown Road, Lafayette, NJ 07848; (973)875-3888
<i>AJA Stables, Frankford</i>	Boarding, training, horseback lessons; 9:00AM-4:00PM	18 Linn Smith Road, Augusta, NJ 07822; (973)875-5655
<i>Blind Brook Farm, Andover Twp</i>	Horse boarding with trail rides, sheep & lambs, adjacent to "Wooden Duck" B&B and Kittatinny Valley State Park; Call Ahead	70 Goodale Road, Newton, NJ 07860; (973)383-4109
<i>Borderland Farms, Vernon</i>	Boarding, Training by Appointment, Riding Instruction, Riding Trails; Year Round, 7 Days-a-week 9:00AM-5:00PM	340 South Route 94, Warwick, NY 10990; (845)986-9433
<i>Carousel Farms</i>	Boarding, training, sales & lessons; Year Round, 7 Days-a-week 8:00AM-9:00PM	8 Linn Smith Road, Augusta, NJ 07822; (973)875-9898
<i>Fairview Hill Farm, Fredon</i>	Boarding, Outdoor Arena; Call in Advance	31 Fairview Hill Road, Newton, NJ 07860; (973)383-8336
<i>Heritage Acres Farm</i>	Horse shows, half-mile track and indoor ring, riding lessons, training, boarding; Year Round, 7 Days-a-week, 9:00AM-5:00PM	110 Pelleton Road, Lafayette, NJ 07848; (973)875-4206
<i>On Course Riding</i>	We specialize in boarding, training, sales and showing Hunter/Jumper. Open 7 days a week.	210 Beaver Run Rd, Lafayette, NJ 07848: 973-875-8780
<i>High Point Equestrian Center</i>	Full service equestrian center offering lessons and training in dressage, stadium jumping, and cross-country jumping. Horse shows on and off-site. Indoor riding arena for all year riding plus 80 acres of scenic trails.	20 Birchtree Road, Montague, NJ 07827; (973)293-0033
<i>Liberty Hill Farm</i>	Boarding, lessons (English), sales, horse shows; 7 Days a week- Call for appt.	31 Holland Road, Wantage, NJ 07461; (973)875-7504
<i>Mare's Nest Farm, Hampton Twp.</i>	Boarding, breeding, training; By Appointment	62 Price Road, Augusta, NJ 07822; (973)579-2413
<i>Postmont Farm</i>	Boarding; 7 Days-a-week	506 Route 519, Wantage, NJ 07461; (973)875-6871
<i>Scavone Farm</i>	Boarding, Meat Goats, NJ State Meat Goat Association member; Call for Hours	100 Silver Grove Road, Stockholm, NJ 07460; (973)827-2645
<i>Spring Valley Equestrian Center, Fredon</i>	Full boarding, breeding, riding lessons (english/western), trail rides, summer horse camp, Appaloosa stallions; 7 Days-a-week, 9:00AM-6:00PM	56 Paulinskill Lake Road, Newton, NJ 07860; (973)383-3766
<i>Squier Farm, Hampton</i>	Pasture horses, riding instructions (western and english), firewood, buys & sells Paint and Quater horses; 8:00AM-6:00PM	12 Dove Island Road, Newton, NJ 07860; (973)579-9293

<i>Stepping Stone Arabians</i>	Boarding, breeding and sales; 9:00AM-6:00PM, 7 days-a-week, Year Round	251 Beaver Run Road, Lafayette, NJ 07848; (973)875-4351
<i>Waterwheel Farm, Fredon</i>	Boarding, training (Handicap Olympics), Petting Zoo & Snowmobile Museum; Call in Advance	124 Fredon-Marksboro Road, Newton, NJ 07860; (973)383-3409
<i>Willo Haven Morgan Horse Farm</i>	Breeding (Registered Morgan Horses), Boarding; Call for Appointment	137 Beaver Run Road, Lafayette, NJ 07848; (973)875-8849
<i>Windsor Astoria Farm, Green Twp.</i>	Boarding, Lessons:western pleasure, dressage, eventing; Fresh eggs; Year Round, 7 Days-a-week -- Call for Information	45 Hamilton Road, Greendell, NJ 07839; (973)579-6676
<i>Yellow Barn Farm</i>	Boarding and Training	349 Rt. 565, Wantage, NJ 07461; (973)702-1836

