

Township of Hillsborough

# COMPREHENSIVE FARMLAND PRESERVATION PLAN

2009



*Prepared by*

*For*

**D&R GREENWAY**  
LAND TRUST



**Hillsborough Township  
Somerset County, NJ**

COMPREHENSIVE  
FARMLAND  
PRESERVATION PLAN  
2009

for

Township of Hillsborough

County of Somerset

# COMPREHENSIVE FARMLAND PRESERVATION PLAN 2009

## Township of Hillsborough County of Somerset

*Produced by:*

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## EXECUTIVE SUMMARY

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Agriculture continues to be a vital, active and viable industry in Hillsborough Township. Farmland defines the rural history and character of the community. Farming is deeply integrated of the rural history and scenic landscape of Hillsborough Township and greatly valued by its residents. The agricultural land in Hillsborough Township borders the scenic Sourland Mountains in the Amwell Valley and creates a rural buffer for the watersheds of the Raritan, Neshanic, and Millstone Rivers. Despite the rapid increase in development and loss of the agricultural land base in the region, Hillsborough Township has been a leader in planning and implementation of strategies to retain agricultural land base and support the existing farmers in the township. The township's farmers have proven to be innovative in adapting to the changing land use but their future depends on all levels of government working together to preserve both the land base as well as the existing local farmers and the business of agriculture in the region.

Hillsborough Township is the premiere agricultural community in Somerset County. At 54.7 square miles, or 35,008 acres, Hillsborough Township is the largest municipality in Somerset County. According to the 2004 Farmland Assessment report, the township had the highest number of farmland assessed acreage in the county, 12,226 acres, representing 28.4% of the County's 43,040 acres of farmland assessed property. In addition, 7,930 of the township's total farmland assessed acres were devoted to active agricultural use, representing 30% of all active agricultural land (26,421 acres) in Somerset County. There is still considerable agricultural infrastructure and an active and vital agricultural community in the township and the Amwell Valley region. Hillsborough Township still retains large contiguous productive farmland areas with 12,226 acres of important farmland soils currently under farmland assessment. Since the inception of the Farmland Preservation Program, Hillsborough Township has preserved over 2,411 acres of farmland, nearly double the acreage preserved individually by Montgomery and Bedminster Townships the second and third ranking township in Somerset County with respect to preserved farmland.

A shrinking land base and changing market conditions have had dramatic effects on Hillsborough Township's and Somerset County's agricultural industry. Rising land prices have persuaded many farmers to produce more input-intensive goods, such as nursery and pick-your-own products, which yield higher cash flows and require less land. Consequently, these products now account for the majority of agricultural sales in Somerset County. Also, the average farm size has decreased while the per-acre cost of agricultural production has increased. These trends highlight the difficulties faced by

producers of Somerset County's traditional goods – dairy and livestock – whose land-intensive operations have encountered rising costs, stiffening competition from other land uses, and falling dairy prices. The combination of these factors has made the practice of traditional agriculture in Somerset County more difficult and has quickened the pace of development on farmlands throughout the County.

Land use planning efforts at the state, county, and local levels have aimed to sustain Somerset County's agricultural lands and industries. The *State Development and Redevelopment Plan* designates 71,658 acres (37%) of Somerset County as Rural or Environmentally-sensitive lands, and encourages the clustering of development within defined "centers" in order to preserve rural environs in these areas. The *Highlands Regional Master Plan* affirms Somerset County's agricultural importance by placing large portions of it within Agricultural Priority Areas. Somerset County's planning efforts support agriculture as well. The *2001 Somerset County Agriculture Retention and Development Master Plan* includes a comprehensive analysis of the County's agricultural resources and provides substantive recommendations for ensuring the County's agricultural viability. Somerset County's upcoming Smart Growth Strategic Plan supports the "centers" concept as a mechanism to maintain its agricultural and natural lands. At the municipal level, many Somerset County towns have implemented cluster ordinances and designated special resource zones in which rural and natural conservation objectives are paramount.

#### ***Somerset County and Hillsborough Township and Farmland Preservation Goals***

Since its inception in 1983, the Somerset CADB has helped preserve 6,710 acres, with an additional 808 acres pending applications. The 2002 Census of Agriculture identified 36,237 acres in Somerset County as land in farms. Thus, 29,527 acres of farmland remain unprotected in Somerset County. Based upon availability of existing funding, utilization of an array of preservation tools and funding sources, Somerset County would be able to preserve an additional 10,000 acres over the next ten years:

Existing preserved acreage:	6,710 acres
One year acreage target:	1,000 acres
Five year acreage target:	5,000 acres
Ten year acreage target:	10,000 acres

Since the inception of the Farmland Preservation Program, Hillsborough Township has preserved 2,367 acres. A realistic goal would be to preserve an additional 1,000 acres in the next 10 years. Preserving the entire acreage of targeted

Existing preserved acreage:	2,367 acres
One year target:	100 acres
Five year target:	500 acres
Ten year target:	1,000 acres

### ***Somerset County Farmland Preservation Project Areas***

This Comprehensive Farmland Preservation Plan Update also identifies thirteen project areas in which future farmland preservation efforts will be concentrated:

- Millstone Valley East
- Millstone Valley West
- Northern Bernards
- Eastern Montgomery
- Pike Run
- Bedens Brook
- Bedens Brook East
- Neshanic Valley North
- Neshanic Valley South
- Upper Raritan East
- Upper Raritan West
- Warren
- Bernards Dead River

### ***Hillsborough Township Farmland Preservation Project Areas***

Farmland in Hillsborough Township falls into portions of the Somerset County's Neshanic Valley and Millstone Valley ADA's. Hillsborough Township has three approved PIG project areas; the Amwell Valley Project Area consisting of 2,269 acres, the Mill Land Project Area consisting of 782.1 acres and the South project area consisting of 703.29 acres. This current draft plan has updated the three PIG Project application to comply with new SADC rules and guidelines regarding County and Municipal Minimum Eligibility Criteria.

#### ***Amwell Valley PIG Project Area***

The Amwell Valley PIG Project Area consists of 2269.08 acres and is located in the western portion of Hillsborough Township. Within this project area there are 56 total farms, 8 preserved farms totaling 646.33 acres and 23 targeted farms totaling 1024.48 acres. The Amwell Valley project is the largest PIG project in Hillsborough Township. In this project area there are 764.34 acres and 16 farms which meet both the Minimum Eligibility Criteria for soils and tillable land.

#### ***Mill Lane PIG Project Area***

The Mill Lane PIG Project Area consists of 782.1 acres and is located in the north-central portion of Hillsborough Township. Within this project area there are 16 total farms, 4 preserved farms totaling 348.0 acres and 6 targeted farms totaling 339 acres. In this project area there are 284.47 acres and 8 farms which meet both the Minimum Eligibility Criteria for soils and tillable land. The entire western end of the Mill Land PIG Project is preserved. All remaining target farms (Doyle, PID Associates and Dorell) are concentrated at the east end of the project area.

### *South PIG Project Area*

The South PIG Project Area consists of 808.93 acres and is located in the southeastern portion of Hillsborough Township. Within this project area there are 17 total farms, 7 preserved farms totaling 417.12 acres and 7 targeted farms totaling 262.2 acres. In this project area there are 467.67 acres and 8 farms which meet both the Minimum Eligibility Criteria for soils and tillable land.

To complete the entire acreage in its three approved PIG Project Areas, it is projected that Hillsborough Township will need to spend in excess of \$33 million. This total amount will exceed the total funding that the township can support from its required portion of the total cost share derived from projected tax revenue. Therefore creative use of all possible leveraging strategies to expand dedicated funding will be required to preserve the existing list of targeted farms.

### *Economic and Development and Conservation Strategies*

Somerset County and Hillsborough Township are committed to sustaining its farmers as well as preserving its farmland. The county endorses the following economic development and conservation strategies aimed at maintaining local agricultural productivity:

- Institutional support – provide local farmers access to educational programs and offer public advertisements of farm stands, markets, fairs, and other agricultural campaigns. Also, facilitate inter-agency coordination between State, County and municipal agencies on agricultural initiatives.
- Branding – offer local farmers information about Jersey Fresh, Jersey Grown, and other branding efforts that try to increase consumption of local farm products.
- Public outreach – educate County residents about local farming, and work with municipalities in order to minimize right-to-farm conflicts.
- Regulatory flexibility – allow farm operations the opportunity to explore potentially lucrative projects while enforcing prohibitive legal mandates on a cost-benefit basis.
- Business partnerships – encourage cooperation between local businesses and farmers in order to make their products available to local consumers. Provide farmers with representation in the County's economic development bodies. Ensure that farmers can obtain health and other forms of insurance.
- Innovative practices – provide information about non-traditional agriculture such as community support agriculture (CSA's), farming coops, incubator farms, and niche markets (organics, wine).
- Conservation - Ensure that farmers have knowledge of and access to federal conservation programs such as WHIP, CREP, and EQIP. Provide assistance to farmers in the development of safe and humane wildlife management strategies.

### *Conclusion*

Agriculture in Hillsborough Township is facing extreme pressures from economics, land development, and erosion of agricultural land base. However, the strong identity of the

community with agriculture and repeated demonstrations of proactive planning and support for farmland preservation as well as the capabilities of local farmers to evolve with changes in the region creates strong potential for a viable agricultural industry in Hillsborough Township in the future.



## CHAPTER 1:

# AGRICULTURAL LAND BASE OF HILLSBOROUGH TOWNSHIP

At 54.7 square miles, Hillsborough Township is the largest municipality in Somerset County. According to the 2004 Farmland Assessment Report the township had the highest number of farmland assessed acreage in the county, with 12,226 acres representing 28.4% of the county's 43,040 acres of farmland assessed property. (see *Farmland Assessed Properties Map*) In addition, 7,930 of the township's total farmland assessed acres were devoted to active agricultural use, representing 30% of all active agricultural land in the county (26,421 acres). Hillsborough also ranked 14<sup>th</sup> in the state on the 2003/2004 Farmland Assessment tabulation of the 50 municipalities with the highest concentrations of agricultural land. (*Farmland Assessment Data*)<sup>1</sup>

## A. Agricultural Land Base

The diverse natural features of Somerset County are conducive to supporting a wide variety of agricultural activities, and the land in Hillsborough is no exception. The township lies within the Piedmont physiographic province, where low rolling hills and broad valleys occupy most of the landscape. In the southwestern section of the township, the Sourland Mountains rise above the weathered, low-lying hills and floodplains that surround them. The Sourland Mountains are composed of igneous rock that has resisted the weathering forces of wind and precipitation while neighboring types of bedrock have eroded to lower elevations over time. (see *Hillsborough Sourland Region Map*)

The breakdown of land use in Hillsborough shows agricultural land covers nearly a quarter of the Township (see *Land Use Land Cover Map*). As the table shows, agriculture plays a much more dominant role in the town (24%) than in the county as a whole (16%).

<b>Land Use (acres) (Source: NJDEP 2002 Land Use/Land Cover)</b>				
	Hillsborough Twp.	% of Total	Somerset County	% of Total
Agricultural Land	8,284	23.52%	30,383	15.57%
Barren	550	1.56%	3,171	1.63%
Forested	9,155	26.00%	50,377	25.82%
Urban	11,357	32.25%	82,569	42.32%
Water	358	1.02%	2,336	1.20%
Wetlands	5,514	15.66%	26,292	13.47%
Total	35,218		195,128	

The highest concentrations of farmed land can be found in the northeastern and northwestern sections of the township, stretching south from the Raritan River, which forms the township's northern boundary. There are also smaller pockets of farmland in the southeast. Together these sections form the Agricultural District, as designated in the *2002 Master Plan Amendment for the Agricultural and Mountain Districts* and the current Hillsborough Development Regulations Ordinance. There are also some farmed lands in the southwestern section of the township, in an area designated by the *2002 Master Plan Amendment* as the Mountain Conservation District. The highest concentration of development in Hillsborough has occurred in the east-central section of the township, predominantly along the Route 206 corridor that runs north to south (see *Preserved Farms Map*). (*2002 Master Plan Amendment*)<sup>2</sup>

### ***Inventory of Farm Properties***

According to the Hillsborough Township tax tables, as of March 15, 2007 11,613 acres of the township qualify as property class 3B, farmland assessed, and an additional 309 acres are assessed as property class 3A, dwelling units associated with that farmland. The farmland assessed acres are spread over 342 separate parcels (see *Farmland Assessed Properties Map*). The majority of these parcels fall within the Agricultural and Mountain Conservation Districts established by the township in its *2002 Master Plan Amendment for the Mountain and Agricultural Districts*. The Appendix to this chapter inventories the class 3A and class 3B farm properties from the tax database. (*Hillsborough Township Tax Data*)<sup>3</sup>

### ***Watersheds***

Hillsborough lies within the Raritan Water Region. In the Hillsborough area, the surface waters from this Region flow down the Raritan River and into Raritan Bay. The New Jersey Department of Environmental Protection (NJDEP) Division of Water Management has established four Watershed Management Areas (WMAs) within the Raritan Water Region. Hillsborough falls within the following three (see *Active Agricultural Land by Watershed Map*):

- North and South Branch Raritan Watershed (WMA 8): This watershed encompasses the western portions of Somerset County and includes the North and South Branches of the Raritan River, the Lamington River, and the Neshanic River. The Neshanic River flows through Hillsborough's northwestern corner to join the South Branch, which forms a section of the township's northern border. 3,590 acres, or 43%, of Hillsborough Township's active agricultural lands lie within this watershed.
- Lower Raritan, South River & Lawrence Watershed (WMA 9): This watershed is found in the eastern and central areas of Somerset County, and contains the Raritan River and Bound Brook. The Raritan River forms much of the township's northern boundary, extending east from the confluence of the South and North Branches near River Road. 1,915 acres, or 23%, of Hillsborough's active agricultural lands lie within this watershed, which covers the smallest portion of the township.
- Millstone Watershed (WMA 10): This watershed drains the eastern and southern portions of the county via the Millstone River, Bedens Brook, and Six-Mile Run. The Millstone River borders the township on the east. The Millstone Watershed covers the



largest portion of Hillsborough Township and contains 2,779 acres, or 34%, of Hillsborough's active agricultural land.  
(NJDEP Division of Watershed Management)<sup>4</sup>

The Sourland Mountain area contains several headwater streams, including Cat Tail Brook and Rock Brook which flow into the Millstone River, and a portion of Pleasant Run which flows into the South Branch of the Raritan. In addition the Royce's Brook watershed, a subwatershed of the Millstone, covers one third of the township. This is the area where most development has occurred and is also the area served by sewers and public water supply. Royce's Brook runs northeast from the Sourland Mountain area, emptying into the Millstone River in the Borough of Manville.

## **B. Distribution of Soil Types and Characteristics**

The origins and chemical compositions of much of Hillsborough's soils are generally capable of supporting agriculture. Localized conditions such as wetness, slope, and depth to bedrock, limit the agricultural productivity of soils in some areas, particularly in the Mountain Conservation District, which includes Hillsborough's portion of the Sourland Mountains.

The Natural Resources Conservation Service (NRCS) classifies agricultural soils as *prime*, *statewide important*, and *unique* based on their exceptional capacity for supporting agricultural productivity (see *Soil Classification Map*).

- Prime farmland soils rest on land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. They have the quality, growing season, and water holding capacity needed to sustain high yields when managed according to acceptable farming methods. Prime soils are not excessively erodible or saturated with water for a long period of time, and they flood infrequently. While prime soils can be found throughout the township, the heaviest concentrations are within the Agricultural District in the northeastern and northwestern sectors, particularly in the triangle between the Neshanic River and the South Branch of the Raritan. Prime soils make up approximately 47% of Hillsborough Township's agricultural land base (see *Hillsborough Township Soils by NRCS Classification* table below).
- Farmland soils of statewide importance are nearly prime farmland and economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce yields as high as prime farmland if conditions are favorable. These soils are found in their highest concentrations in the lands bordering the Sourland Mountain. They account for approximately 36% of the township's agricultural land base.
- Unique soils exhibit specific qualities that may be favorable to the production of specialized crops; there are no unique soils in Hillsborough Township.  
(NRCS website)<sup>5</sup>
- Soils of local importance form another category of agricultural soils that is not mapped or designated by NRCS. However, these soils play a significant role in the agriculture of Hillsborough Township. Located predominately within stream

corridors, locally important soils are limited in terms of crop production as compared to prime and statewide important soils but can viably produce field crops, hay, some fruits and vegetables, and can be used for livestock pasturing. A mass of locally important soils is found along the Raritan River and Dukes Brook in the northeastern sector of the township. (2002 Master Plan Amendment)<sup>6</sup>

- A lesser amount of locally important soils exists in the western portion of the township. These soils are included in the “Other” category in the table below.

The table below shows the breakdown of active agricultural land and total land base in Hillsborough Township by soil type based on the 2002 Land Use Land Cover data and NRCS soil types (see *Soil Classification on Active Agricultural Land Map*). In 2002 land being actively used for agriculture accounted for 8,284 acres in Hillsborough Township, or 23.5% of the township’s 35,218 total acres. Almost half of the land in active agricultural use was classified as prime soils.

<b>Hillsborough Township Soils by NRCS Classification</b>				
NRCS Soil Class	Acres in Active Ag	% of Total	All Lands	% of Total
Prime	3,897	47%	12,285	35%
Statewide	2,341	36%	11,281	32%
Other	2,046	17%	11,683	33%
Total	8,284		35,249	
<i>Sources: 2002 Land Use/Land Cover and NRCS Soil Classes</i>				

A survey of Somerset County soils undertaken in 1989 returned the following detailed breakdown for prime and statewide soils in the entirety of Hillsborough Township. Prime and statewide soils represented 67.5% of all soils in the township, but much of this land has been developed and is no longer used for agricultural purposes.

<b>Abbr</b>	<b>Prime and Statewide Soils Descriptions</b>	<b>Quality</b>	<b>Erodibility</b>	<b>Acres</b>
BhnA	Birdsboro silt loam, 0 to 2 percent slopes	Prime	Not High	143
BhnB	Birdsboro silt loam, 2 to 6 percent slopes	Prime	Potentially	1277
BucB	Bucks silt loam, 2 to 6 percent slopes	Prime	Potentially	501
DuxA	Dunellen moderately well drained sandy loam, 0 to 2 percent slopes	Prime	Not High	17
DunB	Dunellen sandy loam, 3 to 8 percent slopes	Prime	Potentially	406
KepB	Keyport silt loam, 2 to 5 percent slopes	Prime	Potentially	27
LdmB	Lawrenceville silt loam, 2 to 6 percent slopes	Prime	Potentially	96
MonB	Mount Lucas silt loam, 2 to 6 percent slopes	Prime	Potentially	24
NehB	Neshaminy silt loam, 2 to 6 percent slopes	Prime	Potentially	162
NotB	Norton loam, 2 to 6 percent slopes	Prime	Potentially	600
PeoB	Penn channery silt loam, 2 to 6 percent slopes	Prime	Potentially	3806
PenA	Penn silt loam, 0 to 2 percent slopes	Prime	Not High	191
PenB	Penn silt loam, 2 to 6 percent slopes	Prime	Potentially	3579
PepB	Penn-Bucks complex, 2 to 6 percent slopes	Prime	Potentially	2
RarAr	Raritan silt loam, 0 to 3 percent slopes, rarely	Prime	Potentially	377

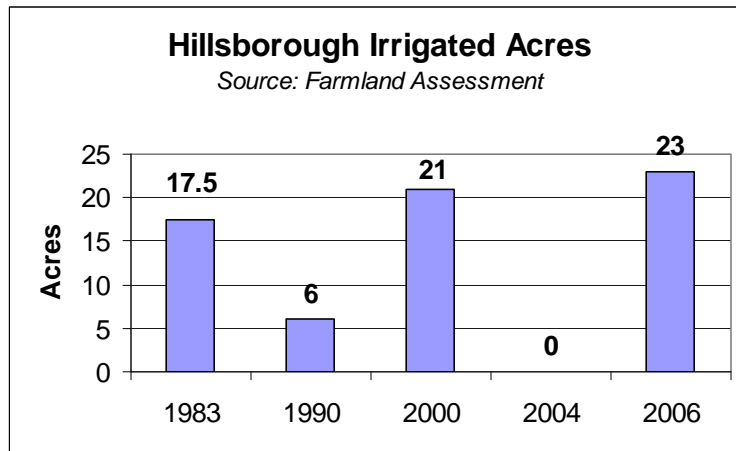
<i>Abbr</i>	<i>Prime and Statewide Soils Descriptions</i>	<i>Quality</i>	<i>Erodibility</i>	<i>Acres</i>
	flooded			
RedB	Readington silt loam, 2 to 6 percent slopes	Prime	Potentially	183
RoyB	Royce silt loam, 2 to 6 percent slopes	Prime	Potentially	901
WhpA	Whippany silt loam, 0 to 3 percent slopes	Prime	Potentially	12
<b>Prime Subtotal</b>				12,304
AbrA	Abbottstown silt loam, 0 to 2 percent slopes	Statewide	Potentially	58
AbrB	Abbottstown silt loam, 2 to 6 percent slopes	Statewide	Potentially	425
BhnC	Birdsboro silt loam, 6 to 12 percent slopes	Statewide	High	20
BoyAt	Bowmansville silt loam, 0 to 2 percent slopes, frequently flooded	Statewide	Not High	170
BucC2	Bucks silt loam, 6 to 12 percent slopes, eroded	Statewide	Potentially	81
ChcB	Chalfont silt loam, 2 to 6 percent slopes	Statewide	Potentially	979
ChcC	Chalfont silt loam, 6 to 12 percent slopes	Statewide	High	122
ChcC2	Chalfont silt loam, 6 to 12 percent slopes, eroded	Statewide	High	14
ChcCa	Chalfont silt loam, 6 to 12 percent slopes, stony	Statewide	High	604
CoxA	Croton silt loam, 0 to 2 percent slopes	Statewide	Potentially	821
CoxB	Croton silt loam, 2 to 6 percent slopes	Statewide	Potentially	84
LbtA	Lansdowne silt loam, 0 to 2 percent slopes	Statewide	Potentially	1033
LbtB	Lansdowne silt loam, 2 to 6 percent slopes	Statewide	Potentially	609
LdmC	Lawrenceville silt loam, 6 to 12 percent slopes	Statewide	High	94
LemB	Lehigh silt loam, 2 to 6 percent slopes	Statewide	Potentially	277
LemC	Lehigh silt loam, 6 to 12 percent slopes	Statewide	High	292
LemC2	Lehigh silt loam, 6 to 12 percent slopes, eroded	Statewide	High	17
NehC	Neshaminy silt loam, 6 to 12 percent slopes	Statewide	Potentially	18
PeoC	Penn channery silt loam, 6 to 12 percent slopes	Statewide	High	1662
PeoC2	Penn channery silt loam, 6 to 12 percent slopes, eroded	Statewide	Potentially	69
PenC	Penn silt loam, 6 to 12 percent slopes	Statewide	High	200
PepC2	Penn-Bucks complex, 6 to 12 percent slopes, eroded	Statewide	Potentially	19
RehA	Reaville silt loam, 0 to 2 percent slopes	Statewide	Potentially	1652
RehB	Reaville silt loam, 2 to 6 percent slopes	Statewide	Potentially	1920
RehC2	Reaville silt loam, 6 to 12 percent slopes, eroded	Statewide	High	2
<b>Statewide Subtotal</b>				11,239
<b>Total</b>				23,948

*Source: 1989 Somerset County Soils Survey*

## C. Irrigated Land & Water Sources

Irrigation has not been a significant water use in Hillsborough (see *chart* below), and according to Sam Conard, chair of the Hillsborough Agricultural Advisory Committee, and other farmers in Somerset County, as evidenced at the public meeting held in July 2007 for the *2008 Somerset County Comprehensive Farmland Preservation Plan*, it is increasingly difficult to obtain the necessary water allocation permits for large-scale irrigation. The latest available statistics show that after a dip to 0 in 2004, irrigated acres rose to 23 in 2006, a 23-year high. The breakdown for 2006 indicates six acres were irrigated for nursery crops, while 16 were devoted to field crops and one to fruit. (*Farmland Assessment 1983-2006*)<sup>7</sup> As will be seen in *Chapter 2*, acreage devoted to

nursery crops is on the rise, so some interest in irrigating land is expected. According to Sam Conard, a new vineyard, which irrigates its vines, opened in the township; in addition a couple of farmers are capitalizing on the popularity of farmer's markets and switching land from conventional crops to vegetables, for which they are using irrigation. (Sam Conard)<sup>8</sup>



In the Agricultural and Mountain Conservation Districts, groundwater [from wells] would be the primary source for irrigation, since these areas of town depend predominantly on wells and septic for water supply and waste management, and there are no plans to bring public water supply or sewers to these areas.