FARMLAND PRESERVATION PROGRAM

RANKING CRITERIA

Applicant: _____
Block(s)/ Lot(s): _____
Municipality: _____

Density or Contiguous Properties (maximum of 10 points)

Add 2 points for the subject farm: _____
Add 2 points for each permanently farm indicated: _____
Add 1 point for each 8-Year farm indicated: _____
Sub Total for this Category: _____

Boundaries and Buffers (multiply percentage as indicated)

Deed Restricted Farmland (permanent) x .20: _____
Deed Restricted Wildlife Areas x .18: _____
Streams (perennial) and Wetlands x .18: _____
Cemeteries x .16: _____
Parks (limited public access) x .14: _____
Military Installations x .14: _____
Golf Course (public) x .14: _____
8 year programs/EP Applications x .13: _____
Highway (limited access) or Railroads x .10: _____
Farmland (unrestricted) x .06: _____
Woodlands x .06: _____
Parks (high use) x .05: _____
Residential Development x .00: N/A
Residential (< 5 acres w/o infrastructure) x .00: N/A
Commercial x .00: N/A
Industrial x .00: N/A
Schools x .00: N/A
Sub Total for this Category: _____

Tillable Acres (multiply percentage as indicated)

Cropland Harvested x .15: _____
Cropland Pastured x .15: _____
Permanent Pasture x .02: _____
Woodlands x .00: N/A
Wetlands x .00: N/A
Other x .00: N/A
Sub Total for this Category: _____

Soils (multiply percentage as indicated)

Prime x .15: _____
Statewide x .10: _____
Unique x .125: _____
Locals x .05: _____
Other x .00: N/A
Sub Total for this Category: _____

Imminence of Change or Conversion

If the premises is in an estate situation add 3 points: _____
If the owner has filed for bankruptcy add 4 points: _____
If subdivision approval has been granted add 2 points: _____
Sub Total for this Category: _____

Local Commitment (maximum of 20 points)

If any question 2a through 2e is "yes" add 5 points: _____

If there is **no** sewer/water indicated add 3 points: _____

If preservation is supported by State/local plans add 2 points: _____

If there is an active CADB liaison add 1 point: _____

If planning board actions support preservation add 1 point: _____

If municipal actions support preservation add 1 point: _____

If any 8-Year municipal programs exist add 1 point: _____

If any easements have been purchased in the town add 1 point: _____

If the town has a Right-to-Farm ordinance add 4 points: _____

If the RTF ordinance requires builder notification add 1 point: _____

Sub Total for this Category: _____

County Ranking

If the property is the County's top ranked farm add 10 points: _____

Sub Total for this Category: _____

General Applicant Information

Up to 10 points can be added to the ranking score depending on the net acres to be preserved in comparison to the average size of a farm in the county. The formula for determining point value for the Size Criterion is:

10 x net acres to be preserved

2 x average farm size in county

(73 acres - from the 2002 U.S. Census of Agriculture)

Points based on above formula: _____

Sub Total for this Category: _____

Exceptions

If exception sum is more than 10% of farm subtract 1 point: _____

If the exception is severable subtract 2 points: _____

If the landowner does not agree to restrict the exception to one house, subtract the number of units in excess of the local zoning requirements: _____

Sub Total for this Category: _____

Amount of all Sub Totals: _____

Final Ranking

Amount of farms submitted in round: _____

Ranking of property based on farms submitted in round: _____

STATE AGRICULTURE DEVELOPMENT COMMITTEE
MODEL RIGHT TO FARM ORDINANCE

A. As used in this ordinance, the following words shall have the following meanings:

“Commercial farm” means:

1. A farm management unit of no less than five acres producing agricultural or horticultural products worth \$2,500 or more annually, and satisfying the eligibility criteria for differential property taxation pursuant to the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq.; or
2. A farm management unit less than five acres, producing agricultural or horticultural products worth \$50,000 or more annually and otherwise satisfying the eligibility criteria for differential property taxation pursuant to the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq.

“Farm management unit” means a parcel or parcels of land, whether contiguous or noncontiguous, together with agricultural or horticultural buildings, structures and facilities, producing agricultural or horticultural products, and operated as a single enterprise.