Approximately 82% of the township, including the Agricultural District, is underlain by the Passaic Formation, formed predominantly of reddish brown siltstone and shale. The shale is highly fractured “which allows water to infiltrate into the formation and makes it one of the best aquifers in the region.” (*Hillsborough Township Master Plan*)<sup>9</sup> By contrast, much of the Sourland area (the Mountain Conservation District) is Jurassic Diabase (Jd) and Lockatong Formation, characterized by poor well yields and subsurface conditions unsuitable for septic systems. The Jurassic Diabase forms the Sourland Mountain and extends under the Passaic Formation; it is medium to coarse-grained intrusive, dense, hard and sparsely fractured. The argillite of the Lockatong Formation allows for little fracture, allowing no course for water to move readily through it or collect in any significant pockets. The diabase and Lockatong formations found in the Sourland area represent some of the poorest yielding aquifers in the state and thus cannot support the intense water use found in the more permeable lower-lying areas of the township, where siltstone and shale predominate.

The potential for aquifer recharge in most of Hillsborough Township falls in the median range of the New Jersey Geological Society’s ranking system, with well yields around 100 to 250 gallons per minute (level C in a range of A-E) and recharge of between 9 and 16 inches per year (levels B and C in a range of A-E). In some areas of the township containing wetlands, hydric soils or for other reasons, no recharge has been calculated.

The lowest aquifer recharge potentials in Hillsborough are found in the western drainage areas of Sourland Mountains, where there are very few acres devoted to active agriculture. The aquifers in this area yield less than 100 gallons per minute (gpm), with recharge in the area of 12 to 16 inches per year. Some agricultural lands exist in the eastern portion of the Sourland Mountain Preserve, with aquifers yielding 100-250 gpm and recharge between 12 and 21 inches per year. The Sourland Mountain region, of which Sourland Mountain Preserve is the northeastern tip, covers some 90 square miles and is the sole source aquifer for drinking water for residents within the region and neighboring communities. Therefore, conservation and protection of water resources in this area is critical.

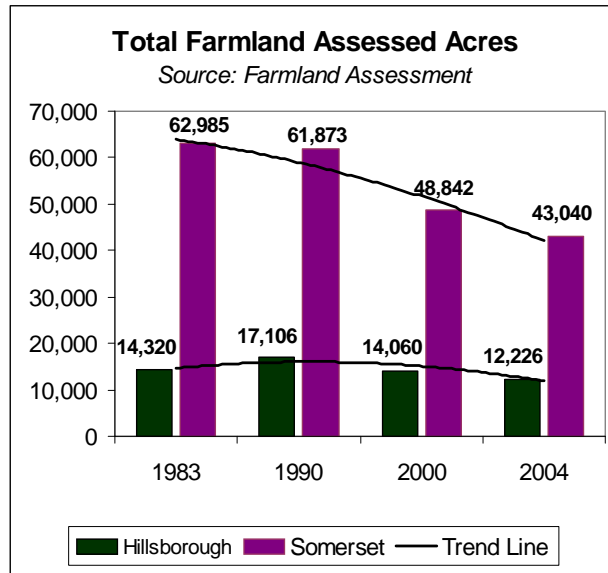
To the north of the Sourlands and along the Raritan are some of the best recharge areas in the township, with yields of 100-250 gpm and recharge between 12 and 21 inches per year. This area also has some of the highest concentrations of active agricultural land in the Township, indicating that these lands are well placed for possible use of groundwater resources for irrigation.

The groundwater below the agricultural lands in the southeastern portion of the Township generally recharges at between 12-16 inches per year, with some areas along the Millstone recharging at between 17-21 inches per year. The aquifer is ranked as yielding between 100-250 gpm. (*New Jersey Geological Society*)<sup>10</sup>

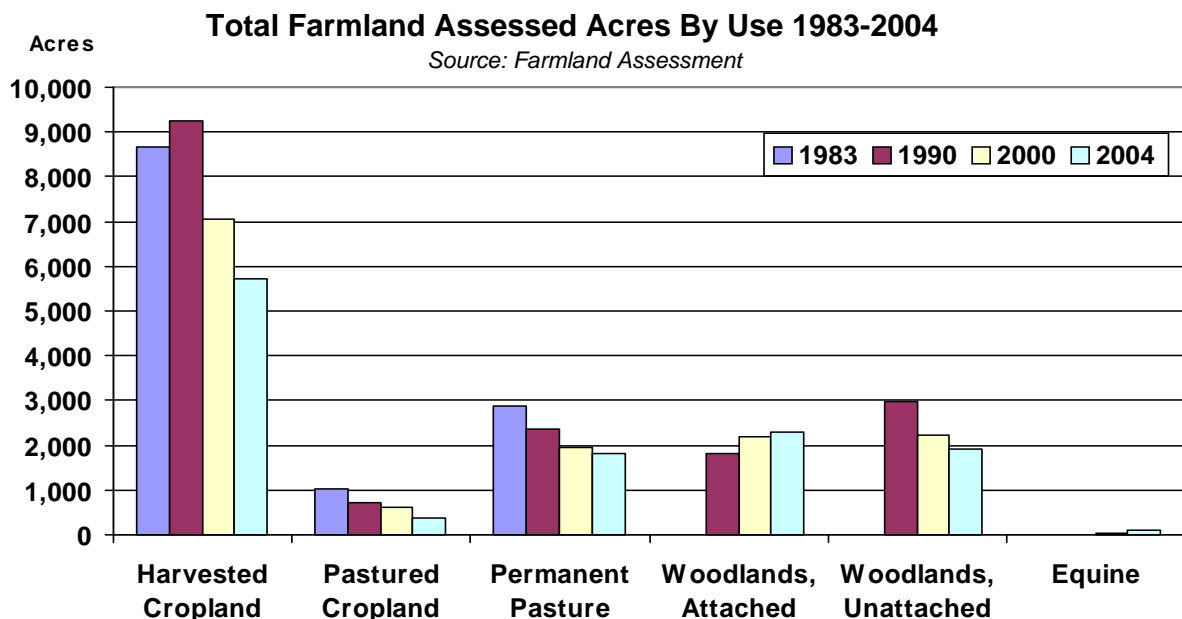
Several areas of the township have poorly drained or very poorly drained soils, with seasonably high water at 0-1 foot from the surface from September to June. One area is on the Duke Estate, another is to the east of U.S. 206 near Manville. Other areas lie to the east of East Mountain Road and in pockets along the Lehigh Valley Railroad between Beekman Lane and Roycefield Road. Extensive areas of the township, including the Sourland Mountain area and along streambeds in other sections, have seasonably high water at 0.5-2.5 feet from the surface from November to May, with moderately well drained to somewhat poorly drained soils, subject to seasonal flooding.

## **D. Farmland Trends & Statistics**

For the purposes of this Plan, land considered to be in active agricultural use includes the following categories, as delineated on the Farmland Assessment reports: cropland harvested, cropland pastured and permanent pasture. While agricultural lands currently occupy about a fifth of Somerset County, this area has been shrinking over the last 20 years. One-third of the County's municipalities have no farmland remaining. (*2004 New Jersey Farmland Assessment*) By contrast, between 1983 and 1990, Hillsborough Township actually showed an increase in acres that were actively farmed, and for the 21-year period between 1983 and 2004, the Township lost 15% of its agricultural land base versus 32% county wide (see *Total Active Agricultural Acres* chart below)

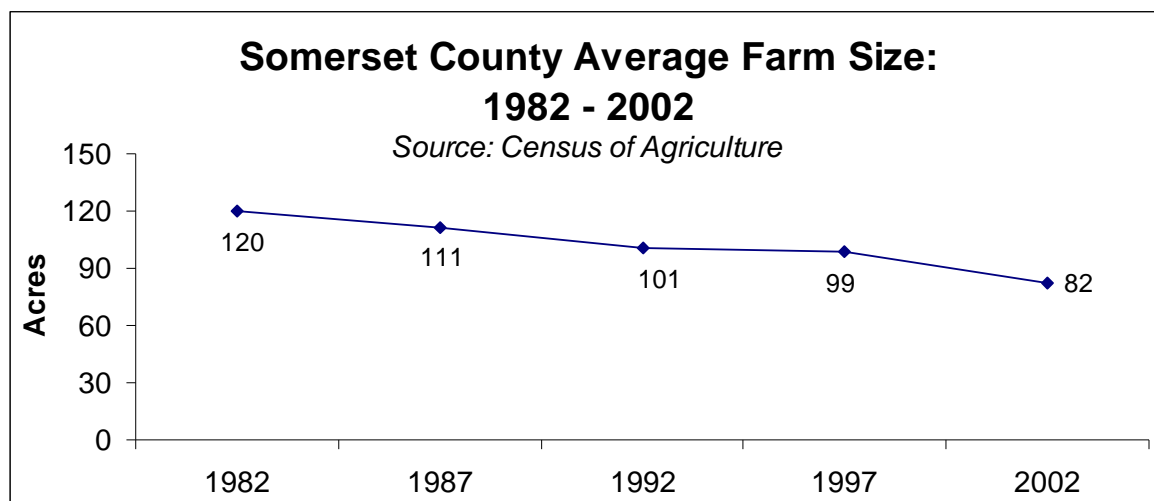


Most of the farmland that has been lost in Somerset County has been active crop and pasturelands, and the trend is no different in Hillsborough Township (see *Farmland Land Use Trends* chart and table below). For the township, the most severe losses between 1983 and 2004 were among pastured cropland, which fell 64%. In that same period, harvested cropland declined by 34% and permanent pasture by 37%, perhaps in line with a decline in livestock farming in the township (see *Chapter 2*). Unattached woodlands declined by 36%. The number of equine acres more than quadrupled, from 18 to 86. While not a significant portion of the total acreage, this does mirror a county-wide trend toward more equine operations. Equine acres include only those acres devoted to boarding, rehabilitating and training; they do not include pastured acres. (1983–2004 *Farmland Assessment*).

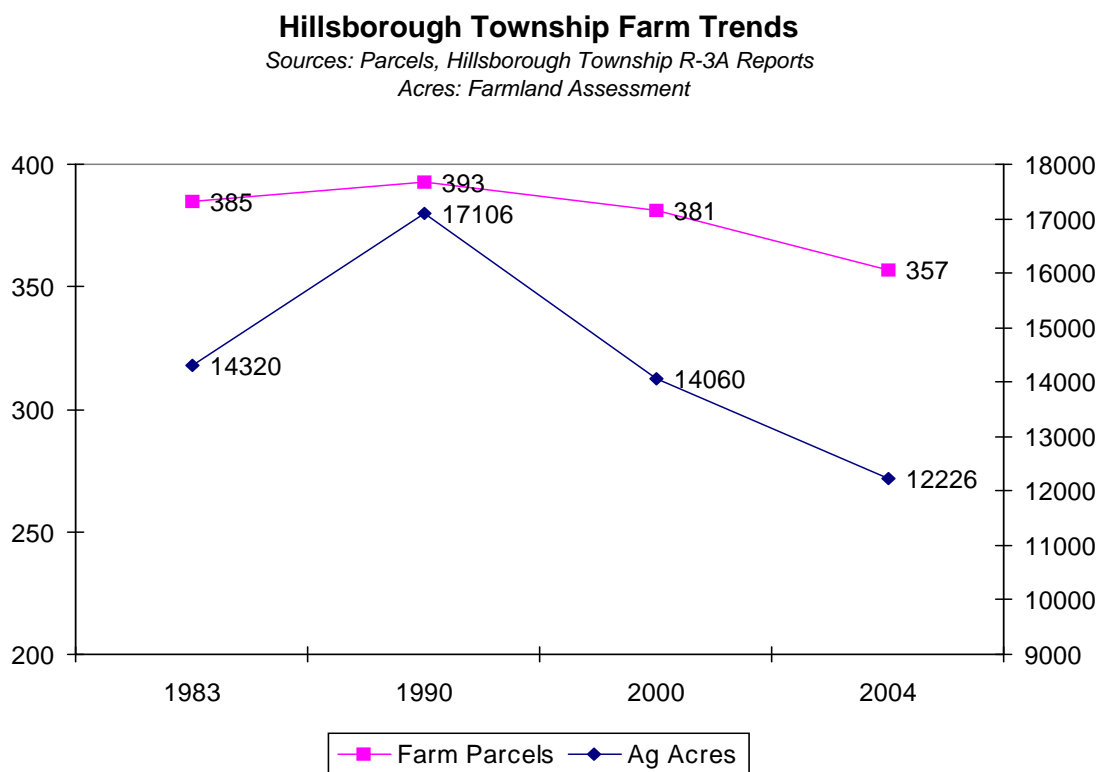


Land Use Trends	Acres				1983-2004 % Change
	1983	1990	2000	2004	
<b>Somerset County</b>					
Harvested Cropland	31,942	28,980	21,767	17,876	-44%
Pastured Cropland	5,635	5,209	3,374	2,013	-64%
Permanent Pasture	9,919	8,425	6,433	6,532	-34%
<i>Active Agricultural Use Subtotal</i>	<i>47,496</i>	<i>42,614</i>	<i>31,574</i>	<i>26,421</i>	<i>-44%</i>
Woodlands, attached		8,615	9,698	10,430	21%*
Woodlands, unattached		10,643	7,280	5,832	-45%*
Equine			290	357	23%**
<b>Total</b>	<b>62,985</b>	<b>61,873</b>	<b>48,842</b>	<b>43,040</b>	<b>-32%</b>
<b>Hillsborough Township</b>					
Harvested Cropland	8,679	9,241	7,066	5,722	-34%
Pastured Cropland	1,012	710	632	392	-61%
Permanent Pasture	2,884	2,359	1,940	1,816	-37%
<i>Active Agricultural Use Subtotal</i>	<i>12,575</i>	<i>12,310</i>	<i>9,638</i>	<i>7,930</i>	<i>-37%</i>
Woodlands, attached		1,810	2,181	2,293	27%
Woodlands, unattached		2,986	2,223	1,917	-36%
Equine			18	86	378%**
<b>Total</b>	<b>14,320</b>	<b>17,106</b>	<b>14,060</b>	<b>12,226</b>	<b>-15%</b>
* Woodlands were combined with wetlands in 1983 as one total: 18,139 for the County and 3,768 for the Township; % change is from 1990					
* Equine reporting began in 2000. % change is from 2000.					

The number of farms in Somerset County has remained relatively constant during the past 20 years. There were 407 farms in 1987, 486 farms in 1997, and 442 farms in 2002, but the average size of farms has dropped by more than 30% since 1982 (see *Average Farm Size* chart below). (2002 Census of Agriculture) The median farm in Somerset County in 2002 was 23 acres, which is much smaller than the average farm size of 82 acres.



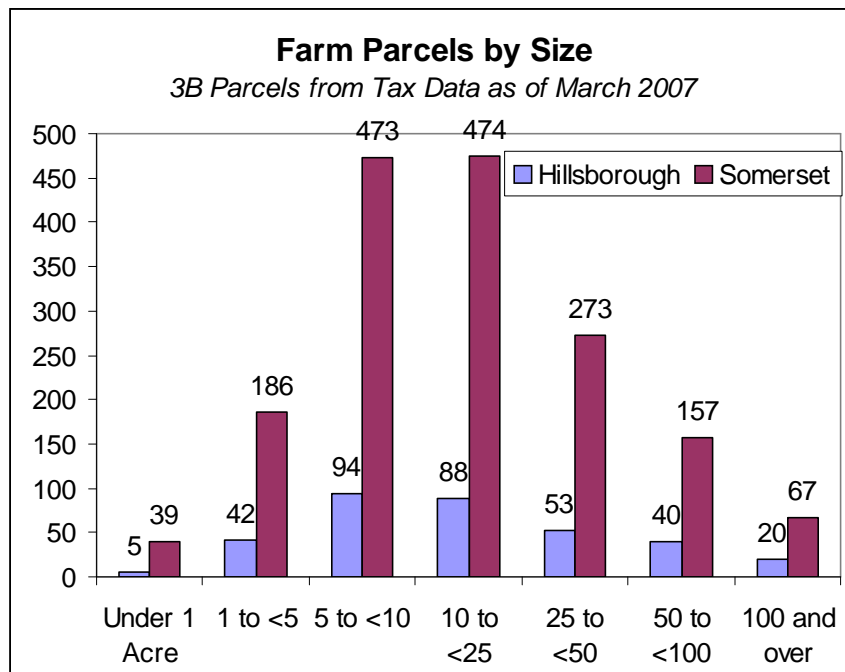
A similar trend can be seen in Hillsborough Township, although the data is based not on farms as reported on the Census but on farm parcels classified as farmland assessed (3B) as reported in the township's tax records. (*Hillsborough Township Tax Assessment Office*)<sup>11</sup> This data shows that the number of parcels assessed as property class 3B remained fairly constant between 1983 and 2000, but showed a significant drop in 2004 to 357. In addition, the number of parcels dropped more dramatically than the number of acres, suggesting that smaller parcels were combined into larger ones and/or that smaller parcels were the ones that changed to other land uses (see *Hillsborough Township Farm Trends* chart below). The inclusion of Duke Farms, which totals more than 2,700 acres, skews these statistics, helping the acres to stay more constant than the parcels.



In March 2007 farm parcels dropped again, to 342 and acreage decreased by 613, from 12,226 in 2004 to 11,613. (*Hillsborough Township Tax Data*) The average size of a farm parcel in the Township was 40 acres and the median size was 13. The distribution of farm parcels by size in Hillsborough is similar to the distribution county wide. More than 50% of Hillsborough and Somerset County farms parcels were between 5 and under 25 acres in size, with another quarter ranging between 25 and less than 100 acres. Farm parcels of 100 acres or more represented 6% of parcels in Hillsborough and 4% county wide (see *table* and *Farm Parcels By Size* chart below)



	<b>Hillsborough</b>		<b>Somerset County</b>	
	# of Parcels	% of Total	# of Parcels	% of Total
Under 1 Acre	5	1%	39	2%
1 to <5	42	12%	186	11%
5 to <10	94	27%	473	28%
10 to <25	88	26%	474	28%
25 to <50	53	15%	273	16%
50 to <100	40	12%	157	9%
100 and over	20	6%	67	4%
<b>Total</b>	<b>342</b>		<b>1669</b>	
<i>Source: New Jersey Association of County Tax Boards</i>				



In late 2007, Sam Conard of the Hillsborough Township Agricultural Advisory Committee prepared an informal analysis as part of a Transfer of Development Study for the township. At the time of his study, there were 340 farmland assessed *parcels* operated by 62 different agricultural *operations*. The average size *per operation* was 171.34 acres, but as noted above, this is skewed by the enormous acreage managed by the Duke Farms Foundation. Only 17 operations had in excess of 100 acres. A more realistic estimate is that majority of farm operators had 20 acres or less. (*Sam Conard*)

The biggest single parcel of farmland assessed property, 647 acres, is owned by the Duke Farms Foundation. More than 2,700 acres are owned and managed by the Foundation, whose core mission is to serve as a model of land stewardship and open space preservation for education and public enjoyment. The second largest parcel, 553 acres, is

owned by 3M, which has operated a quarry along the southern border with Montgomery Township. The biggest single parcel not owned by either of the above entities is 423 acres located on Hamilton Road in the southeastern section of the township, owned by the Mindel, Marchese, Ridless, Menkin Trust. There are a number of parcels over 100 acres located in the Agricultural and Mountain Conservation districts. (*Hillsborough Township Tax Data*)

According to the *2008 Somerset County Comprehensive Farmland Preservation Plan*, the growing number of small farms and the declining number of large farms in Somerset County indicates that large farms are being subdivided and converted into smaller operations. In some cases, portions of subdivided farms that are not retained by the original landowner are converted into residential, commercial or other non-agricultural uses. (*2008 Somerset County Comprehensive Farmland Preservation Plan*)<sup>12</sup>

This trend of decreasing farm size is cause for concern in Somerset County. Larger farms account for the vast majority of local agricultural sales and support more career farmers than smaller operations. Farmers on these larger farms also tend to be more fully invested in the local agricultural industry than farmers of smaller farms. (*2001 Somerset County Agriculture Retention & Development Master Plan*)<sup>13</sup> Furthermore, the landscape that is created by large-scale subdivisions of agricultural land is not favorable to farmers. Subdividing parcels in rural areas promotes the fragmentation of the agricultural landscape with residential and commercial developments. The resulting land use pattern – where many small-scale farms are interspersed amid non-agricultural areas – incites conflict between farmers and their neighbors making agricultural operations more difficult to sustain. (*2008 Somerset County Comprehensive Farmland Preservation Plan*) To counter this, Hillsborough Township has introduced two zoning options in its Agricultural district, in addition to its 10 acre minimum lot size, to promote the retention of large tracts of contiguous space. The two options are lot size averaging and open lands ratio (see *Chapter 3*).

### ***Summary***

Hillsborough Township's significant acreage of agriculturally productive soils contributes to the potential productivity of its farms. Through its various Master Plan Amendments, particularly the creation of Agricultural and Mountain Conservation Districts (see *Chapter 3*), which cover large swaths of the township, Hillsborough is attempting to forestall some of the fragmentation that is occurring in the agricultural landscape in other areas of Somerset County (*2008 Somerset County Comprehensive Farmland Preservation Plan*), as well as protect the water resources from overuse. The township's planned implementation of a Transfer of Development Rights Program can further aid the efforts to keep large areas of contiguous agricultural base in the township. This together with the Hillsborough's commitment to farmland preservation through traditional farmland programs can help the township remain a leader in promoting and supporting agricultural viability in the county.

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<sup>1</sup> New Jersey Department of Agriculture. State Agriculture Development Committee. 2003/2004 Farmland Assessment Data. Highest Municipal Concentration of Agricultural Land.