“Farm market” means a facility used for the wholesale or retail marketing of the agricultural output of a commercial farm, and products that contribute to farm income, except that if a farm market is used for retail marketing at least 51 percent of the annual gross sales of the retail farm market shall be generated from sales of agricultural output of the commercial farm, or at least 51 percent of the sales area shall be devoted to the sale of the agricultural output of the commercial farm, and except that if a retail farm market is located on land less than five acres in area, the land on which the farm market is located shall produce annually agricultural or horticultural products worth at least \$2,500.

“Pick-your-own operation” means a direct marketing alternative wherein retail or wholesale customers are invited onto a commercial farm in order to harvest agricultural, floricultural or horticultural products.

B. The right to farm is hereby recognized to exist in this [Township, Borough, City] and is hereby declared a permitted use in all zones of this [Township, Borough, City]. This right to farm includes, but not by way of limitation:

- (1) Production of agricultural and horticultural crops, trees, apiary and forest products, livestock, poultry and other commodities as described in the Standard Industrial Classification for agriculture, forestry, fishing and trapping.
- (2) Housing and employment of necessary farm laborers.

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- (3) Erection of essential agricultural buildings, including those dedicated to the processing and packaging of the output of the commercial farm and ancillary to agricultural and horticultural production.
- (4) The grazing of animals and use of range for fowl.
- (5) Construction of fences.
- (6) The operation and transportation of large, slow-moving equipment over roads within the [Township, Borough, City].
- (7) Control of pests, including but not limited to insects and weeds, predators and diseases of plants and animals.
- (8) Conduction of agriculture-related educational and farm-based recreational activities provided that the activities are related to marketing the agricultural or horticultural output of the commercial farm and permission of the farm owner and lessee is obtained.
- (9) Use of any and all equipment, including but not limited to: irrigation pumps and equipment, aerial and ground seeding and spraying, tractors, harvest aides, and bird control devices.
- (10) Processing and packaging of the agricultural output of the commercial farm.
- (11) The operation of a farm market with attendant signage, including the construction of building and parking areas in conformance with [Township, Borough, City] standards.
- (12) The operation of a pick-your-own operation with attendant signage.
- (13) Replenishment of soil nutrients and improvement of soil tilth.
- (14) Clearing of woodlands using open burning and other techniques, installation and maintenance of vegetative and terrain alterations and other physical facilities for water and soil conservation and surface water control in wetland areas.
- (15) On-site disposal of organic agricultural wastes.
- (16) The application of manure and chemical fertilizers, insecticides and herbicides.
- (17) Installation of wells, ponds and other water resources for agricultural purposes such as irrigation, sanitation and marketing preparation.

Commercial farm operators may engage in any other agricultural activity as determined by the State Agriculture Development Committee and adopted by rule or regulation pursuant to the provisions of the “Administrative Procedure Act,” P.L. 1968, c.410 (C.52:14B-1 et seq.).

- C. Commercial farm operators are strongly advised to adhere to generally accepted agricultural management practices that have been:
- (a) promulgated as rules by the State Agriculture Development Committee;
 - (b) recommended as site-specific agricultural management practices by the county agriculture development board;

- (c) approved by the local soil conservation district in the form of a farm conservation plan that is prepared in conformance with the United States Department of Agriculture, Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG), revised April 20, 1998, as amended and supplemented; or
- (d) recommended by the Rutgers Agricultural Experiment Station.

- D. The foregoing activities must be in conformance with applicable Federal and State law.
- E. The foregoing practices and activities may occur on holidays, weekdays and weekends by day or night and shall include the attendant or incidental noise, odors, dust and fumes associated with these practices.
- F. It is hereby determined that whatever nuisance may be caused to others by these foregoing uses and activities is more than offset by the benefits of farming to the neighborhood community and society in general.
- G. Any person aggrieved by the operation of a commercial farm shall file a complaint with the applicable county agriculture development board, or the State Agriculture Development Committee in counties where no county board exists, prior to filing an action in court.
- H. To help parties resolve conflicts involving the operation of commercial farms, the State Agriculture Development Committee has also established an Agricultural Mediation Program. Mediation is a voluntary process in which a trained, impartial mediator helps disputing parties examine their mutual problems, identify and consider options, and determine if they can agree on a solution. A mediator has no decision-making authority. Successful mediation is based on the voluntary cooperation and participation of all the parties.
- I. An additional purpose of this ordinance is to promote a good neighbor policy by advising purchasers and users of property adjacent to or near commercial farms of accepted activities or practices associated with those neighboring farms. It is intended that, through mandatory disclosures, purchasers and users will better understand the impacts of living near agricultural operations and be prepared to accept attendant conditions as the natural result of living in or near land actively devoted to commercial agriculture or in an Agricultural Development Area, meaning an area identified by a county agriculture development board pursuant to the provisions of N.J.S.A.4:1C-18 and certified by the State Agriculture Development Committee.

The disclosure required by this section is set forth herein, and shall be made a part of, the following disclosure form:

REAL ESTATE TRANSFER DISCLOSURE STATEMENT

This disclosure statement concerns the real property situated in the [Township, Borough, City] of [] described as Block _____, Lot _____. This statement is a disclosure of the conditions of the above described property in compliance with Ordinance No. _____ of the [Township, Borough, City] of []. It is not a warranty of any kind by the seller(s) or any agent(s) representing any principal(s) in this transaction, and is not a substitute for any inspections or warranties the principal(s) may wish to obtain.

I.

Seller's Information

The seller discloses the following information with the knowledge that even though this is not a warranty, prospective buyers may rely on this information in deciding whether and on what terms to purchase the subject property. Seller hereby authorizes any agent(s) representing any principal(s) in this transaction to provide a copy of this statement to any person or entity in connection with any actual or anticipated sale of the property. The following are representations made by the seller(s) as required by the [Township, Borough, City] of [] and are not the representation of the agents, if any. This information is a disclosure and is not intended to be part of any contract between the buyer and seller.

The [Township, Borough, City] of [] permits the operation of generally accepted

agricultural management practices within the municipality. If the property you are purchasing is located near land actively devoted to commercial agriculture or in an Agricultural Development Area, meaning an area identified by a county agriculture development board pursuant to the provisions of N.J.S.A.4:1C-18 and certified by the State Agriculture Development Committee, you may be affected by these agricultural activities or practices. The effect of these activities or practices may include, but are not limited to: noise, odors, fumes, dust, smoke, insects, operation of machinery (including aircraft) during any 24 hour period, storage and disposal of manure and compost, and the application by spraying or otherwise of fertilizers, soil amendments, herbicides and pesticides. One or more of the effects described may occur as the result of any agricultural operation which is in conformance with existing Federal and State laws and regulations and accepted customs and standards. If you live near an agricultural area, you should strive to be sensitive to the needs of commercial farm operators, as their presence is a necessary aspect of an area with a strong rural character and a strong agricultural sector. The State Agriculture Development Committee has established a formal complaint process as well as an informal Agricultural Mediation Program to assist in the resolution of any disputes which might arise between residents of the [Township, Borough, City] of [] regarding the operations of commercial farms.

Seller certifies that the information herein is true and correct to the best of seller=s knowledge as of the date signed by the seller.

Seller _____ Date _____

Seller _____ Date _____

II.

Buyer(s) and seller(s) may wish to obtain professional advice and/or inspections of the property and to provide for appropriate provisions in a contract between buyer and seller(s) with respect to any advice/inspections/defects.

I/We acknowledge receipt of a copy of this statement.

Seller _____ Date _____ Buyer _____ Date _____

Seller _____ Date _____ Buyer _____ Date _____

Agent representing seller _____ By _____ Date _____

E3-E

DEED OF EASEMENT

STATE OF NEW JERSEY AGRICULTURE RETENTION AND DEVELOPMENT PROGRAM

This Deed is made _____, 20 _____.

BETWEEN _____, whose address is _____ and is referred to as the Grantor;

AND _____, whose address is _____ and is referred to as the Grantee and/or Board.

The Grantor, Grantor's heirs, executors, administrators, personal or legal representatives, successors and assigns grants and conveys to the Grantee a development easement and all of the nonagricultural development rights and credits on the Premises, located in the Township of _____, County of _____, described in the attached Schedule A, and, for the limited purpose of the restrictions contained in Paragraph 13(b), the tract of land described in the attached Schedule C, which schedules are incorporated by reference in this Deed of Easement, for and in consideration of the sum of _____ Dollars.