<sup>2</sup> Master Plan Amendment for the Agricultural and Mountain Districts. Adopted October 24, 2002.

<sup>3</sup> New Jersey Association of County Tax Boards. Hillsborough Township. Data as of 03/15/07. [www.njactb.org](http://www.njactb.org). Accessed November 9, 2007.

<sup>4</sup> New Jersey Department of Environmental Protection, Division of Watershed Management. <http://www.state.nj.us/dep/watershedmgmt/surfri/surfri.html>. Accessed November 2007.

<sup>5</sup> Natural Resources Conservation Service website. Important New Jersey Soils. <http://www.nj.nrcs.usda.gov/technical/soils/njfarminindex.html> . November 2007.

<sup>6</sup> Master Plan Amendment for the Agricultural and Mountain Districts. Adopted October 24, 2002. p. 51.

<sup>7</sup> New Jersey Department of Agriculture. State Agriculture Development Committee. New Jersey Farmland Assessment. 1983. 1990. 2000. 2004. County Summaries.

<sup>8</sup> Personal communication with Sam Conard. Agricultural Advisory Committee and Planning Board member. November 10, 2007.

<sup>9</sup> Hillsborough Township Master Plan. Adopted 1965/1966. Amended 1996.

<sup>10</sup> Aquifer Recharge Potential: <http://www.state.nj.us/dep/njgs/geodata/dgs07-1.htm> NJDEP NJGS Digital Geodata Series DGS07-1: Aquifer-Recharge Potential for New Jersey

<sup>11</sup> R-3A Real Property Classification and Assessment reports for Hillsborough Township for tax years 1983, 1990, 2000 and 2004. Provided by the Office of the Tax Assessor, Hillsborough Township. November 30, 2007.

<sup>12</sup> Somerset County Comprehensive Farmland Preservation Plan. 2008.

<sup>13</sup> Somerset County Agriculture Retention and Development Master Plan. 2001



## **CHAPTER 2:**

### **AGRICULTURAL INDUSTRY IN HILLSBOROUGH TOWNSHIP**

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The agricultural industry in Hillsborough Township benefits not only the farmers but the township as a whole. By requiring few municipal services, agricultural land places less of a financial burden on the township than residential development, which requires more infrastructure, such as schools, roads, police, fire and rescue squads and, in many cases, the extension of public water and sewer service. The *2001 Somerset County Agriculture Retention and Development Master Plan* reports that farmland necessitates the expenditure of \$0.33 in municipal services for every \$1.00 in taxes levied against it, while residential land uses demand \$1.76 per dollar. (*Somerset County Agricultural Master Plan*)<sup>1</sup> Not only do farms require fewer services, but they often provide important benefits, such as groundwater recharge and storm water control, that the township might otherwise have to supply.

Farms can generate a positive cash flow by selling their products to buyers outside the Township. Local farmers will often spend the revenue earned from these sales locally, thus supporting the township's economy. Contrarily, retail stores and other non-agricultural firms that cater to local residents often send their revenues out of the township. Additionally, agriculture directly supports ancillary businesses, such as feed and seed suppliers and livestock veterinarians, whose sales are not captured within agricultural figures, but who depend upon agriculture to create the necessary demand for their services. Farms also provide indirect support to the local economy. For example, they can offer seasonal employment opportunities for young residents and seasonal workers who in turn patronize local stores and businesses.

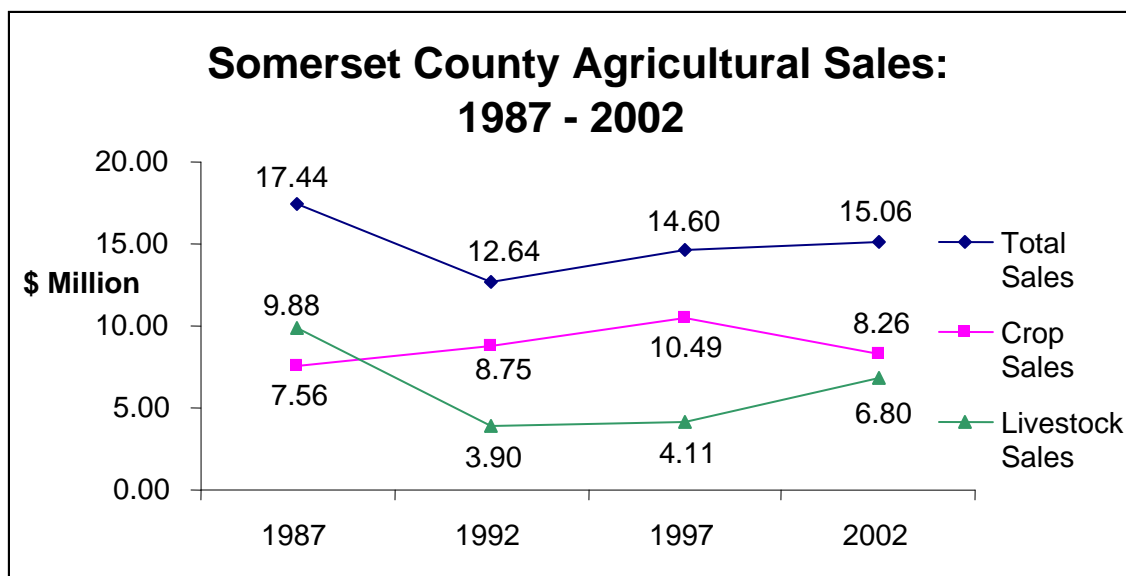
With the highest agricultural acreage of all Somerset County municipalities, Hillsborough's farms are a major contributor to the farming industry in Somerset County. Separate figures are not available for Hillsborough, but countywide agriculture accounted for more than \$15.1 million in sales during 2002 – an amount that was limited by abnormally severe statewide drought conditions that occurred during this time. (*2002 Census of Agriculture*)<sup>2</sup>

#### **A. Trends in Market Value**

Market value trends were calculated using data from the United States Department of Agriculture's National Agriculture Statistics Service (NASS)<sup>3</sup> and were reported at the county level since data at the municipal level was not available. This data is reported every five years as part of the National Census of Agriculture. The most recent Census was in 2002. The next Census report is expected to be available in February 2009.

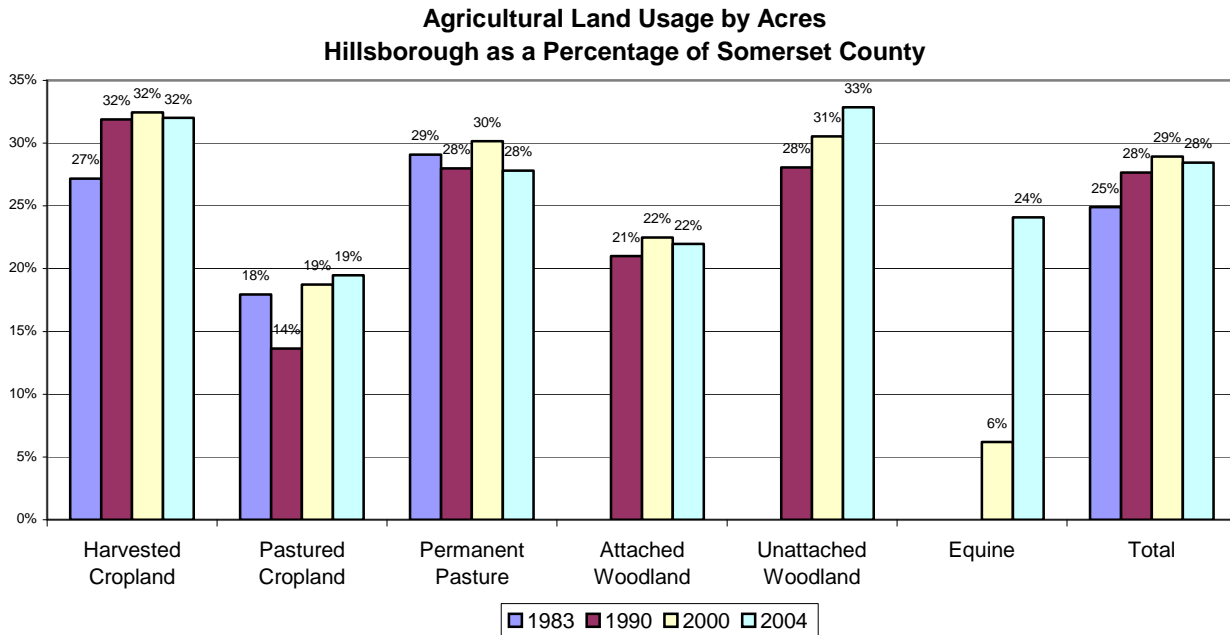
Further obscuring trend analysis is the additional susceptibility to sampling error that occurs with less frequent data observations. For example, the 2002 Census of Agriculture was taken in a year in which New Jersey experienced severe drought conditions that greatly reduced the agricultural output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

The information on agricultural production yields is based on New Jersey Farmland Assessment reports from 1983, 1990, 2000 and 2004. This data is reported at the municipal level. (*Farmland Assessment*)<sup>4</sup> The Census of Agriculture separates agricultural activities into two categories: “crops, including nursery and greenhouse” and “livestock, poultry and their products.” County sales from the “crops, including nursery and greenhouse” category, which had steadily increased from 1987 to 1997, were down 27% from \$10.5 million in 1997 to \$8.3 million in 2002. Similar declines were seen across New Jersey due to the severe drought conditions that were observed during the 2002 Census year. “Livestock, poultry and their products” from Somerset County produced \$6.8 million in sales during 2002, up 66% from \$4.1 million in 1997. This is in sharp contrast to previous years when the County’s livestock operations and productivity were in extended decline due to decreasing numbers of large animals, such as cattle and horses, on county farms.

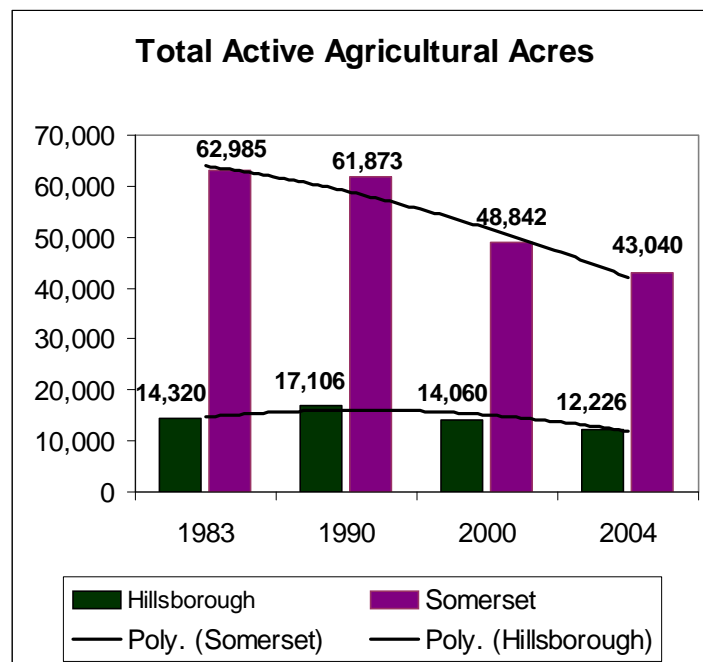


Hillsborough’s agricultural mix differs however, from the County’s. There are fewer livestock and nursery operations and more hay and equine operations than the County average. The chart below (*Agricultural Land Use by Acres*) shows the percentage of the county acres that Hillsborough represents for each of the major agricultural land use categories from 1983 to 2004. On average, during those years, active agricultural land in Hillsborough Township accounted for about 28% of the total county acres devoted to active agricultural use. Most of the individual categories remained relatively stable across this period, although the percentage of equine acres rose significantly, from 6% to 24%,

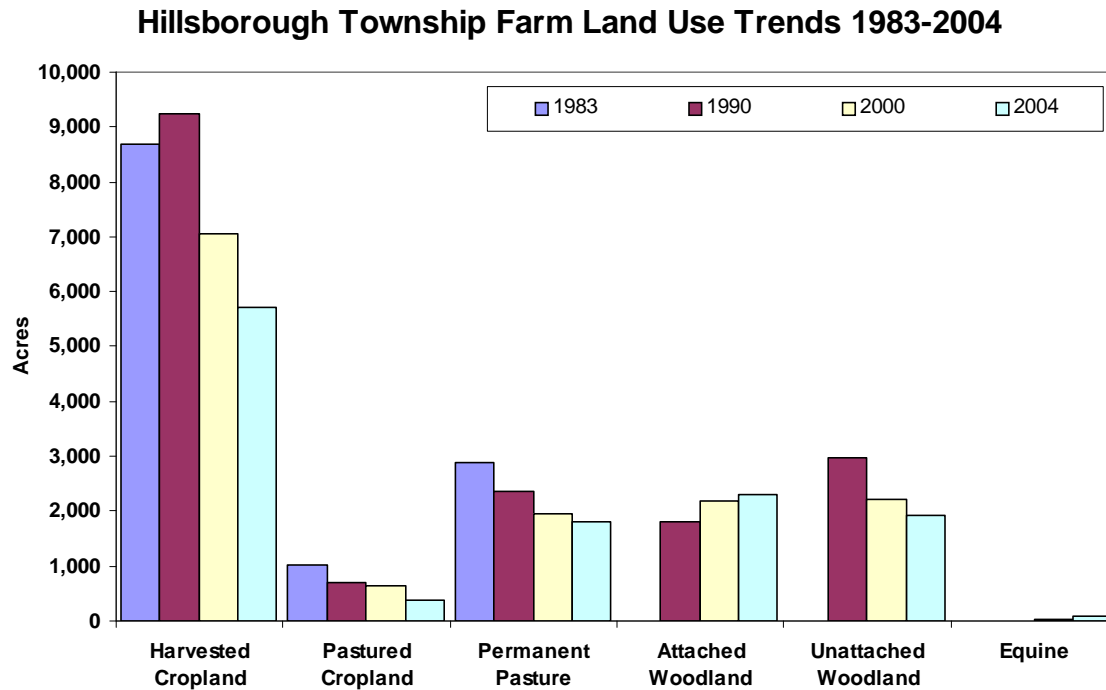
between 2000 and 2004, the two years for which they were reported. (*Farmland Assessment*)



The following chart, comparing net acres in agricultural use, shows that from 1990 on the township and the county are both trending downward. However, while the county lost 32% of its agricultural land base between 1983 and 2004, Hillsborough lost only 15%. (*Farmland Assessment*)



Use trends by category show a decline in acreage in all categories except Attached Woodlands, which have risen slightly in each of the years they have been reported, and Equine, which rose from 18 to 86 acres between 2000 and 2004, the only two years for which this sector has been reported.



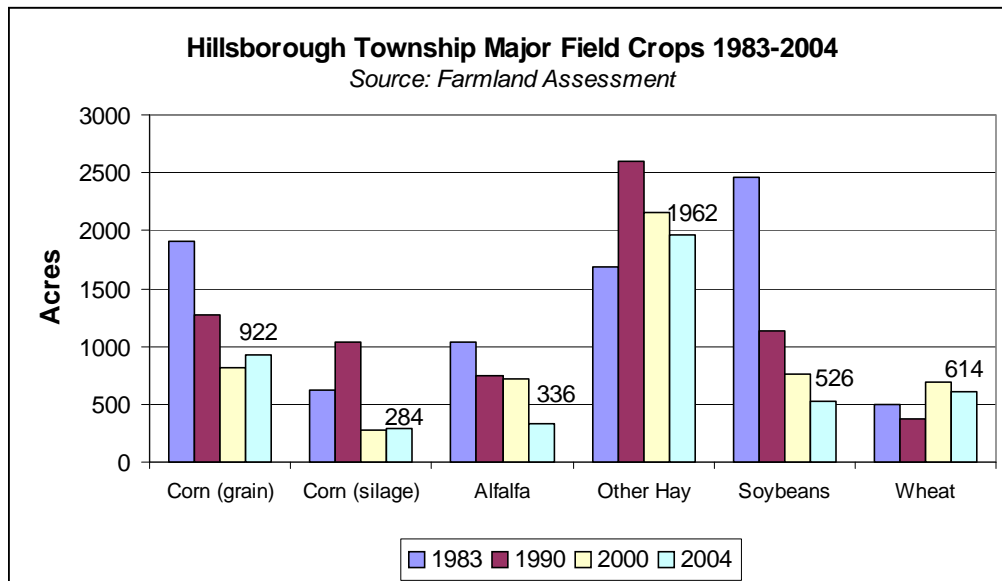
## B. Crop/Production Trends

### *Field Crops*

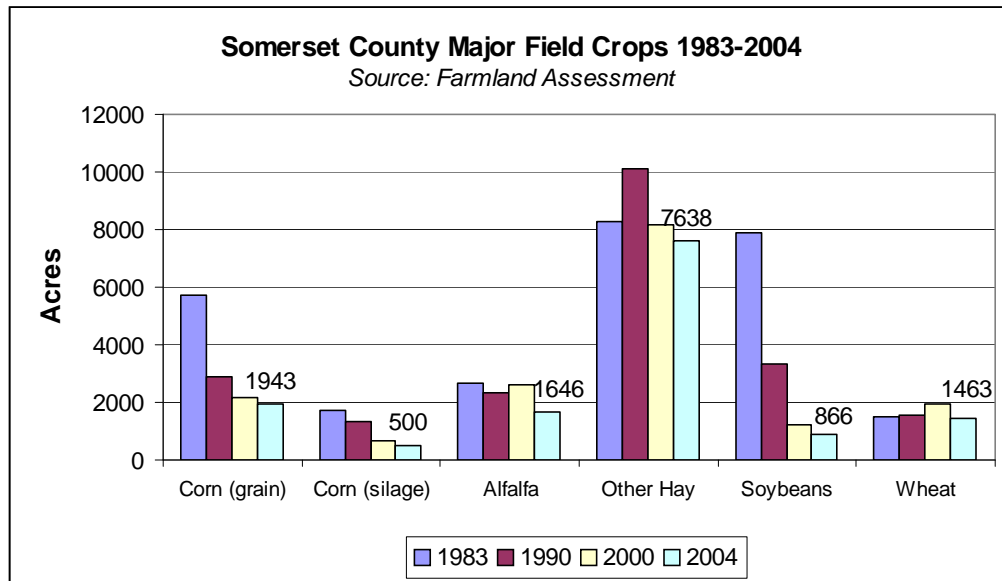
Based on Farmland Assessment reports, the acreage devoted to major field crops declined in the county by almost 50% between 1983 and 2004, but in Hillsborough the losses were slightly less, about 43% (see *table* below). As a result, Hillsborough's contribution to the county's total represented a greater proportion in 2004, 33% versus 29.5% in 1983.

While acreage declined in all categories through the county between 1983 and 2004, Hillsborough experienced an increase in acres devoted to hay (other than alfalfa) and wheat. Throughout the county, including Hillsborough, the most dramatic decline occurred in acreage devoted to soybeans. This was the leading crop in 1983, losing more than half of its acreage by 1990 and continuing to decline through 2004. By 2004, hay ranked as the leading crop countywide and Hillsborough was no exception, with 1,963 acres, more than double the acreage of corn for grain (922), which ranked second. Alfalfa ranked third county wide, outpaced by wheat and soybeans in Hillsborough. Silage corn occupied the fewest acres both in Hillsborough and county wide (see *charts* below).

<b>Major Field Crops by Acre</b>					
	1983	1990	2000	2004	1983-2004 % Change
<b>Hillsborough Township</b>					
Corn (grain)	1905	1278	821	922	-51.60%
Corn (silage)	622	1033	277	284	-54.34%
Alfalfa	1038	750	720	336	-67.63%
Other Hay	1683	2599	2151	1962	16.58%
Soybeans	2460	1135	766	526	-78.62%
Wheat	491	368	696	614	25.05%
<i>Total</i>	<i>8199</i>	<i>7163</i>	<i>5431</i>	<i>4644</i>	<i>-43.36%</i>
<b>Somerset County</b>					
Corn (grain)	5709	2881	2182	1943	-65.97%
Corn (silage)	1738	1349	658	500	-71.23%
Alfalfa	2663	2356	2605	1646	-38.19%
Other Hay	8274	10126	8170	7638	-7.69%
Soybeans	7897	3351	1242	866	-89.03%
Wheat	1496	1560	1942	1463	-2.21%
<i>Total</i>	<i>27777</i>	<i>21623</i>	<i>16799</i>	<i>14056</i>	<i>-49.40%</i>
<i>Source: NJ Farmland Assessment</i>					



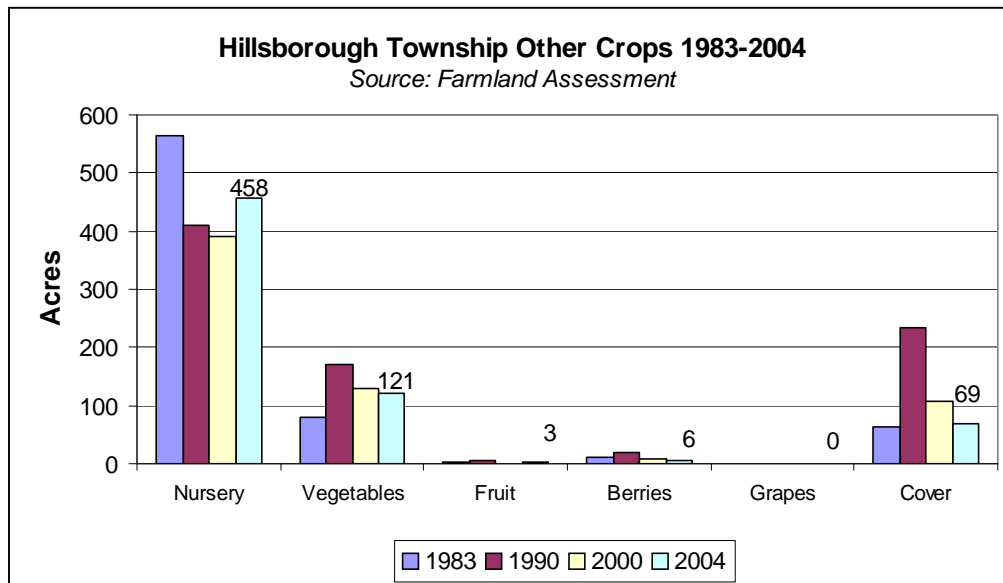


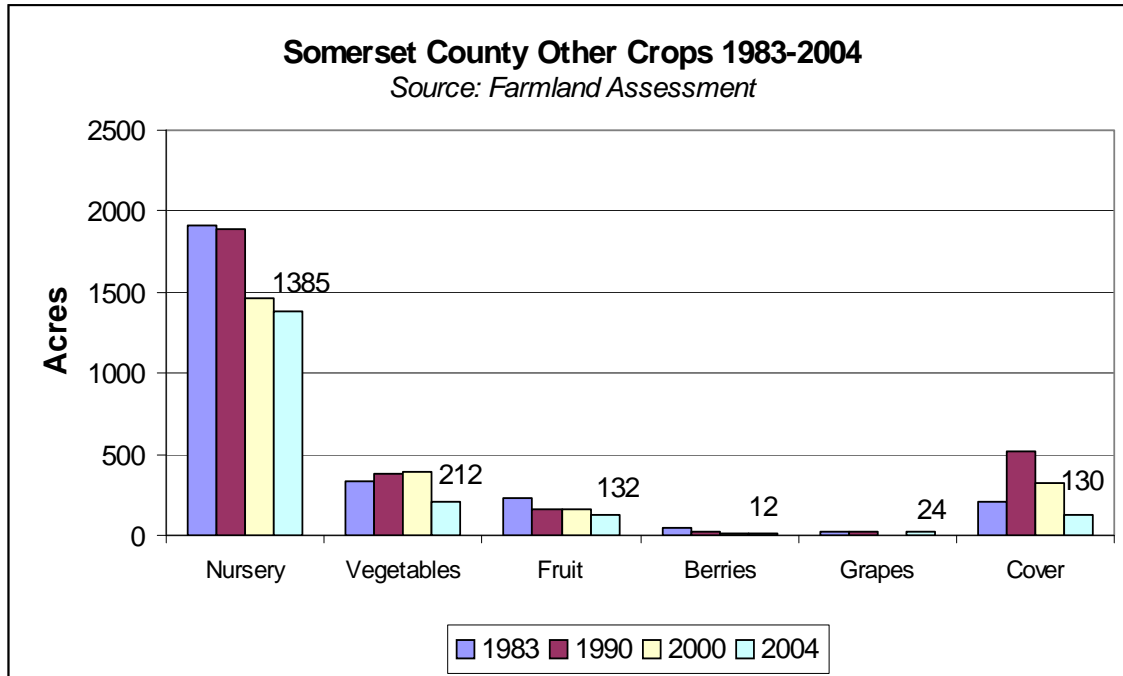


Most of these major field crops are susceptible to damage from wildlife (primarily from deer and geese), which has become an increasing problem in Hillsborough. According to Sam Conard, a local farmer and chair of the Agricultural Advisory Committee, “a lot of ground can’t be planted with commercial crops like corn or soybeans because the deer will eat it all.” (*Sam Conard*)<sup>5</sup> Instead, farmers plant hay or bearded wheat, which don’t attract the deer. On the plus side, he reported a renewed interest in growing soybeans and corn, despite the wildlife problem, because market prices have risen due to demand for these products for production of ethanol and other alternative fuels. In addition, the rise in the equine industry in the county and the township should provide a stable outlet for hay crops.