Any reference in this Deed of Easement to "Premises" refers to the property described in Schedule A, and, for the limited purpose of the restrictions contained in Paragraph 13(b), to the tract of land described in Schedule C.

The tax map reference for the Premises is:

Township of _____
Block _____, Lot _____

WHEREAS, the legislature of the State of New Jersey has declared that the development of agriculture and the retention of farmlands are important to the present and future economy of the State and the welfare of the citizens of the State; and

WHEREAS, the Grantor is the sole and exclusive owner of the Premises; and

WHEREAS, the Grantee believes that the retention and preservation of agricultural lands is beneficial to the public health, safety and welfare of the citizens of _____ County;

NOW THEREFORE, THE GRANTOR, GRANTOR'S HEIRS, EXECUTORS, ADMINISTRATORS, PERSONAL OR LEGAL REPRESENTATIVES, SUCCESSORS AND ASSIGNS PROMISES that the Premises will be owned, used and conveyed subject to, and not in violation of the following restrictions:

1. Any development of the Premises for nonagricultural purposes is expressly prohibited.
2. The Premises shall be retained for agricultural use and production in compliance with N.J.S.A. 4:1C-11 et seq., P.L. 1983, c.32, and all other rules promulgated by the State Agriculture Development Committee, (hereinafter Committee). Agricultural use shall mean the use of the Premises for common farmsite activities including, but not limited to: production, harvesting, storage, grading, packaging, processing and the wholesale and retail marketing of crops, plants, animals and other related commodities and 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 and grazing.
3. Grantor certifies that at the time of the application to sell the development easement to the Grantee and at the time of the execution of this Deed of Easement the nonagricultural uses indicated on attached Schedule (B) existed on the Premises. All other nonagricultural uses are prohibited except as expressly provided in this Deed of Easement.

Prepared by: _____

4. All nonagricultural uses, if any, existing on the Premises at the time of the landowner's application to the Grantee as set forth in Section 3 above may be continued and any structure may be restored or repaired in the event of partial destruction thereof, subject to the following:

- i. No new structures or the expansion of pre-existing structures for nonagricultural use are permitted;
- ii. No change in the pre-existing nonagricultural use is permitted;
- iii. No expansion of the pre-existing nonagricultural use is permitted; and
- iv. In the event that the Grantor abandons the pre-existing nonagricultural use, the right of the Grantor to continue the use is extinguished.

5. No sand, gravel, loam, rock, or other minerals shall be deposited on or removed from the Premises excepting only those materials required for the agricultural purpose for which the land is being used.

6. No dumping or placing of trash or waste material shall be permitted on the Premises unless expressly recommended by the Committee as an agricultural management practice.

7. No activity shall be permitted on the Premises which would be detrimental to drainage, flood control, water conservation, erosion control, or soil conservation, nor shall any other activity be permitted which would be detrimental to the continued agricultural use of the Premises.

- i. Grantor shall obtain within one year of the date of this Deed of Easement, a farm conservation plan approved by the local soil conservation district.
- ii. Grantor's long term objectives shall conform with the provisions of the farm conservation plan.

8. Grantee and Committee and their agents shall be permitted access to, and to enter upon, the Premises at all reasonable times, but solely for the purpose of inspection in order to enforce and assure compliance with the terms and conditions of this Deed of Easement. Grantee agrees to give Grantor, at least 24 hours advance notice of its intention to enter the Premises, and further, to limit such times of entry to the daylight hours on regular business days of the week.

9. Grantor may use the Premises to derive income from certain recreational activities such as hunting, fishing, cross country skiing and ecological tours, only if such activities do not interfere with the actual use of the land for agricultural production and that the activities only utilize the Premises in its existing condition. Other recreational activities from which income is derived and which alter the Premises, such as golf courses and athletic fields, are prohibited.

10. Nothing shall be construed to convey a right to the public of access to or use of the Premises except as stated in this Deed of Easement or as otherwise provided by law.

11. Nothing shall impose upon the Grantor any duty to maintain the Premises in any particular state, or condition, except as provided for in this Deed of Easement.

12. Nothing in this Deed of Easement shall be deemed to restrict the right of Grantor, to maintain all roads and trails existing upon the Premises as of the date of this Deed of Easement. Grantor shall be permitted to construct, improve or reconstruct any roadway necessary to service crops, bogs, agricultural buildings, or reservoirs as may be necessary.