Nursery, vegetables, fruit, berries and cover crops accounted for 657 acres in Hillsborough Township in 2004. This represented about 35% of the total acres devoted to these crops county wide. Hillsborough contributed more than half the acres devoted to vegetable and cover crops and a third of the acres devoted to nursery production. Hillsborough was not a major contributor to fruit, berry or grape production, although Sam Conard reports that one farmer has recently planted a new vineyard. In addition, acres devoted to vegetables in Hillsborough Township, although lower than in 1990, are 50% higher than in 1983. Nursery acreage increased in 2004 after dropping in 1990 and 2000. Acres devoted to cover crops have vacillated over the years, spiking in 1990, with 233 acres, but were close to 1983 levels again by 2004. Since cover crops are used to manage land by renewing depleted soils, adding moisture or preventing soil erosion, decisions for planting these crops depend not so much on market economics but on the needs of the land. Overall, Hillsborough retained its acreage in these crops much better than the county as whole, losing only 9% of its acreage versus 31% county wide (see *table and charts* below)

Other Crops by Acre					
	1983	1990	2000	2004	1983-2004 % Change
<b>Hillsborough Township</b>					
Nursery	564	411	392	458	-18.82%
Vegetables	81	172	128	121	49.53%
Fruit	2	6	1	3	27.66%
Berries	11	19	8	6	-46.43%
Grapes	0	1	0	0	0.00%
Cover	62	233	106	69	11.29%
<i>Total</i>	720.98	842	635	657	-8.87%
<b>Somerset County</b>					
Nursery	1913	1888	1465	1385	-27.60%
Vegetables	338	380	396	212	-37.28%
Fruit	231	163	162	132	-42.86%
Berries	45	23	14	12	-73.33%
Grapes	22	21	0	24	9.09%
Cover	203	517	326	130	-35.96%
<i>Total</i>	2752	2992	2363	1895	-31.14%
<i>Source: NJ Farmland Assessment</i>					





### ***Livestock and Poultry Products***

County wide, inventory of livestock and poultry is down, except for a 15% increase in goat inventory from 1983 to 2004 and large increases in ducks and meat chickens, due to large-scale operations in Franklin Township. Compared to other municipalities, Hillsborough Township generally ranked first or second in the county in 2004. The township contributed more than 90% of the dairy inventory, a third of the swine inventory and a quarter of the inventories for goats and horses. (see *table* below)

<b>Livestock and Poultry Inventories</b>					
	1983	1990	2000	2004	1983-2004 % Change
<b>Hillsborough Township</b>					
Beef	454	285	224	184	-59.47%
Dairy (mature)	1088	550	229	258	-76.29%
Dairy (young)	899	435	250	150	-83.31%
Ducks	150	42	67	105	-30.00%
Goats	58	28	103	62	6.90%
Horses	406	336	265	327	-19.46%
Meat Chickens	380	2192	1108	1149	202.37%
Laying Chickens	3579	469	785	894	-75.02%
Sheep	1233	285	217	200	-83.78%
Swine	713	607	90	158	-77.84%
Total	8960	5229	3338	3487	-61.08%

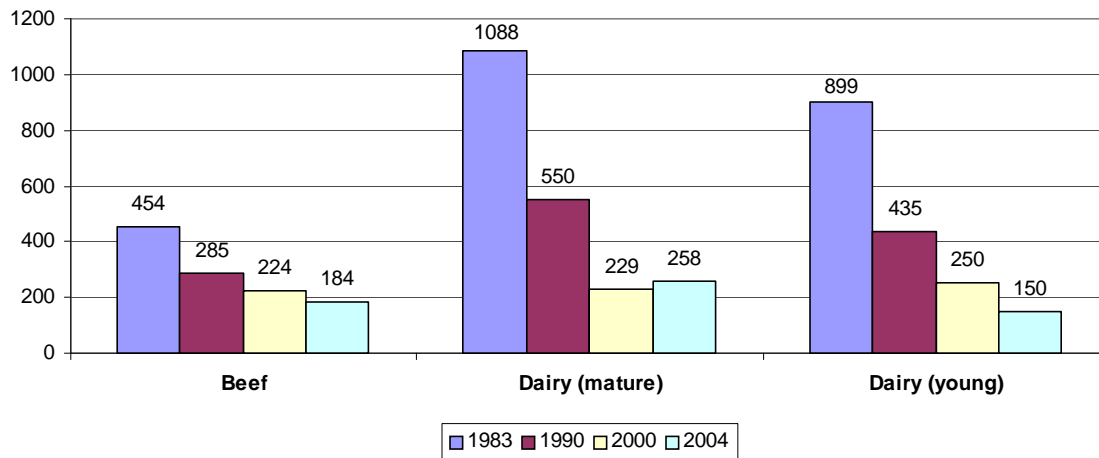
<b>Somerset County</b>					
Beef	2519	1799	3175	1551	-38.43%
Dairy (mature)	3077	946	234	270	-91.23%
Dairy (young)	1277	498	255	166	-87.00%
Ducks	765	355	284	2239	192.68%
Goats	225	175	208	259	15.11%
Horses	1660	1437	1323	1339	-19.34%
Meat Chickens	2755	2770	1473	101602	3587.91%
Laying Chickens	10251	4578	2165	6577	-35.84%
Sheep	2404	1580	1257	1233	-48.71%
Swine	1192	818	218	468	-60.74%
Total	26125	14956	10592	115704	342.89%
<i>Source: NJ Farmland Assessment</i>					

While livestock sales were on the rise in the county in 2002 (up from \$4.1 million in 1997 to \$6.2 million) inventory in Hillsborough Township is waning, as it is county wide. The county enjoyed an upward spike in beef cattle in 2000, but Hillsborough's inventory has been steadily declining since 1983, dropping well more than 50 percent. Dairy inventory has dropped as well, although an informal survey indicates that inventory may be up in 2007 over 2004 figures. Richard Norz, of Norz-Hill Farm, reported 290 mature and 210 young dairy cattle on hand as of October 2007, (*Richard Norz*)<sup>6</sup> while the 2004 farmland assessment report showed just 258 mature and 150 young dairy cattle in the entire township. Although some farms may stock a few dairy cattle for their own purposes or as dairy replacement stock, Norz-Hill is the only dedicated dairy farm left in the township. This is one of two dairy farms left in the county. (*Nicholas Polanin*)<sup>7</sup>

According to the *2008 Somerset County Comprehensive Farmland Preservation Plan*, a number of factors have combined to decrease dairy production. Development pressures created locally high land prices during the 1980's, which subjected most of Somerset County to elevated property taxes and related property expenses. Land-intensive agriculture operations, such as dairy farms, were especially hard hit, causing many dairy farmers to sell their land or transition to other agricultural land uses. In addition, the rising expense of running the operation makes it difficult to run a profitable business. Erosion of local dairy support services, such as creameries and livestock veterinarians, has also hurt County dairy farmers. Currently, Norz-Hill Farm sells its milk to Readington Farms in Whitehouse, Hunterdon County. (*Sam Conard*)

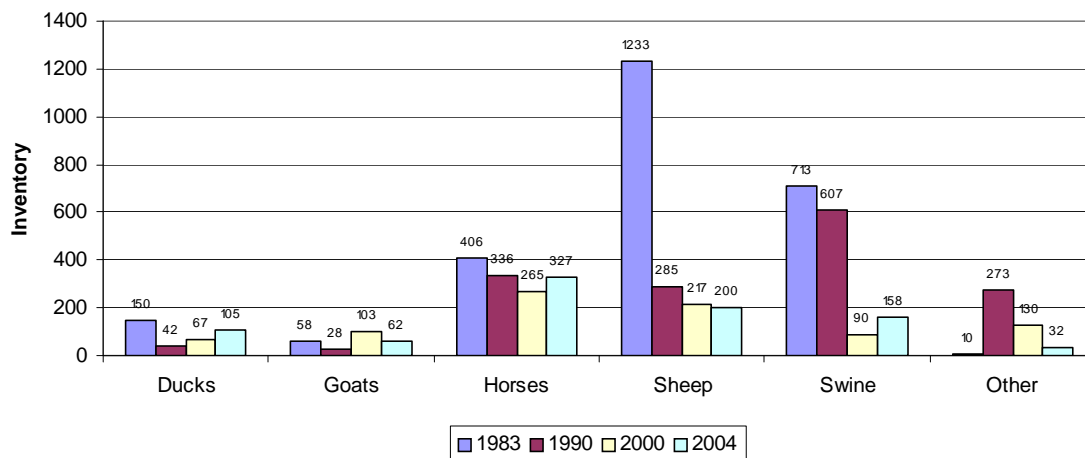
In addition, dairy and other livestock farming have borne the brunt of many of the Right-to-Farm issues, with manure and other odors raising neighbor complaints. When the dairy industry was strong in the township, there were more conflicts than there are now. As the number of livestock is reduced, there has been a corresponding drop in conflicts. In Sam Conard's opinion, people's attitudes have changed over the years. The new people moving into the township are more accepting of the farms and their agricultural operations. (*Sam Conard*)

### Hillsborough Township Cattle Inventory 1983-2004

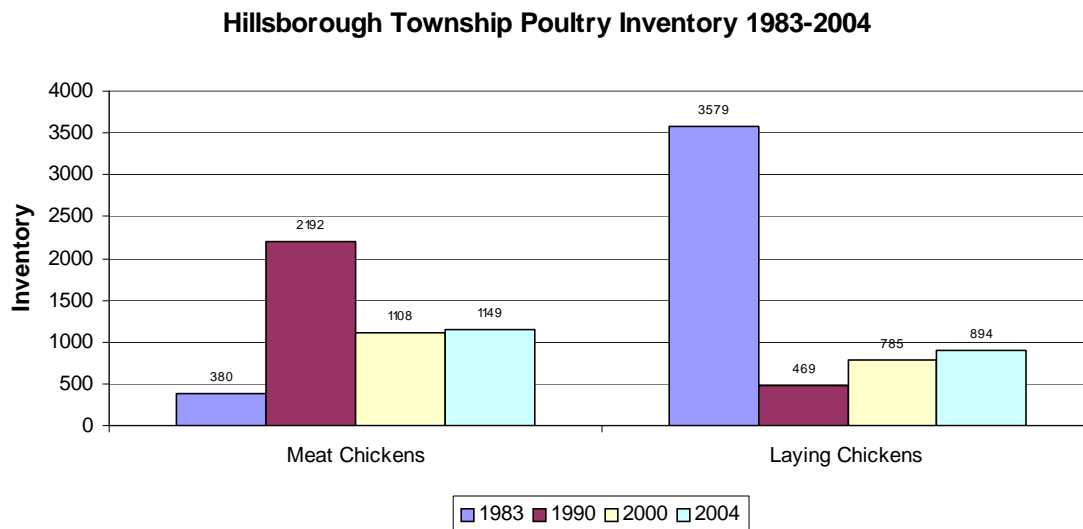


Sheep and hog inventories have declined as well. There are strict zoning ordinances governing the minimum size for farms with swine operations (25 acres) and limiting the number of swine on any one farm to 100. The horse population has varied over the years, but not substantially, and appears to be on the rise again, which would track with trends in the county as a whole. Behind dairy and non-dairy cattle, horse farms were the most significant contributors to livestock sales in Somerset County in 2002. In Hillsborough Township, horses represent the largest livestock sector by inventory, other than dairy cattle, with 327 animals reported in 2004. Sales figures for horses do not represent the whole story, since many horse farms focus on training, boarding, instruction and other services, in addition to or in place of breeding. The earnings from these activities are not calculated by the overall horse sales figure. In addition, horse farms provide an outlet for the hay grown by township farmers.

### Hillsborough Township Livestock Inventory 1983-2004



Poultry inventory has seen dramatic changes, with a steep rise in meat chickens and an even steeper drop in laying chickens between 1983 and 1990. However, inventories have stabilized in more recent years and rose slightly between 2000 and 2004.



### **C. & D. Support Services and other Agricultural-related Industries**

Hillsborough Township has a number of businesses that support farmers, but farmers also go out of town, out of county or out of state for the services and supplies they need. Belle Mead Co-Op on Township Line Road provides feed, seed and nursery supplies. In addition to Belle Mead, Hillsborough Stone Supply and Lowe's offer nursery supplies. Small farm operations that do their own fertilizing can purchase from Belle Mead as well. Most large farming operations have fertilizer custom applied. There are three main chemical companies in New Jersey that local farmers contract with for fertilizer application: Plant Food Chemical Company, Cranbury; Gromark Farm Services, Bloomsbury; and Crop Production Services, Allentown. For bulk feed needs, other than Belle Mead, a couple of large feed grinding operations in eastern Pennsylvania (Brown's and Penfield's) deliver to the Hillsborough area.<sup>8</sup> (*Sam Conard, Chair, Hillsborough Township Agricultural Advisory Committee*)

There are no large farm equipment dealers in Hillsborough, but a new dealer, Central Tractor Supply, opened in Flemington last year. Many farmers use suppliers in eastern Pennsylvania for both their equipment and parts needs. "Service is better now than 20 years ago," says Sam Conard, "because we call up and get a UPS delivery the next day." Lowe's in Hillsborough, the Agway in Raritan, Cammps Hardware and the John Deere dealership in Montgomery Township, and local hardware stores also serve as important depots for agricultural tools, equipment and supplies. For building construction, Updyke's, a private supplier in Montgomery Township, is the closest for lumber, and the John Deere dealership has plumbing supplies. When construction services for barns and other outbuildings are needed, local farmers generally draw from companies in Pennsylvania, such as Morton Buildings. Providers of fencing are numerous, many of them located in Lancaster County, Pennsylvania. (*Sam Conard*)

For livestock sales and purchases, most farmers use the Hackettstown Auction Market, but there are also auctions in New Holland and Leesport, Pennsylvania. The township's dairy farmer also merchandises directly from his farm. (*Sam Conard and Richard Norz*)

There are at least two large animal veterinarians listed for the Hillsborough area in the New Jersey Equine Advisory Board Directory of Facilities: Dr. Jon Higgins and Dr. John Maccia. (*2006 Directory of Facilities*)<sup>9</sup> The Horse and Rider Shop, offering horse feed, tack, rider and horse care, is located on Route 206 in the township.

Two sheep shearers are located in Hillsborough Township: Rebecca Gunther and Brynn Kirby, according to the Green Pages directory of Service Providers available on the Rutgers Cooperative Extension of Salem County web site.<sup>10</sup> This site lists providers in many agriculture-related categories in New Jersey, Pennsylvania and, in some cases, nationwide. These categories include: aerial applicators and certified crop advisors, livestock-related services such as haulers, slaughterhouses, inseminators, veterinarians, hoof trimmers and harriers; suppliers of fertilizers, lime, chemicals, feeds, seeds and equipment; construction companies specializing in barns, fences and other agriculture-related structures; and insurance and legal resources. To supplement the listings in the Green Pages, the Agricultural Advisory Committee may want to consider conducting a farmer survey to pool resources on available support services.

For financial assistance, the predominant provider is First Pioneer Farm Credit in Lebanon. (*Sam Conard*) In addition, the USDA Farm Service Agency office in Frenchtown serves Somerset County farmers. It offers farm ownership and operating loans to small farmers and beginning farmers who cannot obtain conventional loans or commercial credit from a bank, Farm Credit System institution or other lender. (*USDA Farm Service Agency*)<sup>11</sup>

Hillsborough Township farmers benefit from the services of private organizations and public agencies as well. These groups work together to undertake various initiatives that substantively improve the township's and the county's agricultural industry. These groups include the Hillsborough Agricultural Advisory Committee, Somerset County Board of Agriculture and Agriculture Development Board, the New Jersey Farm Bureau, Rutgers Cooperative Extension of Somerset County, Somerset 4-H Club, Duke Farms, Somerset-Union Soil Conservation District, and the Natural Resource Conservation Service, among others. These organizations offer a variety of services including planning assistance, financial aid, and marketing support. *Chapter 6* contains a more thorough discussion of these groups and their efforts.

The community markets of Somerset County provide another valuable service for local farmers. They attract large numbers of nearby and far-away residents to the county and its municipalities with the sole purpose of buying local produce. Local produce is very popular among New Jersey residents, and farmers' markets create a direct link between Somerset County farmers and their potential customers. Community markets also serve as excellent venues for selling "value added" products that can significantly bolster

farmers' cash flows. Below is a listing of the community markets that currently operate in Somerset County: (*New Jersey Department of Agriculture Jersey Fresh website*)<sup>12</sup>

<b>Market:</b>	<b>Bernardsville Farmers' Market</b>	<b>Bound Brook Farmers' Market</b>	<b>Franklin Township Farmers' Market</b>	<b>Montgomery Farmers' Market</b>	<b>North Plainfield Farmers Market</b>
<b>Address:</b>	Rt. 202 & Clairmont Road, Bernardsville	Main Street - NJ Transit Parking Lot	720 Hamilton Street, Franklin Township	Route 206 & Route 518, Montgomery	Somerset & Race Streets, North Plainfield
<b>Phone:</b>	(908) 766-5836	(908) 894-0515	(732) 873-2500, x 362	(908) 359-9665	(908) 755-1526
<b>Contact:</b>	Christa O'Conner	Karen Fritz	Efren Dato	Kim Rowe	Doug Singletary
<b>Open:</b>	June 9 – November 24, Saturdays, 9 am - 2 pm	June 23 – October 27, Saturdays, 9 am - 2 pm	May 12 – November 17, Saturdays, 9am -2 pm	June 14 – October 25, Thursdays, 12:30pm - 6:30pm	July 14 – September 27, Saturdays, 9am - 2pm
<b>Products:</b>	Variety of fruits and vegetables	Variety of fruits and vegetables	Variety of fruits and vegetables	Variety of fruits and vegetables	Variety of fruits and vegetables
<b>Other:</b>	WIC and Senior FMNP checks accepted by some farmers	WIC and Senior FMNP checks accepted by some farmers	WIC and Senior FMNP checks accepted by some farmers	WIC and Senior FMNP checks accepted by some farmers	WIC and Senior FMNP checks accepted by some farmers

Direct marketing efforts by Hillsborough farmers including the following on-farm operations listed on the *Jersey Fresh* website: (*Jersey Fresh*)<sup>13</sup>

**Roadside:**

- Alan Ames, 175 Mountainview Road; corn, tomatoes, pumpkins
- Hillsboro Farm, 219 Hillsborough Road; vegetables, sweet corn, apples, pumpkins, gourds
- Norz-Hill Farm & Market, 116 South Branch Road; vegetables, apples, peaches, pumpkins, gourds

**Pick Your Own:**

- Norz-Hill Farm & Market, 116 South Branch Road; pumpkins, gourds, winter squashes
- Sunhaven Farms, 1018 Orchard Drive; strawberries; vegetables; mums

In addition, certain Hillsborough restaurants make a point to use Jersey Fresh produce and seafood harvested in New Jersey when in season. These restaurants display a sign with the Jersey Fresh logo. They include:

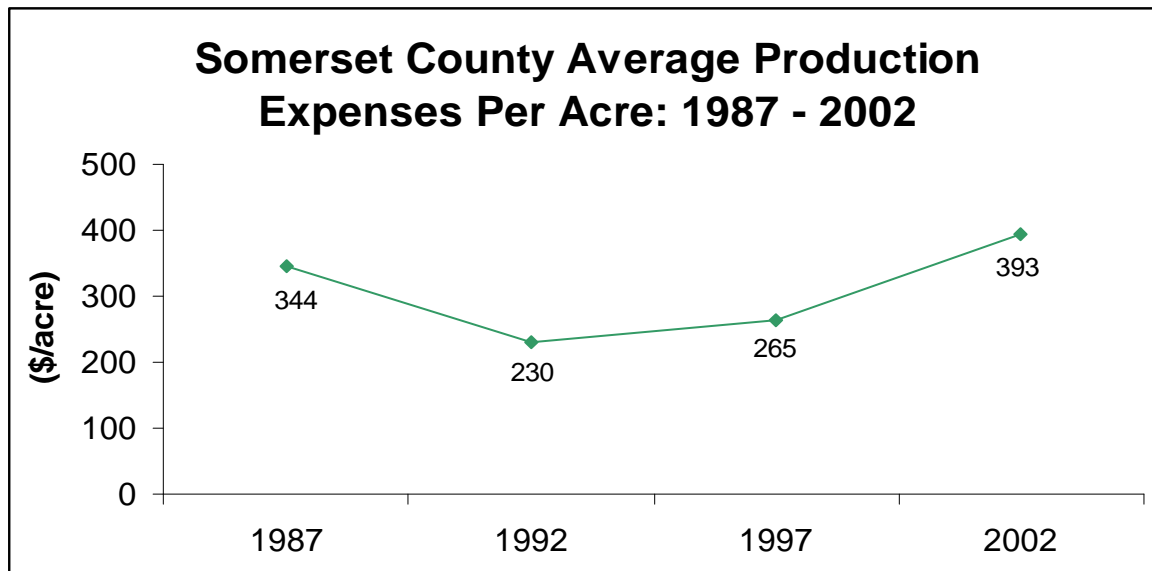
- Charlie Brown's Steakhouse / 381 Route 206 North
- Deluca's Restaurant & Pizzeria / 381 Triangle Road
- Hillsborough Star Diner / 842 US Highway 206
- International House of Pancakes #4670 / 260 Us Highway 206
- Royce Brook Golf Club / 201 Hamilton Road

(*NJDA Jersey Fresh*)<sup>14</sup>



### ***Future of Agriculture***

As documented in the *2008 Somerset County Comprehensive Farmland Preservation Plan*, the future of agriculture in Hillsborough is affected by many of the same pressures as other areas within Somerset County, which includes market forces and social trends that are occurring throughout New Jersey. These trends have already begun to redefine the traditional agricultural industry and will continue to change the agricultural landscape in the near future. Among the most substantial trends shaping local agriculture is the increase in the prices of essential agricultural inputs such as farm labor, property taxes, and fuel energy. Rising land, gas, and transportation prices have combined to make farming in Somerset County and its municipalities more costly than it has ever been before. (*2002 Census of Agriculture*)



The impacts from rising input prices will be multifaceted. Full-time farmers, whose primary incomes are from their agricultural operations, may find it increasingly difficult to live in a county that continues to add affluent residents and businesses that cater to them. Farms will continue to shrink in size, and farmers will rent, instead of own, increasing proportions of the ground that they work. Farmers will also show a growing proclivity for high market value products that do not require large acreages of land, such as nursery crops (see *Production Expenses per Acre* chart above). In addition, Somerset County farmers are likely to continue producing “value added” products, such as homemade jams and salsas, in order to maximize their cash flows. Organic goods offer another opportunity for local farmers to add value to their products. In Hillsborough Township, the only two sectors that have shown an increase in acreage between 1990 and 2004 are nursery and equine operations, which don’t require large acreages. In addition, many farmers are, like Mark W. Kirby, working land they rent or lease. Many, like Sam Conard, work a number of noncontiguous parcels. Four roadside stands and/or pick-your-owns are listed on the *Jersey Fresh* website, but a number of other farmers will sell in season from their farms, particularly pumpkins. (*Mark Kirby and Sam Conard*)<sup>15</sup>

Another challenging trend facing Somerset County farmers is accommodating growing amounts of non-agricultural land uses. Somerset County remains very attractive to home buyers, and residential and commercial areas continue expanding into previously agricultural and natural areas. This has important implications for the future of farming in the county. Growing residential populations offer farmers an expanded consumer base to whom they can sell their products. Many county farmers, such as the four roadside and pick your own operations in Hillsborough listed previously, have already capitalized on the influx of new residents by establishing farm stands and similar agritourism attractions on their farms. Farmers also have begun to provide agricultural services that more effectively cater to nearby residents, such as horse boarding and training. As noted above, equine operations are on the rise in Hillsborough. These practices are expected to occupy increasing shares of future agricultural sales in Somerset County and Hillsborough, providing a local outlet for Hillsborough Township hay growers.

Unfortunately, growing residential and commercial areas pose significant problems for county and township farmers as well. Some farmers are directly displaced by new development that takes place on and around their farms, although Hillsborough Township has been working to discourage such development in prime agricultural areas (see *Chapter 3*). Other farmers are indirectly displaced by right-to-farm conflicts or increased production costs associated with farming in suburban environs. For example, water rights are a common source of conflict between farmers and their neighbors. Due largely to residents' fears of water pressure drops and groundwater contamination, the amount of irrigated land in Somerset County fell nearly 50% between 1997 and 2002. (*2002 Census of Agriculture*) The 2004 farmland assessment reported no irrigated acres in Hillsborough. Those farmers that wish to irrigate find it increasingly difficult to get the permitting from the NJDEP and/or the municipality.

Hillsborough Township's high concentration of prime, statewide and local importance soils, combined with its strong local commitment to farmland preservation and the enforcement of its Agricultural District zoning work together to support agriculture into the future. Every step Hillsborough Township and its farmers take to preserve additional acres of farmland is another step toward protecting the critical mass necessary to ensure agricultural viability on an ongoing basis. Hillsborough is working towards implementation of a Transfer of Development Rights (TDR) program. This is another tool added to the mix of other farmland preservation programs already in place at the state, county and municipal levels to make land preservation attractive and possible. TDR has the added benefit of directing growth and creating additional preservation opportunities without the need for additional public funding.

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- <sup>1</sup> Somerset County Agriculture Development Board. *Somerset County Agricultural Master Plan – Executive Summary*. 2001.
- <sup>2</sup> United States Department of Agriculture: National Agricultural Statistic Service, 2002 Census of Agriculture. [http://www.nass.usda.gov/Census\\_of\\_Agriculture/index.asp](http://www.nass.usda.gov/Census_of_Agriculture/index.asp). Accessed June 2007.
- <sup>3</sup> New Jersey Office National Agriculture Statistics Service. [http://www.nass.usda.gov/Statistics\\_by\\_State/New\\_Jersey/index.asp](http://www.nass.usda.gov/Statistics_by_State/New_Jersey/index.asp). Accessed June and August 2007.
- <sup>4</sup> New Jersey Farmland Assessment. County Summary. County=Somerset. 2004 (tax year 2005), 2000 (tax year 2001), 1990 (tax year 1991) and 1983 (tax year 1984).
- <sup>5</sup> Personal communication with Sam Conard. November 10, 2007.
- <sup>6</sup> Personal communication with Richard A. Norz, November 12, 2007.
- <sup>7</sup> Personal communication with Nicholas Polanin. RCE of Somerset County. July 2007.
- <sup>8</sup> Personal communication with Sam Conard. January 12, 2009.
- <sup>9</sup> The New Jersey Equine Advisory Board *2006 Directory of Facilities*. <http://www.jerseyequine.nj.gov/06equinefacilities.pdf>. Accessed November 12, 2007.
- <sup>10</sup> Rutgers Cooperative Extension of Salem County. Green Pages: An Agricultural Resource Guide. <http://salem.rutgers.edu/greenpages/>. Service Providers: <http://salem.rutgers.edu/greenpages/service.pdf>. Accessed January 2009.
- <sup>11</sup> U.S. Department of Agriculture. Farm Service Agency. Farm Loan Programs. <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=landing>. Accessed January 13, 2009.
- <sup>12</sup> New Jersey Department of Agriculture. Jersey Fresh. <http://www.state.nj.us/cgi-bin/agriculture/jerseyfresh/search.pl?type=urban&county1=somerset>. Accessed November 2007.
- <sup>13</sup> New Jersey Department of Agriculture. *Jersey Fresh* website. <http://www.state.nj.us/jerseyfresh/>.
- <sup>14</sup> New Jersey Department of Agriculture. *Jersey Fresh* website. New Jersey Restaurants and Jersey Fresh/Jersey Seafood. <http://www.state.nj.us/jerseyfresh/jfresteraurants.htm>
- <sup>15</sup> Personal communication with Mark W. Kirby and Sam Conard. July and November 2007.



## **CHAPTER 3:**

# **LAND USE PLANNING IN HILLSBOROUGH TOWNSHIP**

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Land use patterns in Hillsborough Township have been driven, in large part, by existing infrastructure and natural resource capacity, as recognized in the *1965/1966 Master Plan (Master Plan)* and ensuing amendments. Infrastructure supporting development exists mostly in the eastern portion of the township. Logistical and fiscal limitations on extending infrastructure such as public water and sewer service to the western portions of the township have combined with limitations to well and septic system capacity imposed by the geology of the area. Master Plan amendments and development regulations in recent years have recommended and implemented planning and zoning that encourages continued development in the eastern portion of the township and limits development in the western portion. The establishment of Agricultural and Mountain Conservation Districts, laid out in the *Master Plan Amendment for the Agricultural and Mountain Conservation Districts (2002 Master Plan Amendment)*, adopted in October 2002, clearly indicates Hillsborough's recognition of the importance that agriculture and the agricultural landscape play in the character, economy and physical viability of the community.

The State of New Jersey and Somerset County have undertaken a number of land use planning initiatives aimed at improving the quality of life in the county and in the municipalities it encompasses. These initiatives have produced various planning tools that have been instrumental in local policy-making decisions. Many of these studies and plans identify the preservation of agricultural land as an essential part of the effort to enhance quality of life for Somerset County residents. This chapter reviews the findings from both municipal and regional land planning initiatives and analyzes their implications for current farmland preservation efforts in Hillsborough.

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

The *State Development and Redevelopment Plan (SDRP)*<sup>1</sup> outlines general policy objectives concerning land use and future development in the state. The SDRP originally identified five principal Planning Areas with different sets of goals and guidelines that are considered appropriate to determine development activities. These Planning Areas are identified as Metropolitan (PA1), Suburban (PA2), Fringe (PA3), Rural (PA4) and Environmentally Sensitive (PA5) lands. The SDRP also identified Designated Centers where future development and redevelopment activities are most appropriate and will be actively promoted. Centers are designated 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.

The 2001 State Plan Policy Map showed Hillsborough's land divided among four of the five principal planning areas, excluding the Metropolitan area designation. Within Hillsborough, the map delineated sections of rural, environmentally sensitive, fringe and suburban planning areas. In addition, the map shows a proposed town center, a proposed village center (Flagtown) and proposed hamlets (South Branch and Neshanic). (see *Policy Map of the New Jersey State Development And Redevelopment Plan: Somerset County and Hillsborough Township Proposed Amendments* maps in this chapter)

The Agricultural District is primarily mapped as Planning Areas 4 (Rural Planning Area), 4B (Rural/Environmentally Sensitive) and 5 (Environmentally Sensitive). A small portion of the Agricultural District is designated as PA3 (Fringe Planning Area). The Mountain Conservation District is primarily mapped as PA5.

The State Plan is now in its third round of Cross-Acceptance, which began in 2004. The latest mapping, incorporating some 2006 data, reflects additional planning area designations for parks and natural areas (6,7,8), as well as Critical Environmental Sites (CASs), which are environmentally sensitive areas located within PAs 1–3, and Historical and Cultural Sites (HCS).

Listed below are definitions of the main planning area designations and how they affect Hillsborough.

*Metropolitan Planning Areas (PA1)* comprise the most densely 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. Somerset County has 20,536 acres in the Metropolitan Planning Area, none of which is in Hillsborough Township. However, the Somerset County Regional Center in Bridgewater, Raritan, and Somerville, which borders Hillsborough on the north, and Manville Borough, adjoining Hillsborough in the northeast, fall within the Metropolitan Planning Area.

*Suburban Planning Areas (PA2)* are relied upon to support most of the new development that will occur in New Jersey while maintaining the character of its existing communities. Growth in suburban town centers is especially encouraged in order to help protect and preserve the natural resources that are sustained in these areas. The Suburban Planning Area is meant to complement metropolitan areas, and is most commonly found outside heavily urban areas. The Suburban Planning Area is the most common Planning Area in the County. In Hillsborough, the Suburban Planning Area encompasses the proposed town center in the eastern portion of the township and abuts Manville, which is designated as PA1, a Metropolitan Planning Area. The Suburban Planning Area also extends a thin arm northward towards the Raritan River, intersecting and dividing the

section of Hillsborough proposed as PA4. There are 1,962 acres of active agricultural lands in the Suburban Planning Area, of which 476 acres are preserved.

*Fringe Planning Areas (PA3)* 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. The Fringe Planning Area in Hillsborough Township surrounds and encompasses neighboring Millstone Borough, which is carved out of the eastern section of the township. There are 337 acres of active agricultural lands in the Fringe Planning Areas. There are 37 acres of preserved farmland.

*Rural Planning Areas (PA4)* 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. In Hillsborough Township, this includes two large areas of land that encompass portions of the Agricultural District but also contain certain residential districts. There are 2,206 acres of active agricultural lands in the Rural Planning Area. There are 872 acres of preserved farmland.

*Rural/Environmentally Sensitive Planning Areas (PA4B)* are suitable for agricultural development, but contain environmentally sensitive features that must be taken into account. In Hillsborough, this designation is proposed for the northwest sector of the township, bounded by the South Branch of the Raritan, River Road and Wertsville Road. In addition, a section of PA5 extending north from Sourland Mountain has been redesignated as PA4B on the Preliminary State Plan Policy Map dated November 2004. There are 1,425 acres of active agricultural land in the Rural / Environmentally Sensitive Planning Area. There are 554 acres of preserved farmland.

*Environmentally Sensitive Planning Areas (PA5)* contain lands where natural resource preservation should be the primary planning consideration. Development is minimized or constrained to existing centers while large contiguous natural areas are to be preserved as open space. PA5 roughly corresponds to important natural features, such as the Raritan and Millstone Rivers, as well as areas of steeply sloping topography, including the Sourland Mountains. The largest concentrations of PA5 are the southwestern, or Sourland section of the township, and a large part of the Agricultural District in the northeast. Narrower strips of PA5 border the Raritan and Millstone Rivers. There are 1,123 acres of active agricultural lands in the Environmentally Sensitive Planning Area. There are 702 acres of preserved farmland.

The table below provides a summary of the breakdown of agricultural land and preserved farm acreage by State Planning Area. As can be seen the greatest percentage of both preserved farm acres and active agriculture can be found in the Rural Planning Area (PA4A), followed by the Rural/Environmentally Sensitive Planning Area (PA4B), in alignment with the intent of the State Plan. The Suburban Planning Area (PA2), which

covers the largest part of the township, ranks between PA4A and PA4B in volume of active agricultural acres (1,962), but this represents just 14% of PA2's 14,161 acres. The Environmentally Sensitive Planning Area (PA5) ranks second to PA4A in terms of preserved farm acres, but these 702 acres represent just 6% of PA5's total acreage of 11,746.

<b>Hillsborough Township State Planning Areas Active Agricultural Lands and Preserved Farms Compared to Total Acres</b>					
	<i>Acres</i>				
<i>State Planning Area</i>	<i>Total Lands</i>	<i>Active Agriculture</i>	<i>% of Total</i>	<i>Preserved Farms</i>	<i>% of Total</i>
Suburban (PA2)	14,161	1,962	14%	476	3%
Fringe (PA3)	1,946	338	17%	37	2%
Rural (PA4A)	3,842	2,206	57%	872	23%
Rural/Environmentally Sensitive (PA4B)	3,040	1,425	47%	554	18%
Environmentally Sensitive (PA5)	11,746	1,123	10%	702	6%
State Park (PA8)	465	119	26%	0	0%
<i>Sources: 2002 Land Use Land Cover; Farmland Preservation Program</i>					

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 development plans to the Office of Smart Growth that are subsequently endorsed.

There are various types of center designations that vary according to the characteristics of the urban areas being considered. Different policies concerning land use and the promotion of future development opportunities are applicable in each.

*Urban Centers* are the most intensively utilized areas in the state. They serve as concentrations for corporate headquarters, industry, residential areas, and culture. Somerset 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. Somerset County's Designated Regional Center – the Bridgewater-Raritan-Somerville Regional Center – lies to the north of Hillsborough.

In designing the *Strategic Master Plan* for this center, Somerset County considered its impact on adjoining Hillsborough:

*“The lands in Hillsborough which border the Regional Center are zoned Agriculture. A Master Plan Reexamination report dated 1999 recommends that agricultural uses be preserved in this area of the township, which functions as the*

*environs for the Regional Center. The area on both sides of the river is also subject to serious environmental constraints, i.e., floodplains. This Regional Center Strategic Plan recommends the establishment of a greenway along the Raritan River with Raritan, Somerville and Bridgewater, which will provide an additional buffer between the undeveloped areas of Hillsborough Township and the existing land uses in the Regional Center.” (Somerset County Regional Center Strategic Plan)<sup>2</sup>*

*Towns* are smaller than Urban and Regional Centers, usually less than two square miles in size, and serve as local concentrations of commerce and government activity. They commonly support residential neighborhoods and offer access to local goods and services. The 2001 State Plan Policy Map shows a proposed town center for Hillsborough, but the township has moved forward with its own plan for a town center, as adopted in its 2005 *Master Plan Amendment*. The town center proposed on the first iteration of the State Plan Policy map is no longer reflected on the November 2004 iteration (see *Hillsborough Township Planning Areas* in this chapter).

*Villages* are residential neighborhoods that have access to some local public and commercial facilities. Villages are small, occupying less than one square mile. The State Plan at one time proposed the Flagtown section of Hillsborough as a village designation, but that has been removed from the latest map. Flagtown falls within PA2 (suburban) on the State Plan Policy Map.

*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. Two hamlets were originally proposed for Hillsborough: Neshanic and South Branch, but the latest map indicates that they should be designated Historic and Cultural Sites (HCS). These are shown on an overlay to the 2004 Preliminary State Plan Policy map that also shows preserved farmlands and Critical Environmental Sites (CES).<sup>3</sup>

In 2005, the County undertook a municipal questionnaire as part of cross-acceptance, asking each municipality to name its top three planning goals on the local and regional levels. Hillsborough Township’s goals were:<sup>4</sup>

Priority	Local	Regional
1	Create town center	Complete route 206 bypass and improvements
2	Preserve farmland and open space	Preservation of the Sourland Mountains (Hillsborough Township supports state designation of the Sourland Mountains as a Special Resource Area, as proposed by the Sourland Mountains Planning Council)
3	Provide for appropriate reuse of Belle Mead / Somerville VA Depots	Duke Estate preservation and limited development as a regional historic and cultural resource

In addition, in the *March 2005 Cross-Acceptance Final Report*, the Township stated its awareness of and willingness to work in concert with Smart Growth initiatives:



“The Township of Hillsborough is committed to the principles and goals of Smart Growth, as evidenced by the *2002 Master Plan Amendment* and subsequent zoning revisions intended to make large-scale development less attractive in the Agricultural and Mountain Zone Districts. Ten acre zoning in the Agriculture Zone and fifteen acre zoning in the Mountain Zone is intended to conserve the resources in this remaining rural area while also providing a serious attempt to stop sprawl development. Through the rezoning and aggressive open space and farmland preservation program, Hillsborough intends to redirect most new development back towards the proposed Town Center and the surrounding developed core where the appropriate infrastructure is available. This will only be possible with the continuing assistance of the appropriate state and county agencies in the following areas:

- Route 206 Bypass – Completion of the bypass through Hillsborough is crucial. The existing improvements to Route 206 in the northern section of the township have created a bottleneck that affects local residents, as well as commercial and commuter traffic. Since this is the primary north-south access through Hillsborough, the bypass must remain a high priority at the state level. Once completed, existing Route 206, where cut off by the bypass, will become ‘Main Street’ within the Town Center. [Note: The *Master Plan Amendment – Phase 2* for the creation of the Town Center and Main Street was adopted in October 2005].
- West Trenton Commuter Rail Line – With highway access increasingly congested and somewhat limited through Hillsborough, the potential reactivation of the West Trenton Commuter Rail Line could serve as a viable option for commuters. A rail station on the proposed line has been designated in Hillsborough. The township has expressed an interest in working with state and county agencies to ensure an appropriate station location designated to complement the proposed Town Center.
- Town Center – As previously noted, cooperation with state and county agencies will be necessary to ensure the completion of the Route 206 bypass, resulting in the creation of Main Street as the focus of the proposed Town Center. The proposed re-activation of the West Trenton Commuter Rail Line and an appropriate rail station location are also encouraged as complementary to the Town Center. Assistance by state and county agencies will also be required for necessary infrastructure improvements, such as a pedestrian friendly, traffic-calming feature at the intersection of Route 514 and Main Street (existing Route 206).
- Transfer of Development Density – The Township needs to establish a ‘limits of development’ boundary to include the existing developed core, including the proposed Town Center. This may involve changes to portions of the sewered and non-sewered area, as appropriate, in order to fine-tune the areas where any potential development would be encouraged in the future. Sending and receiving areas could then be established to promote the transfer of development density from areas that are identified to be preserved to the proposed Town Center. Cooperation with the NJDEP will be needed to effectively make any changes to the sewered and non-sewered areas in Hillsborough on a timely basis.”

The Township enumerated the following strategies and initiatives, in addition to their master plans and land use ordinances, as supportive of the CES and HCS policies contained in the *2004 Preliminary Plan: Municipal Open Space Trust Fund, Tree Mitigation Ordinance and Designated Historic Districts*.

Upon review of the Preliminary Plan, the township made the following proposed amendments to the State Plan Policy Map (see *Hillsborough Township Proposed Amendments Map* in this chapter):

- PA2 to PA4 – two areas – to include existing preserved farms and approved Planned Incentive Grant (PIG) Farmland Preservation Project Areas;
- 2-PA5 to PA3 – “Claremont” vicinity north of Millstone Borough – “to better reflect existing development and accommodate future sanitary sewer service for this neighborhood where failing septic systems has become a significant problem”;
- PA3 to PA5 – for a section along the Millstone River, “to provide a greenbelt between the historic Millstone village area and Hillsborough’s proposed commercial TOD receiving area”; and
- New overlays to reflect local parks and open space (PA6), including additional open space parcels; updates to the preserved farm overlay; and delineation of the proposed Sourland Mountains Special Resource Area (see *Special Resource Areas* discussion below).

Hillsborough has indicated that it is interested in pursuing Plan Endorsement. Municipalities voluntarily choose to seek Plan Endorsement, a review process that ensures the goals of the municipality align and coordinate with the goals and policies of the State Planning Act. The benefits of Endorsement include financial and technical incentives, including enhanced scoring for grant funding, low-interest loans, tax credits, prioritized technical assistance and coordinated regulatory review. The process includes 10 steps: the pre-petition collection of relevant municipal planning documents and meeting with the Office of Smart Growth and other state, regional and county agencies; establishment of a municipal Plan Endorsement Citizens’ Advisory Committee; completion of a Municipal Self-Assessment report; an opportunities and constraints assessment conducted by state agencies; community visioning (including three workshops and two public hearings); Office of Smart Growth consistency review of the petition with the State Plan; municipal adoption of an Action Plan and state issuance of a Certificate of Eligibility; an Office of Smart Growth Recommendation Report and Drafting Planning & Implementation Agreement for State Planning Commission review; State Planning Commission Endorsement; and finally, ongoing monitoring and municipal eligibility for Plan Endorsement benefits. (*Plan Endorsement Process*)<sup>5</sup>

Hillsborough collected and submitted the necessary pre-petition documents in 2007 and held their pre-petition meeting. Further, the Township is awaiting resolution of issues with their proposed Transfer of Development Rights program before taking further action on the Endorsement process. (*Robert Ringelheim*)<sup>6</sup>

## **B. Special Resource Areas**

The State Plan supports the recognition of Special Resource Areas (SRA). SRAs are defined as having “unique characteristics or resources of statewide importance which are essential to the sustained well being and function of its own region and other regions or systems—environmental, economic, and social—and to the quality of life for future generations.” The Highlands Region is the first and currently the only SRA. To ensure the continued uniqueness of such areas, or regions, which straddle counties and municipalities, the State Planning Commission seeks to foster regional planning initiatives for these areas. (*Office of Smart Growth*)<sup>7</sup>

The Highlands region covers 13% of New Jersey’s land area, including five municipalities in northern Somerset County – Bedminster and Bernards Townships and Bernardsville, Far Hills and Peapack Gladstone Boroughs. Hillsborough Township is not directly adjacent to the Highlands Region, but it does share the North and South Branch Raritan Watershed (WMA8) with communities in the Highlands Region. The *Highlands Regional Master Plan* not only focuses on the value of protecting these critical water resources but also addresses agricultural management and sustainability as another critical resource worth protecting. (*Somerset County Farmland Preservation Plan*)

Of direct import to Hillsborough is the proposed Sourland Mountain Special Resource Area recommended to the State by the Sourland Planning Council and supported by the municipalities it traverses. The Sourlands region is an area of approximately 62 square miles. Stretching from Hillsborough to Hopewell and West Amwell, it covers parts of three counties, seven municipalities and four major watersheds. Its resources include agricultural lands, surface and groundwater resources, and a belt of contiguous woodlands that stretches along the ridge of 17-mile-long Sourland Mountain. Supported by a Smart Growth Grant, the Sourland Planning Council has released for review a draft Sourland Mountain Conservation Management Plan (Sourland CMP). (*Sourland Planning Council*)<sup>8</sup> Among the CMP’s goals are reducing the loss of farmland, forests, wetlands, wildlife habitats, and scenic vistas; maintaining the rural character of the communities, specifically by identifying an agricultural retention area; and securing SRA designation under the SDRP. (*Draft Sourland CMP*)<sup>9</sup>

## **C. County and Municipal Planning Documents and Development Regulations**

### ***1987 Somerset County Master Plan & 1998 Master Plan Re-Examination Report***

The *1987 Master Plan* identifies the prevention of sprawl to be among the county’s most important planning objectives. Instrumental to this goal was the preservation of contiguous agricultural land where roads and sewer infrastructure were scarce and large farm clusters existed. These farm belts were to provide many of the natural services that were diminished by sprawl-type development, including recreation, water supply, stormwater control, and wildlife protection in addition to agricultural retention. The *Master Plan* identified four Rural Preservation Areas that fit these criteria – the Millstone

Valley, the Sourland Mountains, the Neshanic Valley, and the Upper Raritan Watershed (URA). (2008 *Somerset County Comprehensive Farmland Preservation Plan*)<sup>10</sup> The URA borders Hillsborough to the north. Portions of the other three areas fall within Hillsborough's boundaries and, for the most part, fall within the Agricultural and Mountain Conservation Districts, where limiting development and preserving farmland and open space are identified objectives.