13(a). At the time of this conveyance, Grantor has existing single family residential buildings on the Premises and residential buildings used for agricultural labor purposes. Grantor may use, maintain, and improve existing buildings on the Premises subject to the following conditions:

- i. Improvements to agricultural buildings shall be consistent with agricultural uses;
- ii. Improvements to residential buildings shall be consistent with agricultural or single and extended family residential uses. Improvements to residential buildings for the purpose of housing agricultural labor are permitted only if the housed agricultural labor is employed on the Premises; and
- iii. Improvements to recreational buildings shall be consistent with agricultural or recreational uses.

13(b). Grantor, their heirs, executors, administrators, personal or legal representatives, successors and assigns may use and maintain the Exception Area, as described in the attached Schedule C, conditions:

sample conditions:

- a. the Exception Area shall not be severed or subdivided from the Premises
- b. the Exception area may be severed and subdivided from the Premises
- c. the Exception Area shall be limited to one residential unit
- d. (Right to Farm Language if Exception is Non-Severable)

Grantors, grantor's heirs, executors, administrators, personal or legal representatives, successors and assigns or any person who is occupying or residing on the Exception Area as well as the heirs, executors, administrators, personal or legal representatives, successors and assigns of all such persons are hereby notified and made aware that the Exception Area is adjacent to a parcel ("Premises") permanently deed restricted under the Agriculture Retention and Development Act, N.J.S.A. 4:1C-11 et seq. Such persons occupying or residing on the Exception Area are notified and made aware that agriculture is the accepted and preferred use of the adjacent Premises and that the adjacent Premises shall continue in agricultural use as defined in Section 2 of the Deed of Easement.

- e. (Right to Farm Language if Exception is Severable)

Grantors, grantor's heirs, executors, administrators, personal or legal representatives, successors and assigns or any person to whom title to the Exception Area is transferred as well as the heirs, executors, administrators, personal or legal representatives, successors and assigns of all such persons are hereby notified and made aware that the Exception Area is adjacent to a parcel ("Premises") permanently deed restricted under the Agriculture Retention and Development Act, N.J.S.A. 4:1C-11 et seq. Such persons taking title to the Exception Area are notified and made aware that agriculture is the accepted and preferred use of the adjacent Premises and that the adjacent Premises shall continue in agricultural use as defined in Section 2 of the Deed of Easement.

14. Grantor may construct any new buildings for agricultural purposes. The construction of any new buildings for residential use, regardless of its purpose, shall be prohibited except as follows:

- i. To provide structures for housing of agricultural labor employed on the Premises but only with the approval of the Grantee and the Committee. If Grantee and the Committee grant approval for the construction of agricultural labor housing, such housing shall not be used as a residence for Grantor, Grantor's spouse, Grantor's parents, Grantor's lineal descendants, adopted or natural, Grantor's spouse's parents, Grantor's spouse's lineal descendants, adopted or natural; and
- ii. To construct a single family residential building anywhere on the Premises in order to replace any single family residential building in existence at the time of conveyance of this Deed of Easement but only with the approval of the Grantee and Committee.
- iii. _____ residual dwelling site opportunity(ies) have been allocated to the Premises pursuant to the provisions of N.J.A.C. 2:76-6.17, "Residual Dwelling Site Opportunity". The Grantor's request to exercise a residual dwelling site opportunity shall comply with the rules promulgated by the Committee in effect at the time the request is initiated.

In the event a division of the Premises occurs in compliance with deed restriction No. 15 below, the Grantor shall prepare or cause to be prepared a Corrective Deed of Easement reflecting the reallocation of the residual dwelling site opportunities to the respective divided lots. The Corrective Deed shall be recorded with the County Clerk. A copy of the recorded Corrective Deed shall be provided to the Grantee and Committee.

In the event a residual dwelling site opportunity has been approved by the Grantee, the Grantor shall prepare or cause to be prepared a Corrective Deed of Easement at the time of Grantee's approval. The Corrective Deed of Easement shall reflect the reduction of residual dwelling site opportunities allocated to the Premises. The Corrective Deed shall be recorded with the

County Clerk. A copy of the recorded Corrective Deed shall be provided to the Grantee and Committee.