The 1987 *Master Plan* proposes several strategies to preserve farmland in these areas including; easement purchases, local planning and zoning reforms, and mandatory set-asides for open space and farmland. Hillsborough Township's active Planned Incentive Grant (PIG) program, Open Space Trust Fund, Agricultural Advisory Committee, Agricultural and Mountain Conservation District master plan amendment and proposed implementation of a Transfer of Development Rights (TDR) initiative all support the County Master Plan's objectives.

The 1998 *Re-Examination Report* emphasizes the importance of farmland to the unique "sense of place" that exists in Somerset County as well as its role in providing many local fiscal and natural benefits including positive ratables, local economic growth, and aquifer recharge capacity. The county-wide goal for farmland preservation that was set by this Report was 8,100 total acres with the provision that more should be preserved in order to maintain a "critical mass" of agricultural land in the county and keep it economically competitive with other areas in New Jersey. Hillsborough Township has preserved 2,367 acres and has sixteen farms targeted for preservation in two municipal PIG project areas. (*Somerset County Comprehensive Farmland Plan*)

#### ***2007 Somerset County Smart Growth Strategic Plan***

The 2007 *Somerset County Smart Growth Strategic Plan (SGSP)* will update the 1987 *County Master Plan*. A draft plan document was anticipated to be provided to the Somerset County Planning Board in August 2007. Preliminary design of the plan called for a three-system organizational framework that will focus on the "smart conservation" of naturally and culturally important landscapes, "smart growth" in communities that are most capable of supporting it, and "smart investment" that will guide future planning efforts in such a fashion that the County's conservation and growth needs are met. The Smart Conservation section of the draft SGSP identifies the following planning objectives that are appropriate for rural areas, such as the Agricultural District in Hillsborough Township:

<b>3) PRESERVE RURAL RESOURCE AREAS, FARMLAND AND AGRICULTURE</b>
<i>Planning Objectives</i>
1) Protect and preserve adequate agricultural resources and land base needed to support and sustain the agricultural industry, both short and long term
2) Implement policies and programs that enable farm operations to continue and expand, i.e., encourage the application of new agricultural technologies, promote agricultural tourism and increase marketing opportunities for local farm products
3) Encourage the establishment of local agriculture-related support industries, such as distributors and equipment suppliers, while assuring that facility design is compatible with the rural landscape, infrastructure and natural system capacity <ul style="list-style-type: none"> <li>o Discontinue sprawl development patterns</li> <li>o Identify and implement strategies that increase labor force participation in, and the attractiveness of, agricultural occupations in the county</li> <li>o Encourage the use of agricultural “best practices”</li> </ul>

### ***2001 Somerset County Agriculture Retention and Development Master Plan***

Pursuant to the *1998 Master Plan Re-Examination Report*, the *2001 Agriculture Retention and Development Master Plan* was written to maximize the county’s farmland preservation efforts. It provides a comprehensive analysis of the agricultural demographics of Somerset County and supports future farmland preservation based on its findings. This Plan also outlines a series of recommendations (below) that aim to supplement the county’s agriculture industry and land use in the future. These recommendations center around five principal objectives: strengthening agricultural viability as a land-based economic enterprise; retaining agriculture as an economic sector and industry; preserving agriculture as a lifestyle; maximizing farmland preservation; and strengthening the agricultural preservation program. (*2008 Somerset County Comprehensive Farmland Preservation Plan*)

SOMERSET COUNTY AGRICULTURE RETENTION & DEVELOPMENT PLAN <b>June 2001</b>
<b><i>1) STRENGTHEN AGRICULTURAL VIABILITY AS A LAND-BASED ECONOMIC ENTERPRISE</i></b>
1) Increase more intensive forms of cropping to improve per/acre productivity and profitability
2) State, Regional and Local Land Use Plans should support farmland retention and agricultural viability
3) Coordinate Farmland and Public Open Space Preservation such that preservation serves more than one goal
4) Enable agriculture to continue on public open space acreage where appropriate
5) Encourage municipal planning and zoning policies that are supportive of the long-term viability of agricultural land uses
6) Encourage changes in commodity mix to produce more value-added products

<p>SOMERSET COUNTY AGRICULTURE RETENTION &amp; DEVELOPMENT PLAN</p> <p><b>June 2001</b></p>
<p>7) Provide technical assistance and resources to encourage farmers to utilize agricultural practices that are supportive of state, regional and local water supply, wetland and habitat protection goals.</p>
<p><b>2) <i>RETAIN AGRICULTURE AS AN ECONOMIC SECTOR AND INDUSTRY</i></b></p>
<p>1) Assess the needs of owner and tenant farmers and their ability to sustain profitability and economic viability of farm operations</p>
<p>2) Reduce Right-to-Farm conflicts through appropriate planning, management and technology; and through improved public awareness, education and policies</p>
<p>3) Encourage and support farmer investment in new facilities, crop systems and technology</p>
<p>4) Strengthen and support the complex economic network of mutually dependent agricultural markets and products</p>
<p>5) Increase public awareness of other services available through the agricultural community that can enhance the economic viability of farms</p>
<p>6) Help farmers take advantage of new forms of marketing and advertising that increase their visibility and maximize marketing opportunities</p>
<p>7) Provide assistance and training to improve business and financial management; and to implement new project ideas</p>
<p><b>3) <i>PRESERVE AGRICULTURE AS A LIFESTYLE AND INCREASE THE VIABILITY OF AGRICULTURE</i></b></p>
<p>1) Support the continuation of Farmland Assessment Tax Benefits to slow the loss of farmland acres and to support the continuation of mutually dependent commercial and residential/lifestyle farms</p>
<p>2) Adopt land use policies and establish agricultural development programs that support farm “permanence”, and strengthen belief in the viability of agriculture in the future</p>
<p>3) Support organizations, universities and programs that encourage young people to enter the agricultural industry</p>
<p>4) Establish farming apprentice programs, and provide financial or technical assistance for new farmers beginning operations or seeking land</p>
<p>5) Educate the non-farm community to produce greater understanding and respect for farm operations</p>
<p>6) Promote a positive work environment</p>
<p>7) Support agricultural innovation and change that improves viability</p>
<p><b>4) <i>MAXIMIZE FARMLAND PRESERVATION</i></b></p>
<p>1) Provide Access to Locally Grown Produce</p>
<p>2) Preserve Open Space and Rural Character</p>
<p>3) Expand farm-based recreation, historic and cultural resource, agritourism, hunting &amp; fishing, and education opportunities</p>
<p>4) Protect wildlife habitat</p>
<p>5) Retain air and groundwater recharge capacity</p>
<p>6) Retain flood protection, erosion and sediment control benefits</p>

SOMERSET COUNTY AGRICULTURE RETENTION & DEVELOPMENT PLAN <b>June 2001</b>
7) Maximize municipal and public fiscal/tax benefits
<b>5) STRENGTHEN THE AGRICULTURAL PRESERVATION PROGRAM</b>
1) Preserve a total of 16,000 acres by 2010
2) Create a fast-track program for specially qualified applicants to address farms in need of emergency funds
3) Expand available modes of farmland preservation to address landowners having different farmland preservation interests and needs
4) Support the use of the Planning Incentive Grant Program (PIG)
5) Provide incentives to encourage farmer participation in the preservation program, i.e. streamline the application process, reduce associated fees, eliminate the annual application for farmland assessment, strengthen Right-to-Farm protection and enhance eligibility for loan and cost share programs including for soil and water conservation funds.
6) Re-assess Farmland Preservation Program goals, eligibility requirements, priority areas, ranking criteria and other program design and management aspects to maximize implementation and achievement of preservation goals.

*Source: 2005 Somerset County Cross-Acceptance Report*

### ***2008 Somerset County Comprehensive Farmland Preservation Plan***

The *2008 Comprehensive Farmland Preservation Plan* serves as an update to the *2001 Agriculture Retention and Development Master Plan*. It supports the goals and objectives of the *2001 Master Plan* and the state's *2007 Economic Development Strategies*. In addition, it has set a ten year target of preserving 10,000 acres, updated its Agricultural Development Area (ADA) and identified thirteen Project Areas where future farmland preservation efforts will be concentrated. Two of those project areas, Millstone Valley West and Neshanic Valley North, include portions of Hillsborough Township. For these Project Areas, it is important to note that only those farms that are located within the designated ADA are those which are suitable for preservation. The ADA designates land that has the potential for long-term agricultural viability as based upon both statutory and county criteria. See *Chapters 4 and 5* for more detailed discussion of the ADA and Project Areas and how they affect Hillsborough Township's farmland preservation efforts. (*2008 Somerset County Comprehensive Farmland Preservation Plan*)

### ***Hillsborough Township***

Hillsborough Township has been proactive in moving forward with its own land use planning initiatives. The *2002 Master Plan Amendment for the Agricultural and Mountain Conservation Districts* established these two districts, with the goal of preserving the character and existing uses of these areas through controlled development, open space acquisition and farmland preservation. The *Master Plan Amendment – Phase 2*, adopted in October 2005 laid out the planning concept for the rest of Hillsborough, with designation of a town center, a transit oriented village and other areas where growth will be encouraged to occur. The township also works in concert with and considers land use and planning initiatives at the County and State levels. These include the *State*

*Development and Redevelopment Plan*, the County 1998 *Master Plan Reexamination*, which incorporates many of the State's policy directives from these plans into its own land use plans, and the 2004 *Smart Growth Report*. Hillsborough also participates actively in the State's Cross-Acceptance process.

## D. Development Patterns & Land Use Trends

Hillsborough is a collection of small villages, including Belle Mead, Blackwells Mills, Flagtown, Neshanic and South Branch. Hillsborough was established as a Township in 1771. While Somerset County has historically been an area of concentrated development, Hillsborough Township has long remained a rural community, even while lying in close proximity to clusters of commercial and industrial activity located in neighboring Somerville, Raritan and Manville to the north and east. It is bounded on the west, south and southeast by East Amwell (Hunterdon County), Montgomery and Franklin Townships, which, like Hillsborough, are growing communities that have retained their rural character and landscape.

Very little development occurred in Hillsborough until the 1960's, but between 1960 and 1990, the population almost quadrupled, from 7,500 to 28,800. The population grew by another 27% between 1990 and 2000, to 36,634. However, projections call for dramatically slower growth in the next ten year period, with about a 4% increase.

<b>Populations of Hillsborough and Neighboring Somerset County Communities: 1930-2010</b>										
	1930	1940	1950	1960	1970	1980	1990	2000	2005	2010
<b>Hillsborough Township</b>	<b>2,283</b>	<b>2,645</b>	<b>3,875</b>	<b>7,584</b>	<b>11,061</b>	<b>19,061</b>	<b>28,808</b>	<b>36,634</b>	<b>37,730</b>	<b>39,240</b>
<i>Neighboring Somerset County Municipalities</i>										
Branchburg Township	1,084	1,231	1,958	3,741	5,742	7,846	10,888	14,566	14,850	15,250
Bridgewater Township	3,352	4,934	8,234	15,789	30,235	29,175	32,509	42,940	44,750	45,350
Franklin Township	6,039	6,299	9,601	19,858	30,389	31,358	42,780	50,903	57,690	58,920
Manville Borough	5,441	6,065	8,597	10,995	13,029	11,278	10,567	10,343	10,490	10,590
Millstone Borough	187	252	289	409	630	530	450	410	460	760
Montgomery Township	2,648	3,360	3,819	3,851	6,353	7,360	9,612	17,481	18,130	18,790
Raritan Borough	4,751	4,839	5,131	6,137	6,691	6,128	5,798	6,338	6,370	6,470
Somerville Borough	8,255	8,720	11,571	12,458	13,652	11,973	11,632	12,423	12,690	13,400
<i>Source 1930-2000: Somerset County Farmland Preservation Plan 2008 Update</i>										
<i>Source 2005-2010: Municipal Cross-acceptance Population Projections<sup>11</sup></i>										

Following World War II, residential development expanded westward from New York City at an unprecedented rate. A number of factors contributed to rapid growth in Hillsborough and the surrounding area during this time period. Government incentives encouraged the construction of single-family homes, prompting developers to seek out larger and cheaper parcels of land on which to build. Simultaneously, the nation began



constructing Interstate and regional highways, which greatly increased the ease of living in rural communities far from traditional employment centers.

Development radiated westward from eastern counties and cities, especially New Brunswick and Plainfield. The 1940's and 1950's saw the Somerset County municipalities that border these cities – Franklin and North Plainfield – undergo the most dramatic population growth. During the 1960's and 1970's, suburban development continued in these towns, but also began to impact municipalities surrounding the county's regional center along the Raritan River, including Hillsborough. The township recorded some of the highest growth rates during these decades and into the 1990's as new residents chose to live here over the established towns of Somerville, Manville and Raritan. Hillsborough Township contained the critical combination of abundant, inexpensive land and automobile accessibility to existing employment centers that made it ideal for rapid residential growth. Transportation improvements after 1970, especially the completion of Interstates 78 and 287, brought further development, not only as a bedroom community but also as a home to retail businesses and other commercial establishments. As more and more development occurred, land values also rose.

Today, Somerset County contains few areas that resemble the agricultural, center-based landscape of its past. However, Hillsborough Township is home to some of the most productive concentrations of agricultural land that are left – in the Neshanic Valley, and land bordering the Millstone and Raritan Rivers. Hillsborough also contains a large area of forested land associated with the Sourland Mountains, which ranks as one of most substantial undeveloped natural areas in the county.

Although the pace of development appears to be slowing, Hillsborough Township continues to lose natural and agricultural lands, but at a lower rate than the County as a whole (15% between 1983 and 2004 versus 32% for County). (*Farmland Assessment*) According to the New Jersey Department of Environmental Protection (NJDEP), in 2002 agricultural land still covered 24% of the township, and forested land another 26%. Urban land formed the largest percentage at 31%. This is illustrated in the 2002 *Land Use Land Cover* chart that follows the definitions below for the different land use categories. Farmland assessed acres were 14,060 in 2000 and 12,226 in 2004, indicating that the land use profile will have changed somewhat since 2002, moving toward less agricultural and forested land and more urban land. (also see *Land Use Land Cover Map*)

*Urban:* Includes most of what normally would be considered developed land: residential areas, commercial areas, services and institutions, industrial areas, and those developed for transportation and utilities. Urban land also includes developed recreation areas, whether they are part of a park, educational facility, or golf course.

*Agricultural:* Includes all land areas associated with agricultural production. The greatest amount of these lands would be areas used in the active cultivation of both row and field crops. Also included, however, are pasturelands and grazing lands associated with horse or cattle raising operations, orchards, vineyards, nurseries and other horticultural areas, and confined feeding operations. Other lands used in support of the agricultural activities,

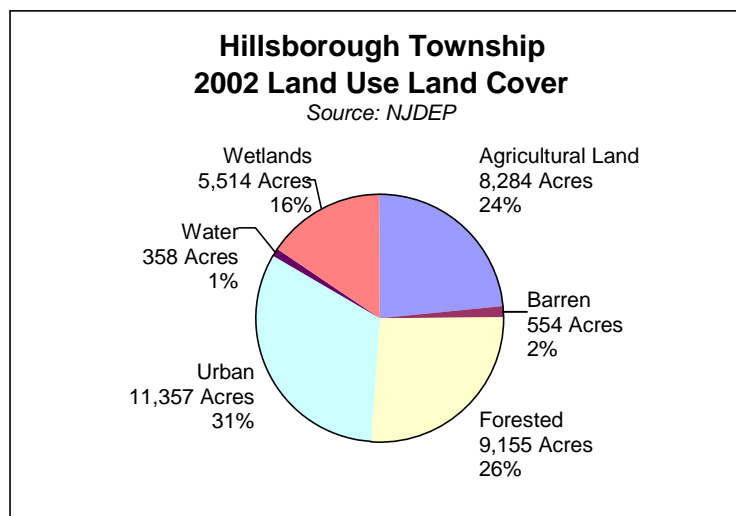
such as the farmsteads, associated barns, stables, and corrals, among others, also are included.

**Forested:** Includes all upland areas covered by woody vegetation. The vegetation may be primarily deciduous, coniferous or a mixture of both, and include scrub/shrub and brush areas as well as mature tree stands of various densities. Also included in this category are early stage forest successional stands, commonly referred to as old fields. These do not normally have a significant amount of mature trees on them, but are placed in this category because of their potential development to forests. Not included in the forest category are forested wetlands.

**Water:** Includes freshwater lakes, ponds, and reservoirs and portions of rivers and streams that are greater than 80 feet in width.

**Wetlands:** Includes those areas that exist where the water table is at, near or even above the soil surface for significant time periods of the year. The soil is, therefore, generally saturated, and only plant types capable of growing under saturated conditions are found. Wetlands serve a variety of ecological functions, and are given special attention in the NJDEP mapping programs, and in environmental protection strategies.

**Barren:** Includes a wide variety of specific types, but all are characterized by a general lack of any significant vegetative cover. Included are both naturally occurring barren areas, such as rock outcrops, as well as artificially created barren areas, where vegetation has been artificially removed. Cleared but undeveloped urban lands, transitional areas, mines, dumps and quarries are also included in this general category. (*GIS General Category Descriptions*)<sup>12</sup>



Comparing the period 1986-2002, Hillsborough Township saw a greater transformation in land use patterns than the county as a whole. In 1986, agricultural land was the highest land use in Hillsborough followed by forest and urban use, whereas urban use and forest outpaced agricultural use county wide. (see *chart* below) By 2002, urban land use had taken over the number one position in Hillsborough as well. For both the county and the

township, there was an almost even exchange between acres lost to agricultural use and acres gained in urban use in the 1986-2002 period: Hillsborough lost 3,551 agricultural acres and gained 3,162 urban acres; Somerset County lost 17,025 agricultural acres and gained 17,441 urban acres. Both in Hillsborough and county wide, forested acres showed very little change, barren land declined and both water and wetlands increased. (*Land Use Land Cover data*)

<b>Land Use Land Cover Comparison by Acres 1986-2002</b>										
	Hillsborough Township					Somerset County				
	1986	1995	2002	Change in Acres	% Change	1986	1995	2002	Change in Acres	% Change
Agricultural	11,835	9,711	8,284	-3,551	-30%	47,404	36,949	30,379	-17,025	-36%
Barren	837	644	550	-287	-34%	3,907	3,321	3,170	-737	-19%
Forest	9,205	9,032	9,155	-51	-1%	51,529	51,459	50,420	-1,109	-2%
Urban	8,195	9,795	11,357	3,162	39%	65,097	73,449	82,538	17,441	27%
Water	305	313	358	53	17%	2,118	2,248	2,306	188	9%
Wetlands	4,836	5,723	5,514	679	14%	24,915	27,702	26,314	1,399	6%
<i>Source: Land Use Land Cover Data</i>										

Comparing Hillsborough to adjacent communities in shared watersheds, between 1995 and 2002, the township retained a higher percentage of its agricultural lands than the aggregate for other communities in the Raritan watersheds (WM8 and WMA9) to the north, west and northeast of the township, but a slightly lower percent than adjacent communities in the Millstone watershed (WMA10) to the south and east. The data shows an increase in forested land across the board in WMA8 and no significant change in WMA9 or WMA10. Urban lands increased at about the same pace in Hillsborough as in adjacent communities in WMA8 (approximately 10%), at a much higher rate in WMA9 (14% versus 4%) and at a lower rate in WMA10 (17% versus 29%). (see *table* below)

	Hillsborough			Adjacent Communities		
	1995	2002	% Change	1995	2002	% Change
<b>WMA8 - North &amp; South Branch Raritan</b>						
Agricultural	3,959	3,590	-9%	26,123	22,304	-15%
Forest	2,574	2,843	10%	19,930	20,817	4%
Urban	1,731	1,913	11%	27,827	30,497	10%
<b>WMA9 - Lower Raritan</b>						
Agricultural	1,969	1,915	-3%	850	656	-23%
Forest	929	904	-3%	4,694	4,571	-3%
Urban	946	1,081	14%	14,776	15,354	4%

<b>WMA10 – Millstone</b>						
Agricultural	3,783	2,779	-27%	12,810	9,804	-23%
Forest	5,530	5,408	-2%	12,558	12,691	1%
Urban	7,119	8,364	17%	11,146	14,377	29%
<i>Source: Land Use Land Cover</i>						

## **E. Public Infrastructure – Sewer and Water Service Areas**

Hillsborough Township receives its public water supply from New Jersey American Water (formerly Elizabethtown Water Supply), which draws its water mostly from wells throughout its service area. The water supply is sometimes supplemented with surface water pumped from the Raritan River through the Canal Road Water Treatment Plant in Somerset and/or the Millstone Water Treatment Plan in Bridgewater. (*New Jersey American*)<sup>13</sup> A large water storage tank, which services Hillsborough, is located in neighboring Montgomery Township. Public water is available to about one third of the township, predominantly in its more developed areas. The airport water system in the northern section of Hillsborough is serviced by neighboring Manville. The remainder of Hillsborough not provided with public water draws its water from the groundwater aquifer. This includes most of the Agricultural and Mountain Conservation Districts, which were established by the 2002 *Master Plan Amendment*. Neither Hillsborough nor the water company has any plans for extending the public water supply area. (*Hillsborough Master Plan*) (*Robert Ringelheim*)<sup>14</sup>

Much of the central and eastern portions of the Township are sewered, primarily in the Royce's Brook drainage basin. The Hillsborough Township Municipal Utilities Authority (HTMUA) manages the community sewer service area. (*Master Plan*)<sup>15</sup> In addition, several sections of Hillsborough are serviced by sewer systems other than the HTMUA, none of which could service new or additional customers. (*Master Plan, Utility Element, page 5*) (*Master Plan*)<sup>16</sup> Eleven pumping stations and two wastewater treatment plants are located within the township (see *Sewer Service Areas and Active Agriculture Lands* map). The *Master Plan* indicates that sewage collected in Hillsborough is conveyed to a regional plant in Bridgewater for treatment. Septic standards in non-sewered areas of the township are governed by NJDEP. The updated *County Wastewater Management Plan*, once it is completed, will reflect the Septic Density Standards required by NJDEP's Water Quality Management Planning (WQMP) Rules.

There are no plans to significantly expand the sewer service area, although minor expansions are being considered to bring sewer service to some older neighborhoods. (*Robert Ringelheim*) One such area is the Claremont vicinity north of Millstone Borough where failing septic systems have become a significant problem; plans call for sanitary sewer lines throughout the development, a pump station, and connection into the MUA's main trunk line, with anticipated completion in 2010/ This area was originally designated PA5 (environmentally sensitive) in the *State Plan*, and Hillsborough has requested a change to PA3 (fringe). The NJDEP recently approved an amendment to the sewer

service area to include the Claremont subdivision. This is reflected on the map included in this Plan. (*Laurette Kratina, Somerset County Planning Division*)<sup>17</sup>

The *Master Plan Amendment – Phase 2* indicates that one area originally targeted for sewerage was the Corporate Development Zone (CDZ). The southern part of the CDZ is now being considered for agricultural preservation and has been designated in this Plan as the South PIG Project Area. (see *Conceptual Plan Route 206 Bypass* map below) Sewering this zone was proposed based on the original alignment of the Route 206 bypass.<sup>18</sup> The bypass has been redesigned to include just one major interchange, at Amwell Road, a major east-west corridor. There is an at-grade interchange at Hillsborough Road. The redesign eliminates two planned interchanges, at Homestead Road and Township Line Road, which would have promoted sprawl and congestion, as well as a connector road between Hillsborough Road and Homestead Road. (see *Conceptual Plan Route 206 Bypass* map below) (*NJ DOT News Release*)<sup>19</sup> In its latest amendment, the NJDEP has removed an area of preserved farm on Township Line Road from the sewer service area. This is reflected on the map included in this Plan. (*Laurette Kratina*)

Somerset County's long standing policy is to coordinate land use and sewer planning so they reinforce each other and do not lead to unwanted extensions of public sewers into low density rural areas, especially those designated as Planning Areas 4, 4B or 5 by the *State Plan*. In these areas, the county supports the use of alternative discharge to groundwater technologies in order to preserve significant amounts of farmland while allowing some clustered development to take place. This is in line with Hillsborough's *Master Plan*, which states: "Major extensions through undeveloped land to provide service to peripheral areas or even areas outside the service area of the HTMUA should be discouraged." (*Master Plan*)<sup>20</sup> In Hillsborough, these undeveloped lands lie generally in the Agricultural and Mountain Conservation Districts the township has created, which generally align with the State Plan's Planning Areas 4A, 4B and 5. In addition, Hillsborough plans to implement a Transfer of Development Rights (TDR) program, which should further minimize development in the Agricultural and Mountain Districts and promote preservation of the agricultural landscape.

This *Farmland Preservation Plan* proposes three project areas in which to focus farmland preservation. The Amwell Valley Project Area, in western Hillsborough, is located well outside existing or proposed sewer service areas. The Mill Lane Project Area lies just west of the sewer service area boundaries. Other than the farmland removed in the latest sewer service area amendment, the South Project Area falls within existing or proposed sewer service areas, but in general hookups have not been made. Approximately 2,208 acres of active agricultural lands are located within the sewer service area. This does not mean that these lands are currently hooked into the sanitary sewer system, but that they are in an area approved for hook-up should the need arise, as in the case of the land being developed.

In 2008 to 2009, Somerset County is undergoing an update to its *Wastewater Management Plan (WMP)* to bring it into compliance with new Water Quality

Management Planning (WQMP) Rules adopted in July 2008. These Rules mandate that Environmentally Sensitive Areas that are not yet developed be removed from sewer service areas. The criteria being used to define Environmentally Sensitive include Landscape Study Habitat Ranks 3-5, Natural Heritage Priority Sites, wetlands, and 150-foot and 300-foot buffers along waters classified as trout maintenance or category one, respectively. This will result in a number of changes to the sewer service area mapping in Hillsborough. (*Laurette Katrina*)

To meet the new WQMP standards, the WMP update also requires a build-out analysis to generate data on future wastewater flow and water demand and septic yield. In areas outside sewer service areas, if zoning densities based on these build-out analyses would exceed allowable septic yield, then down zoning would have to occur. All areas that lie outside of approved sewer service areas are governed by the NJDEP WQMP Rules in terms of nitrate based septic density. (*Laurette Katrina*) This could potentially impact zoning in the largely unsewered Agricultural and Mountain Districts.

## **F. Municipal Master Plan & Zoning**

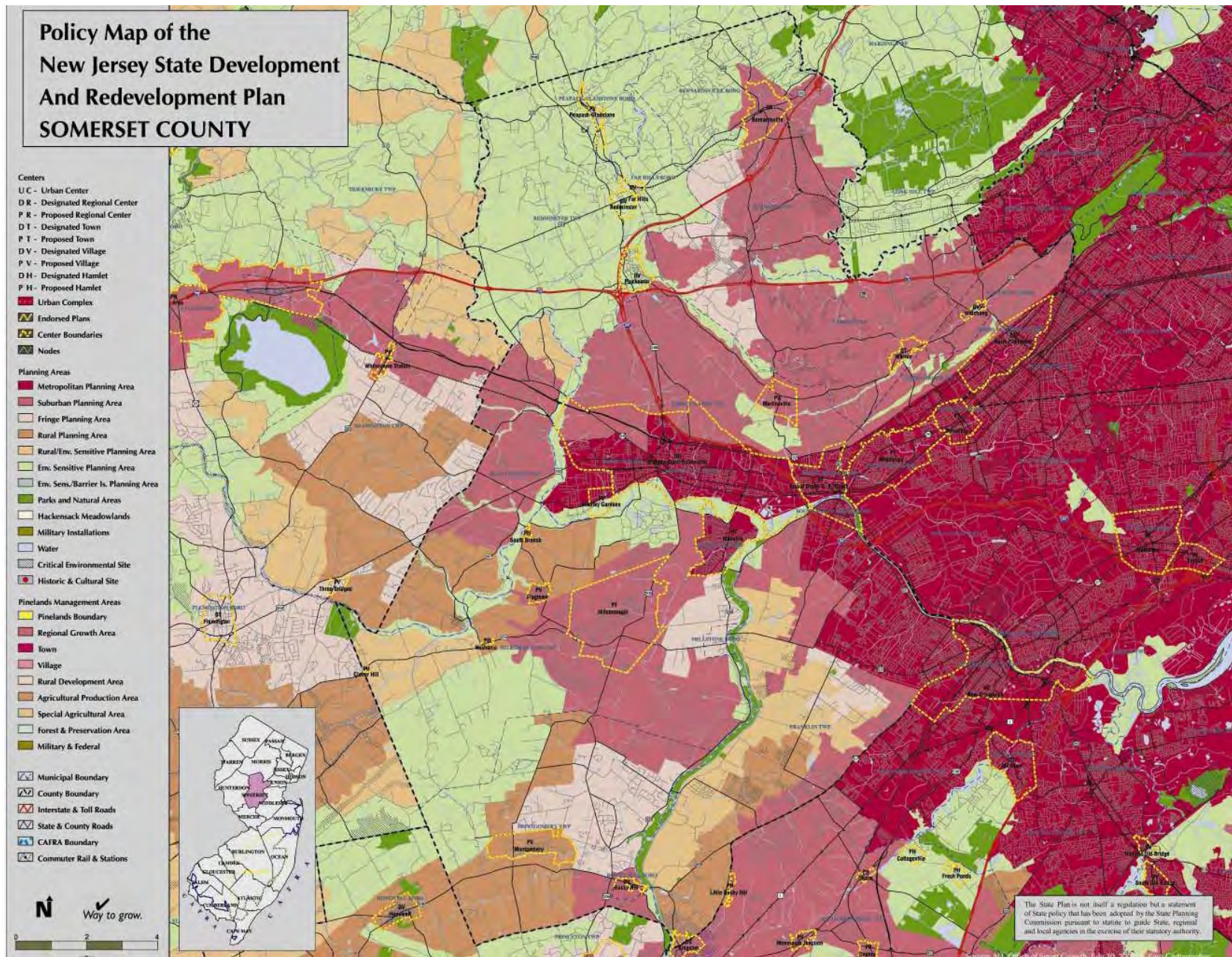
Hillsborough Township has implemented innovative zoning and land use regulations to further its preservation goals. In recognition of the value of agriculture and to help ensure the viability of farming in the community, Hillsborough established an Agricultural District in 2002. The district is composed of three noncontiguous segments in the northeastern, northwestern and southeastern sections of the township. (see *Zoning Map*) According to the *2002 Master Plan Amendment*, “an agricultural mosaic dotted with farmsteads, barns, stream corridors and small clusters of houses typifies most of the district, where the critical mass of open land and cultivated fields imparts a prevailing rural character. More than 80% of the Agricultural District consists of highly productive farmland, including Prime farmland and Soils of Statewide or Local Importance.” (*Agricultural and Mountain Districts Plan Amendment*)<sup>21</sup>

The *2002 Master Plan Amendment* also established a Mountain Conservation District, which lies in the southwestern quadrant of Hillsborough. The main goal of the Mountain Conservation District is to protect the Sourland Mountain region’s fragile natural resources and unique ecosystem. The Sourlands include one of the largest remaining contiguous forests in Central Jersey, and portions of the district also support active agricultural operations.

Certain features of the Agricultural and Mountain Conservation Districts that make them unsuitable for development, such as narrow roads, lack of sanitary sewer and water service, and severe limitations on wells and septic, work in favor of continuing the agricultural tradition.







Source: New Jersey Office of Smart Growth (OSG) website. <http://www.nj.gov/dca/osg/docs/somersetcountymap.pdf>. Accessed September 2007.



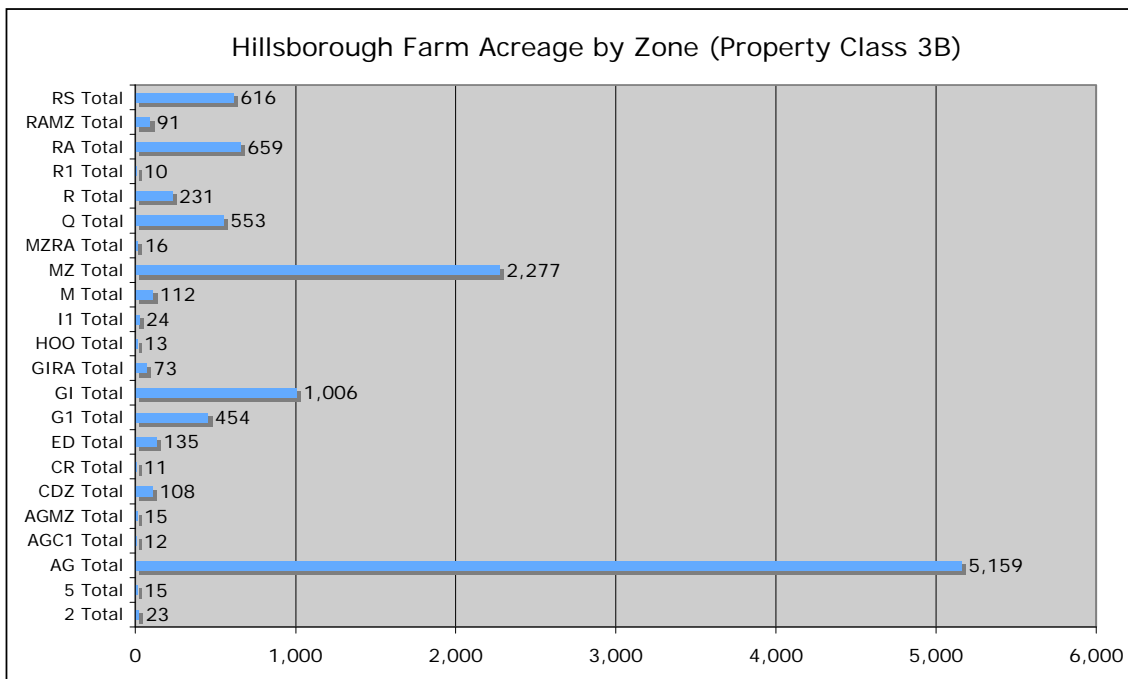
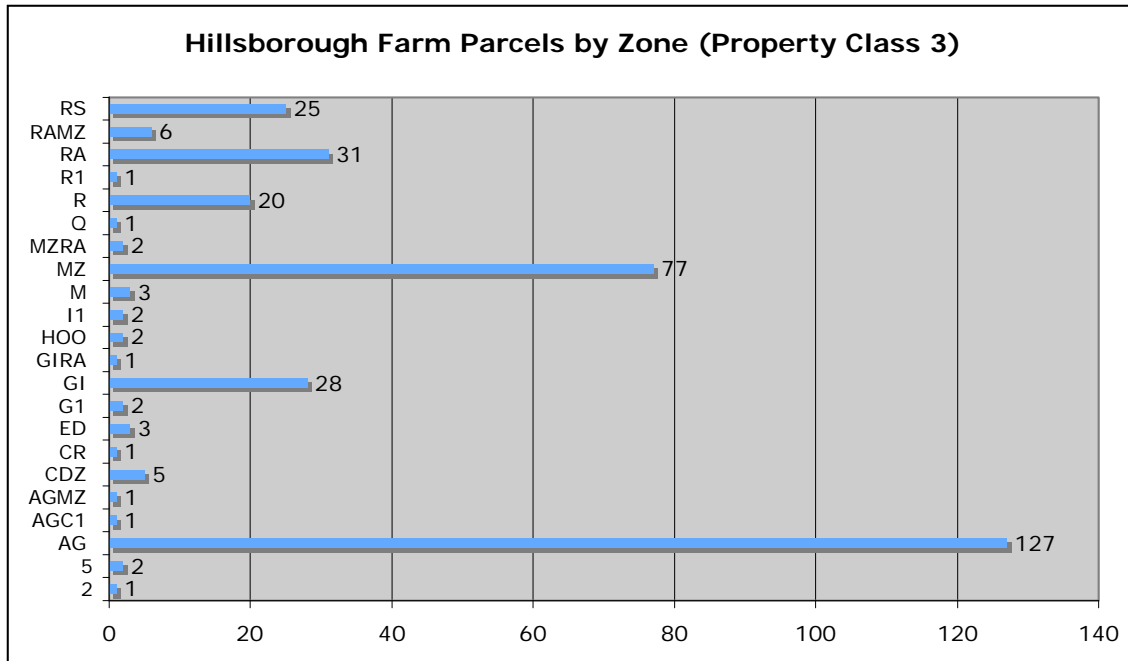


In addition, Hillsborough has designated an Open Space-Cultural Landscape District (OS-CL) where zoning regulations provide protection for the important scenic, natural, and agricultural resources (including conservation and preservation). (*Hillsborough Development Regulations Ordinance*)<sup>22</sup> This district, added April 27, 2004, is located in the extreme northeastern corner of the township and encompasses the buildings and other portions of Duke Farms that are open to the public. The farmland continues to be part of the Agricultural District. (*Robert Ringelheim*)

The latest *Master Plan Amendment*, adopted October 27, 2005, proposes re-designating an area within the Corporate Development Zone (CDZ) as an agricultural preservation area. The CDZ was designated in line with a planned Route 206 bypass, whose design has since been amended. Little development has occurred in this area since that designation and much of the land is still farmland assessed. The re-designation, states the *Master Plan Amendment*, “would allow farmland east of the proposed Route 206 Bypass and just north of Township Line Road, which has already been so preserved, to be expanded and help provide a greenbelt surrounding the areas slated for development north and west of this area.” (*Master Plan Amendment – Phase 2*)<sup>23</sup> The southern area of the CDZ has been designated as one of the three project areas for this Plan.

Farms and agricultural activities, including nurseries, poultry and livestock raising, are listed as permitted principal uses in all residential districts and are the primary permitted uses in the Agricultural District. In addition, in the Rural/Suburban (RS) District, a conditional use is Planned Residential Cluster and Farmland/Open Space Preservation Development Option (sending and receiving parcels, in effect, TDR within the district). Agriculture is a conditional use in the Mountain Conservation District, where clearing is limited to 10% or one acre, whichever is less. In addition, an ordinance adopting development regulations for the new Town Center District states that farm and open-air markets are a permitted principal use. (*Town Center District Ordinance*)<sup>24</sup>

The breakdown of farms and farm parcels by zoning district indicates that by far most active farming occurs in the Agricultural District, followed by the Mountain Conservation District. Of the 514 parcels classified as 3A or 3B as of March 15, 2007, 127 were located in the Agricultural District and 77 in the Mountain Conservation District. 5,159 acres of farmland assessed property (class 3B) were located in the Agricultural District, followed by the Mountain Conservation District with 2,277 and the General Industrial District (GI) with 1,006. However, some parcels indicated in the tax records as located in the GI zone, including several farms in the South PIG Project Area that are already preserved or targeted for preservation are actually in CDZ, according to the *Zoning Map*, which accurately represents the distribution according to Robert Ringelheim, Township Planner. The charts below, which show the distribution of farm parcels and acreages in the zoning districts, are based on the March 15, 2007, tax data – the only data available in electronic format from which to perform this analysis – and thus present some inaccuracies, predominantly involving distribution within the GI and CDZ zones. (see *charts* below)



### ***General Lot Size Categories and Distribution***

Throughout Hillsborough, there is a two acre minimum lot size for any area without sewer or water service, even in zones that otherwise permit one acre zoning. But minimum lot sizes for new development in the Agricultural and Mountain Districts are set at 10 and 15 acres respectively.

Hillsborough Township Residential Zone Minimum Lot Size and Density Schedule (9/10/07)							
Zone <sup>1</sup>	Unit Type <sup>7,5</sup>	Minimum <sup>2,6</sup> Lot Size Per Unit (square feet unless otherwise indicated)	Units <sup>4</sup> Per Acre All Unit Types	Minimum Tract Area for Cluster (acres)	Space Dedicated Cluster Design (percent)	Usable Recreation for Cluster (percent)	TDC Maximum Density (units per acre)
<b>MVH</b>	DSF	5 acres					N/A
<b>MZ</b> <sup>23</sup>	DSF	15 acres <sup>24,25</sup>					N/A
	New						
<b>AG</b> <sup>26</sup>	DSF	10 acres <sup>27</sup>					N/A
	Existing						
	DSF	3-10 acres					
	Existing	Less than					
	DSF	3 acres					
<b>RA</b>	DSF	2 acres	0.45 <sup>11,22</sup>	20	20	10	N/A
	CSF	1 acre					
<b>RS</b>	DSF	1.5 acres	0.55 <sup>11,22</sup>	20	20	10	N/A
	CSF	1 acre					
<b>R</b>	DSF	1 acre	0.85 <sup>11,22</sup>	20	25	10	N/A
	CSF	20,000					
<b>R1</b>	DSF	20,000	1.5 <sup>22</sup>	30	30	10	2
	CSF	15,000					
	ASF <sup>3</sup>	12,000					
<b>CR</b>	DSF	17,500	2 <sup>22</sup>	10	30 <sup>10</sup>	10	3
	CSF	12,000					
	ASF <sup>3</sup>	8,500					
	TH	2,000					
<b>AH and RCA</b> <sup>19</sup>			3,15,22	10	20 <sup>10</sup>		N/A
	DSF	15,000					
	CSF	10,000					
		7,000					
	ASF <sup>3</sup>	5,000 <sup>18</sup>					
	TH	2,000					
<b>R2</b>	DSF	8,000	4 <sup>8,22</sup>	10	30 <sup>10</sup>	10	5
	CSF	5,000					
	ASF <sup>3</sup>	5,000					
	TH	2,000					
	GA						9
<b>PD</b>	DSF	6,000	8 <sup>8,22</sup>	10	30 <sup>10</sup>	10	
	CSF	4,000					
	ASF <sup>3</sup>	4,000					
	TH	2,000					
	GA						
<b>ARPDG</b> <sup>29</sup>							
<b>RC</b> <sup>30</sup>							

<b>Hillsborough Township Residential Zone Minimum Lot Size and Density Schedule (9/10/07)</b>							
<b>Zone<sup>1</sup></b>	<b>Unit Type<sup>7,5</sup></b>	<b>Minimum<sup>2,6</sup> Lot Size Per Unit (square feet unless otherwise indicated)</b>	<b>Units<sup>1</sup> Per Acre All Unit Types</b>	<b>Minimum Tract Area for Cluster (acres)</b>	<b>Space Dedicated Cluster Design (percent)</b>	<b>Usable Recreation for Cluster (percent)</b>	<b>TDC Maximum Density (units per acre)</b>
<b>Selected footnotes:</b> 1 Except in the AH, RCA, RC and ARPDG Zone Districts, which are exempted from the critical area calculations and requirements herein, the permitted density for all minor residential subdivisions and preliminary major residential subdivisions and site plans shall be determined based upon the extent of critical areas identified in the Natural Resources Inventory and subject to the provisions contained in Section 188-46B. [Amended 6-28-1988 by Ord. No. 88-10; 4-12-2005 by Ord. No. 2005-02] 2 All cluster, multifamily and planned developments, except in the AG Zone, require public water and public sewer service for approval; any lot proposed for development with septic systems shall have a minimum lot size per dwelling unit based on the approved location of the septic system but shall not be less than two acres; and any lot proposed for development without a public water supply shall not be less than two acres each. 7 DSF = detached single-family; CSF = clustered single-family; ASF = attached single-family; TH = townhouse; GA = garden apartment. 11 The density of unit(s) per acre is based on the minimum lot size with deduction taken for land needed for streets. The measured edge to edge of the right-of-way assumed amount needed for streets increases as the density increases and lot sizes decline. The loss to streets was assumed at 10% in the Mountain, Agricultural and RA Zones and 15% in the RS and R Zones. 27 See lot size averaging and open lands ratio subdivision options pursuant to Section 188-99.3G(2)							

Source: Township of Hillsborough Schedule for Residential Zones. September 10, 2007

#### Zoning legend:

<b>AG</b>	Agricultural	<b>AH</b>	Affordable Housing	<b>ARPDG</b>	Age Restricted Planned Development Gateway
<b>C1</b>	Retail Commercial	<b>CDZ</b>	Corporate Development Zone	<b>CR</b>	Central Residential
<b>ED</b>	Economic Development	<b>GA</b>	Gateway A	<b>GB</b>	Gateway B
<b>GI</b>	General Industrial Office & Research	<b>HOO</b>	Home Occupation/Office	<b>II</b>	Light Industrial
<b>I2</b>	Light Industrial	<b>I3</b>	Light Industrial	<b>M</b>	Mining
<b>MVH</b>	Millstone Valley Historic Zone	<b>MZ</b>	Mountain Conservation	<b>O2</b>	Office
<b>O5</b>	Office/Research	<b>OLC</b>	Office Light Commercial	<b>OS-CL</b>	Open Space - Cultural Landscape
<b>PD</b>	Planned Development	<b>PR</b>	Professional/Retail	<b>Q</b>	Quarry
<b>R</b>	Residential	<b>R1</b>	Residential 1	<b>R2</b>	Residential 2
<b>RA</b>	Residential/Agricultural	<b>RC</b>	Retirement Community	<b>RCA</b>	Regional Contribution Area
<b>RS</b>	Rural/Suburban	<b>TC</b>	Town Commercial		

The table starting on page 3-27 shows the breakdown of total acreage for farmland and vacant land within each zoning district by lot size as sourced from the March 15, 2007 tax database. The lot size categories are small (less than 1 acre), medium (1 through 5 acres), large (greater than 5 through 10 acres), and very large (greater than 10 acres). The three property classes called out from the totals in each category are farmland assessed (3B), farm residences and appurtenant structures (3A) and vacant lots (1). The same inaccuracies of zone attribution between the GI and CDZ as outlined above apply to this analysis as well. A review of the table reveals:

- Overall, the breakdown for farmland-assessed (class 3B properties) includes 10,761 acres in the very large lot category, with 700 acres classified as large lots, 150 acres as medium lots and 1.79 acres as small lots.