(OR)

- iii. No residual dwelling site opportunities have been allocated pursuant to the provisions of N.J.A.C. 2:76-6.17. No residential buildings are permitted on the Premises except as provided in this Deed of Easement.

For the purpose of this Deed of Easement:

"Residual dwelling site opportunity" means the potential to construct a residential unit and other appurtenant structures on the Premises in accordance with N.J.A.C. 2:76-6.17.

"Residual dwelling site" means the location of the residential unit and other appurtenant structures.

"Residential unit" means the residential building to be used for single family residential housing and its appurtenant uses. The construction and use of the residential unit shall be for agricultural purposes.

"Use for agricultural purposes" as related to the exercise of a residual dwelling site opportunity and the continued use of the residential unit constructed thereto, means at least one person residing in the residential unit shall be regularly engaged in common farmsite activities on the Premises including, but not limited to: production, harvesting, storage, grading, packaging, processing and the wholesale and retail marketing of crops, plants, animals and other related commodities and 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, water management and grazing.

15. The land and its buildings which are affected may be sold collectively or individually for continued agricultural use as defined in Section 2 of this Deed of Easement. However, no division of the land shall be permitted without the joint approval in writing of the Grantee and the Committee. In order for the Grantor to receive approval, the Grantee and Committee must find that the division shall be for an agricultural purpose and result in agriculturally viable parcels. Division means any division of the Premises, for any purpose, subsequent to the effective date of this Deed of Easement.

- i. For purposes of this Deed of Easement, "Agriculturally viable parcel" means that each parcel is capable of sustaining a variety of agricultural operations that yield a reasonable economic return under normal conditions, solely from each parcel's agricultural output.

16. In the event of any violation of the terms and conditions of this Deed of Easement, Grantee or the Committee may institute, in the name of the State of New Jersey, any proceedings to enforce these terms and conditions including the institution of suit to enjoin such violations and to require restoration of the Premises to its prior condition. Grantee or the Committee do not waive or forfeit the right to take any other legal action necessary to insure compliance with the terms, conditions, and purpose of this Deed of Easement by a prior failure to act.

17. This Deed of Easement imposes no obligation or restriction on the Grantor's use of the Premises except as specifically set forth in this Deed of Easement.

18. This Deed of Easement is binding upon the Grantor, the Grantor's heirs, executors, administrators, personal or legal representatives, successors and assigns and the Grantee; it shall be construed as a restriction running with the land and shall be binding upon any person to whom title to the Premises is transferred as well as upon the heirs, executors, administrators, personal or legal representatives, successors, and assigns of all such persons.

19. Throughout this Deed of Easement, the singular shall include the plural, and the masculine shall include the feminine, unless the text indicates otherwise.

20. The word 'Grantor' shall mean any and all persons who lawfully succeed to the rights and responsibilities of the Grantor, including but not limited to the Grantor's heirs, executors, administrators, personal or legal representatives, successors and assigns.

21. Wherever in this Deed of Easement any party shall be designated or referred to by name or general reference, such designation shall have the same effect as if the words, 'heirs, executors, administrators, personal or legal representatives, successors and assigns' have been inserted after each and every designation.

22. Grantor, Grantor's heirs, executors, administrators, personal or legal representatives, successors and assigns further transfers and conveys to Grantee all of the nonagricultural development rights and development credits appurtenant to the lands and Premises described herein. Nothing contained herein shall preclude the conveyance or retention of said rights by the Grantee as may be permitted by the laws of the State of New Jersey in the future. In the event that the law permits the conveyance of said development rights, Grantee agrees to reimburse the Committee (_____) percent of the value of the development rights as determined at the time of the subsequent conveyance.

23. That portion of the net proceeds, representing the value of the land only (and not the value of the improvements), of a condemnation award or other disposition of the Premises following termination of this Deed of Easement, as permitted pursuant to N.J.S.A. 4:1C-11 et seq., P.L. 1983, c.32, shall be distributed among the Grantor and the Grantee in shares in proportion to the fair market value of their interests in the Premises on the date of execution of this Deed of Easement. For this purpose, the Grantee's allocable share of the proceeds shall be the net proceeds multiplied by a fraction, the numerator of which is the fair market value of the development easement as certified by the Committee at the time of the initial acquisition and the denominator of which is the full fair market value of the unrestricted Premises as certified by the Committee at the time of the initial acquisition, which is identified as (____ / ____).

Furthermore, the Grantee's proceeds shall be distributed among the Grantee and the Committee in shares in proportion to their respective cost share grants on the date of execution of this Deed of Easement. The Grantee shall use its share of the proceeds in a manner consistent with the provisions of N.J.S.A. 4:1C-11 et seq., P.L. 1983, c.32.

24. No historic building or structure located on the Premises may be demolished by the grantor or any other person without the prior approval of the State Agriculture Development Committee. Historic building or structure is a building or structure that, as of the date of this Deed of Easement, has been included in the New Jersey Register of Historic Places established pursuant to N.J.S.A. 13:1B-15.128 et seq.

The Grantor signs this Deed of Easement as of the date of the top of the first page. If the Grantor is a corporation, this Deed of Easement is signed and attested to by its proper corporate officers, and its corporate seal, if any, is affixed.

_____(L.S.)

_____(L.S.)

_____(Corporate Seal)

Secretary
(For use by corporations only)

(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF NEW JERSEY, COUNTY OF _____ SS.:

I CERTIFY that on _____, 20 _____,

_____ personally came before me and acknowledged under oath, to my satisfaction, this that person (or if more than one, each person):

- (a) is named in and personally signed this DEED OF EASEMENT;
- (b) signed, sealed and delivered this DEED OF EASEMENT as his or her act and deed;
- (c) made this DEED OF EASEMENT for and in consideration of mutual obligations and benefits to each party; and
- (d) the actual and true consideration paid for this instrument is \$_____.

Print name and title below signature

(CORPORATE ACKNOWLEDGMENT)

STATE OF NEW JERSEY, COUNTY OF _____ SS.:

I CERTIFY that on _____ 20 _____, the subscriber

_____, personally appeared before me, who, being by me duly sworn on his or her oath, deposes and makes proof to my satisfaction, that he or she is the Secretary of _____, the Corporation named in the within Instrument; that _____ is the President of said Corporation; that the execution, as well as the making of this Instrument, has been duly authorized by a proper resolution of the Board of Directors of the said Corporation, that deponent well knows the corporate seal of said Corporation; and that the seal affixed to said Instrument is the proper corporate seal and was thereto affixed and said Instrument signed and delivered by said President as and for the voluntary act and deed of said Corporation, in presence of deponent, who thereupon subscribed his or her name thereto as attesting witness; and that the full and actual consideration paid to purchase a development easement as evidenced by the DEED OF EASEMENT is \$ _____ and the mutual obligations and benefits contained herein.

Sworn to and subscribed before me, the date aforesaid

Print name and title below signature

(COUNTY AGRICULTURE DEVELOPMENT BOARD)

THE UNDERSIGNED, being Chairperson of the _____ County Agriculture Development Board, hereby accepts and approves the foregoing restrictions, benefits and covenants.

ACCEPTED AND APPROVED this _____ day of _____, 20 ____.

Chairperson
_____ County Agriculture Development Board

STATE OF NEW JERSEY, COUNTY OF _____ SS.:

I CERTIFY that on _____, 20 _____,

_____ personally came before me and acknowledged under oath, to my satisfaction that this person: (a) is named in and personally signed this DEED OF EASEMENT, (b) signed, sealed and delivered this DEED OF EASEMENT as the Board's act and deed; and (c) is the Chairperson of the _____ County Agriculture Development Board.

Print name and title below signature

(STATE AGRICULTURE DEVELOPMENT COMMITTEE)

The State Agriculture Development Committee has approved the purchase of the development easement on the Premises pursuant to the Agriculture Retention and Development Act, N.J.S.A. 4:1C-11 et seq., P.L. 1983, c.32, and has authorized a grant of _____% of the purchase price of the development easement to _____ County in the amount of \$ _____.

Gregory Romano, Executive Director
State Agriculture Development Committee
Date _____

STATE OF NEW JERSEY, COUNTY OF _____ SS.:

I CERTIFY that on _____, 20 _____,

_____ personally came before me and acknowledged under oath, to my satisfaction, that this person:

- (a) is named in and personally signed this DEED OF EASEMENT,
- (b) signed, sealed and delivered this DEED OF EASEMENT as the Committee's act and deed, and
- (c) is the Executive Director of the State Agriculture Development Committee.

Print name and title below signature