- The bulk of class 3A properties fall into the medium lot (1-5 acre) category.
- Very large lots account for 2,000 acres of vacant (class 1) property and another 1,000 of vacant land are split between large and medium lots. Small vacant lots total 216 acres, with most of these in the Agricultural (AG) and Rural/Suburban (RS) zoning districts.
- The Agricultural District (AG) is the largest, encompassing 9,185 acres. Very large lots account for 7,700 acres, of which 4,790 acres are farmland assessed. Vacant lots account for another 358 acres. This District includes the Mill Lane PIG Project Area and a portion of the Amwell Valley PIG Project Area.
- The Mountain Conservation District (MZ) is second, with 6,119 acres. Very large lots account for 4,936 acres, of which 2,081 acres are farmland assessed. Most vacant land in this zone falls into the large or very large lot category (more than 120 acres in each category). This zone includes a portion of the Amwell Valley PIG Project Area.
- The General Industrial District (GI) is third, with 2,645 acres. Very large lots account for 2,361 acres, of which 1,421 are farmland assessed and 109 are vacant. The source data erroneously identifies much of the *Farmland Preservation Plan's* South PIG Project Area within this zone. However, as the *Zoning Map* accurately reflects, these parcels are in the Corporate Development Zone (CDZ).
- The Residential/Agricultural District (RA) ranks fourth with 2,051 acres. Very large lots total 1,268, of which 579 are farmland assessed and 312 are vacant.
- The Rural/Suburban District (RS) accounts for 1,468 acres. Very large lots total 1,072 acres, of which 581 are farmland assessed.

<b>Hillsborough Township Class 1 (Vacant), 3A (Farm Residences and Appurtenant Structures) and 3B (Farm Assessed) Properties by Zone</b>																	
Zone	Total	Small Lots (<1 acre)				Medium Lots (1-5 acres)				Large Lots (>5-10 acres)				Very Large Lots >10 acres)			
	Acreage	Total	Vacant	3A	3B	Total	Vacant	3A	3B	Total	Vacant	3A	3B	Total	Vacant	3A	3B
<b>1</b>	0.50	0.50	–	–	–	0.00	–	–	–	0.00	–	–	–	0.00	–	–	–
<b>2</b>	171.11	0.50	0.50	–	–	25.28	7.00	–	–	28.98	6.01	–	–	116.34	–	–	23.49
<b>3</b>	0.83	0.83	0.83	–	–	0.00	–	–	–	0.00	–	–	–	0.00	–	–	–
<b>5</b>	33.23	0.91	–	–	–	3.30	–	–	3.30	0.00	–	–	–	29.02	17.42	–	11.60
<b>17</b>	10.46	0.00	–	–	–	0.00	–	–	–	0.00	–	–	–	10.46	–	–	–
<b>AG</b>	9184.50	91.83	76.52	6.24	–	738.93	69.78	90.46	56.97	653.90	44.22	17.39	311.98	7699.83	358.20	–	4789.88
<b>AGC1</b>	15.68	0.00	–	–	–	3.70	–	3.70	–	0.00	–	–	–	11.98	–	–	11.98
<b>AGMZ</b>	76.97	0.00	–	–	–	5.00	–	5.00	–	5.94	–	–	–	66.03	–	–	14.73
<b>AH</b>	85.78	6.71	2.04	–	–	5.41	5.41	–	–	13.27	–	–	–	60.39	60.39	–	–
<b>C1</b>	190.01	3.36	–	–	–	93.28	1.01	–	–	32.02	5.18	–	–	61.36	–	–	–
<b>C1/R</b>	17.25	0.00	–	–	–	0.00	–	–	–	17.25	–	–	–	0.00	–	–	–
<b>CDZ</b>	184.38	0.08	–	–	–	15.91	–	6.00	7.90	5.23	–	–	5.23	163.17	–	–	94.94
<b>CR</b>	132.36	24.84	3.40	–	–	68.93	–	–	–	12.53	–	–	–	26.06	–	–	10.77
<b>ED</b>	1463.01	0.29	–	–	–	15.05	5.61	–	–	26.77	5.32	–	–	1420.90	338.81	–	134.95
<b>GI</b>	2645.01	2.78	0.06	2.37	–	124.26	15.98	11.32	3.74	156.67	14.00	–	35.80	2361.29	108.81	–	1420.69
<b>GIRA</b>	147.52	0.00	–	–	–	1.00	–	1.00	–	0.00	–	–	–	146.52	–	–	73.04
<b>HOO</b>	152.35	6.85	–	–	–	98.17	7.65	1.85	–	47.34	17.94	–	12.71	0.00	–	–	–
<b>I1</b>	357.55	12.28	3.60	–	–	99.36	14.90	–	5.00	54.81	14.18	–	–	191.10	19.59	–	19.40
<b>I1/R</b>	2.93	0.00	–	–	–	2.93	–	–	–	0.00	–	–	–	0.00	–	–	–
<b>I2</b>	272.86	0.91	–	–	–	55.23	16.49	–	–	24.14	5.99	–	–	192.59	79.60	–	–
<b>I3</b>	36.00	0.00	–	–	–	12.82	6.20	–	–	9.43	9.43	–	–	13.75	13.75	–	–
<b>M</b>	314.66	0.00	–	–	–	0.00	–	–	–	8.27	–	–	–	306.39	78.09	–	112.42
<b>MZ</b>	6119.22	6.80	0.99	4.04	0.88	476.91	37.92	55.93	35.35	699.12	127.10	18.05	160.19	4936.38	126.92	19.65	2080.61
<b>MZRA</b>	17.46	0.00	–	–	–	1.84	–	–	–	15.63	–	–	15.63	0.00	–	–	–
<b>O2</b>	14.21	0.99	–	–	–	1.40	–	–	–	11.81	–	–	–	0.00	–	–	–
<b>OLC</b>	12.34	0.00	–	–	–	2.55	–	–	–	9.79	–	–	–	0.00	–	–	–
<b>PD</b>	664.11	3.04	1.86	–	–	32.04	28.15	–	–	53.15	47.95	–	–	575.88	199.60	–	–
<b>PD/R</b>	2.48	0.00	–	–	–	2.48	2.48	–	–	0.00	–	–	–	0.00	–	–	–
<b>PR</b>	7.06	0.45	0.45	–	–	0.00	–	–	–	6.61	–	–	–	0.00	–	–	–
<b>Q</b>	878.00	0.00	–	–	–	0.00	–	–	–	0.00	–	–	–	878.00	–	–	553.00
<b>R</b>	1750.70	83.68	17.67	1.40	–	446.95	57.02	4.52	10.73	331.44	39.58	–	43.88	888.63	109.74	17.26	176.72
<b>R/R1</b>	54.73	0.00	–	–	–	5.49	–	–	–	0.00	–	–	–	49.24	49.24	–	–
<b>R1</b>	443.39	18.23	3.92	–	–	54.60	3.13	1.00	–	61.38	7.10	–	9.82	309.18	41.38	–	–
<b>RA</b>	2050.72	47.56	13.44	0.50	0.31	464.19	136.10	16.69	14.84	271.11	63.20	–	64.87	1267.85	312.27	–	578.72
<b>RAMZ</b>	210.15	34.47	20.79	–	–	50.15	37.67	7.00	2.07	15.22	–	–	15.22	110.31	–	–	73.89
<b>RC</b>	44.29	12.26	11.86	–	–	1.14	1.14	–	–	14.91	14.91	–	–	15.99	15.99	–	–

Hillsborough Township Class 1 (Vacant), 3A (Farm Residences and Appurtenant Structures) and 3B (Farm Assessed) Properties by Zone																	
Zone	Total	Small Lots (<1 acre)				Medium Lots (1-5 acres)				Large Lots (>5-10 acres)				Very Large Lots >10 acres)			
	Acreage	Total	Vacant	3A	3B	Total	Vacant	3A	3B	Total	Vacant	3A	3B	Total	Vacant	3A	3B
RCA	33.97	22.23	2.63	–	–	3.96	3.96	–	–	7.78	7.78	–	–	0.00	–	–	–
RR	2.83	0.00	–	–	–	2.83	2.83	–	–	0.00	–	–	–	0.00	–	–	–
RS	1468.32	67.76	53.81	0.50	0.61	268.89	80.87	16.67	9.73	59.62	–	–	24.58	1072.05	72.57	–	580.91
TC	174.05	20.44	1.91	–	–	34.51	15.53	–	–	29.96	24.58	–	–	89.14	89.14	–	–
Total	29442.96	470.57	216.26	15.04	1.79	3218.49	556.83	221.14	149.64	2684.08	454.47	35.44	699.90	23069.82	2091.50	36.91	10761.15
Source: New Jersey Association of County Tax Boards. <sup>25</sup>																	



### ***Innovative Planning Techniques***

In several districts, Hillsborough offers a choice between conventional zoning and more innovative land uses designed to maximize open space and preserved land. In its conventional zoning, Hillsborough has set specific minimum lot size and maximum density standards for its various zoning areas. The more innovative options including lot size averaging and open lands ratio – clustering provisions that encourage development units to be confined on a small portion of a parcel while the remaining land is preserved as agricultural land or open space.

Both the Agricultural and Mountain Conservation Districts offer lot size averaging as an option to conventional zoning. In the Agricultural District, a second option is available: the open lands ratio, which gives developers a density bonus for preserving at least 65% of the total tract as farmland. Robert Ringelheim, the township's planner, recalls at least three times that the open lands ratio option has been used since the clustering ordinance proposed in the 2002 *Master Plan* was adopted. Under this approach, the applicant agrees to preserve 65% of the property as farmland; in return, the applicant is allowed extra density on the remaining land. Instead of meeting the Agricultural District's 10-acre minimum lot size, the developer can build on 2-acre lots with a 15% density.

The most significant example of the use of cluster zoning techniques was the Chase subdivision in the South Branch area of the township (part of the Agricultural District), which preserved more than 150 acres by applying the clustering option to noncontiguous lots. The original development area consisted of five separate lots, and the clustering option allowed development to occur on only one of those lots, while the remaining four were preserved. The developed lot incorporated 105 building units clustered on 20,000 square-foot lots. Three of the preserved lots are being leased for farming and the fourth is planned for NJDEP bird habitat, although some limited farming may be allowed. Under the ordinance none of these properties are eligible for preservation through the Farmland Preservation Program but all are deed restricted as farmland.

Where they exist, these options provide a valuable tool for promoting and protecting active agricultural use without requiring general municipal, county or state taxpayer money to do so. These zoning options are voluntary, not mandatory; if they are not employed, conventional zoning regulations apply. The township has not considered introducing mandatory clustering, which, according to Robert Ringelheim probably would not meet a legal test, if challenged. The ordinance behind the open lands ratio has been upheld in the courts. (*Robert Ringelheim*)<sup>26</sup>

A member of the Agricultural Advisory Committee sits on the Planning Board and is part of the subdivision review process, which can assess whether the applicant's proposed use of the land retains for agricultural use those lands that are best suited for it. A soil analysis is required as part of the application process. (*Robert Ringelheim*) The AAC is very positive about clustering, considering it advantageous because it helps to save the most amount of land. In addition, the township gets the benefits of open space while protecting these areas for agriculture. (*Sam Conard*)<sup>27</sup>

Following is a brief overview of zoning options in the Agriculture, Mountain and Rural/Suburban Districts:

<b>Land Development Zoning Options</b>			
District	Conventional	Optional	
Agricultural (AG)	Min. lot: 10 acres	<b><i>Lot size averaging</i></b> <ul style="list-style-type: none"> <li>▪ 40 acre tract;</li> <li>▪ min. lot: 2 acres</li> <li>▪ max density .1 unit/acre</li> <li>▪ deed restricted against further subdivision</li> </ul>	<b><i>Open lands ratio</i></b> <ul style="list-style-type: none"> <li>▪ 65% open lands</li> <li>▪ 50% of open land unconstrained</li> <li>▪ min. res. lot: 2 acres</li> <li>▪ min. open lands lot: 10 acres</li> <li>▪ max density .15 unit/acre</li> <li>▪ tracts ≤100 acres open land must be contiguous</li> <li>▪ tracts ≥100 acres: open land min. 50 contiguous acre parcels</li> </ul>
Mountain Conservation (MZ)	Min. lot: 15 acres	<b><i>Lot size averaging</i></b> Min. res. lot: 5 acres Max. density: .066 unit/acre Deed restricted against further subdivision	
Rural/Suburban (RS)	Min. lot: 1.5 acres DSF; 1 acre CSF	<b><i>Planned Residential Cluster and Farmland/Open Space Preservation Development Option</i></b> Used to receive dwelling units transferred from properties elsewhere in the RS District that will be dedicated to the township or permanently deed-restricted for farmland preservation, open space or public park use (70% of the gross tract area including receiving and sending parcels)	

Hillsborough regulations also state that cluster development must occur in areas with public water and sewer service, unless the lots are one acre or larger, in which case septic is permitted. The minimum tract is set according to the standards for the particular district as set out in Article V of the regulations. (*Development Regulations Ordinance*)

### ***Buffer Requirements***

A critical area is “any area which is environmentally sensitive or which, if disturbed during construction, would adversely affect the environment, including but not limited to slopes of 12% or greater, floodplains, floodways, areas of critical seasonal high water table, wetlands and wetland transition areas and stream corridors.” (*Hillsborough Development Regulations*)

*Ordinance Definitions*)<sup>28</sup> On lands where critical areas exist, the following percentages of the critical area have to be excluded from the overall permitted density calculations:

	AG	MZ	Other Residential
Slopes 12-24.99%	100	75	50
Slopes $\geq$ 25%	100	100	100
Floodplain	100	75	50
Floodway	100	100	100
Wetlands/transition areas	100	75	50
Stream corridors	100	75	50
Critical seasonal high water table	100	75	50

Currently, Hillsborough's ordinances do not include any requirements for buffers separating agricultural land uses from other land uses. (*Robert Ringelheim*) However, in the Agricultural District, conventional zoning requires neighborhood tree conservation buffers measuring at least 100 feet in width around the perimeter of any tract proposed for a conventional residential subdivision. (*Hillsborough Development Regulations Ordinance*) According to Sam Conard, Chair of the Agricultural Advisory Committee, these buffers have proved adequate as evidenced by the fact that there have been no complaints brought forth by either residents or farmers in the last five to seven years. (*Sam Conard*)

#### ***Development Pressures and Land Value Trends***

Between 2000 and 2007, the number of authorized residential building permits in Somerset County trended downward, from 2,282 in 2000 to 926 in 2007. The county experienced its biggest drop between 2000 and 2001. In contrast, Hillsborough's volume peaked in 2001, with 204 permits authorized, up from 98 in 2000. The numbers dropped to single digits in 2003-2005 and spiked again in 2006 (114) and 2007 (186), but are estimated to be down significantly in 2008. In the eight-year period from 2000 through 2007, Hillsborough's share of the county's overall authorized permits was 6%, reaching an annual high of 20% in 2007 (see *table* below). In general, commercial building permits have followed a similar pattern to that of residential permits. (*Robert Ringelheim*)

<b>Residential Building Permits Authorized 2000-2007</b>										
	<b>Type</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>Total</b>
Hillsborough Township										
	Single	18	59	6	5	4	15	37	165	309
	Multi	80	145	26	3	0	0	77	21	352
	Total	98	<b>204</b>	32	8	4	15	114	186	661
% Change			108%	-84%	-75%	-50%	275%	660%	63%	
Somerset County										
	Single	1,227	1,103	869	890	797	818	623	595	6,922
	Multi	1,055	336	661	370	565	402	435	331	4,155
	Total	<b>2,282</b>	1,439	1,530	1,260	1,362	1,220	1,058	926	11,077
% Change			-37%	6%	-18%	8%	-10%	-13%	-12%	
Hillsborough as % of County		4%	14%	2%	1%	0%	1%	11%	20%	6%
Source: N.J. Department of Labor and Workforce Development website <sup>29</sup>										

With regard to land values, the cost of farmland preservation easements appears to be gradually rising. Average cost per acre in 2000 and 2001 were \$7,492 and \$8,255, respectively. In 2004, two properties were preserved at a much higher cost per acre than previously, but in 2005 the average cost spread across five properties dropped to \$11,931, closer to the 2003 average of \$10,900. In 2006, one 28-acre parcel was preserved by easement purchase for a much higher cost per acre than any previous project, \$104,352. However, in the same year, a fee simple purchase of 43 acres cost only \$16,000 per acre. A comparison of undeveloped land purchases in the Agricultural (AG) and Mountain Conservation (MZ) Districts versus other zoning districts, including commercial, industrial and residential districts, shows that land values in the AG and MZ districts generally are lower than in the other zones. In addition, while the average cost per acre has vacillated up and down in the AG/MZ districts, it has climbed steadily in the other zones. (see *table* below)

<b>Comparison of FPP Easements and Undeveloped Land Sales in Hillsborough By Average Cost Per Acre</b>						
Year	Farmland Preservation Easements	Land Sales				
		AG/MZ			Other Zones	
		Private	Public	Preserved	Private	Public
2003	\$10,900	\$29,740	\$18,321		\$31,247	
2004	\$24,328	\$37,004			\$47,147	
2005	\$11,931	\$35,517			\$131,458	\$10,000
2006	\$104,352	\$27,309	\$24,823		\$103,609	
2007		\$14,567	\$31,597	\$11,306	\$121,386	
2008		\$32,776	\$20,685		\$231,557	\$54,000
Source for Land Sales: Hillsborough Township Tax Assessor <sup>30</sup>						

## G. 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.

TDR programs afford developers the option to buy development rights from landowners in the sending area and apply them to parcels in the receiving area. For example, local zoning in a TDR receiving area may only allow one development unit per acre. If a developer buys the development rights equal to four units from a landowner in a TDR sending area and applies them to a one-acre project in the receiving area, the developer can exceed the receiving area zoning by building up to five units on that acre.

The New Jersey State Transfer of Development Rights Act (*NJ Statutes Annotated. 40:55D-140*)<sup>31</sup> 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 amend its master plan to include a Development Transfer Plan Element and a Utility Service Plan for the receiving zone. Then, a town must adopt a Capital Improvement Program for the receiving zone. A municipality has to prepare a market analysis that quantifies the development potential of the sending zone(s) and the capacity of the receiving zone(s) to accommodate additional development. This analysis must include a mechanism for assigning development credits to areas in the sending zone and reapplying them to areas in the receiving zone. Once complete, a town must receive approval from the State Planning Commission to adopt the TDR ordinance. (*N.J.S.A. 40:55D-140*)

There are several transfer-of-development rights programs that may be instituted in Somerset County. One such program is the *intra-municipal TDR* in which sending and receiving areas are located within the same town. This is the type of TDR that Hillsborough Township is currently working to implement.

The State of New Jersey facilitates the implementation of TDR in many ways. The New Jersey State TDR Bank offers Planning Assistance Grants to municipalities looking to establish municipal TDR programs, and directly funds some purchases of development credits. The State TDR Bank also provides financial banking on loans secured using development credits as collateral, and keeps 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. Hillsborough Township is one of two municipalities in Somerset County currently seeking to implement a TDR program. The other is neighboring Montgomery Township, which has identified its

Sourland Mountain Special Resource Area as an appropriate sending zone and the area surrounding the Belle Mead station on the former West Trenton rail line as its receiving zone.

In Hillsborough, the Agricultural and Mountain Conservation Districts, as well as an agriculturally oriented area within the current Corporate Development Zone, have been identified as sending areas and the Corporate Center and Transit Oriented Village Districts between the Town Center and Millstone Borough, outlined in the *Master Plan Amendment – Phase 2*, would become the receiving areas. (see *TDR Analysis Map*) Hillsborough has received a Planning Assistance Grant from the State TDR Bank and a Smart Future Grant for \$50,000 from the Office of Smart Growth. The township has hired a consultant to assist with the planning for this project (2006 N.J. State Transfer-of-Development Rights Bank Board Annual Report)<sup>32</sup> and had been in the process of preparing its market analysis. Work on the TDR proposal is in hiatus at the present time due to new NJDEP Water Quality Management rules regarding wastewater and sewerage that impact the sending and receiving areas. The township continues to work with the Office of Smart Growth and other state and county agencies to find a solution to this challenge, so that the TDR process can move forward. (*Robert Ringelheim*)

TDR has many advantages for Hillsborough and its residents. It is an incentive for developers to build in centers designed to absorb development, thereby allowing agricultural areas to remain free of cluster development that might otherwise occur. It provides a preservation mechanism that does not require public funding at the municipal, county or state level, creating more opportunities for land preservation. It often generates a better financial outcome for landowners selling their development credits than the farmland preservation mechanisms available through the State's traditional farmland preservation program. According to Courtenay Mercer of the Office of Smart Growth, landowners participating in established TDR programs in another town were getting, two years ago, the equivalent of \$10,000 an acre through TDR versus \$5,000 via traditional farmland programs. (*Hillsborough Township TDR Workshop*)<sup>33</sup>

While the township is interested in pursuing TDR as an intramunicipal program, it has no interest on a regional level unless there would be a possibility of sending densities to other towns. There is little to no likelihood that the township would be interested in receiving densities from other municipalities. (*Robert Ringelheim*)

### ***Township Goals and Objectives***

While development pressure may have leveled off somewhat and the current slowdown in the real estate market may have curbed spiraling land values, the township is aware that there is still much land that could be appealing to developers when the market curve turns upward again. As with so much of New Jersey, Hillsborough realizes that the time is now to preserve as much land as it can, for the sustainability of agriculture, for the sustainability of its natural resources and for the retention of the character of Hillsborough. To that end, the township's goals and objectives include several that foster the preservation of farms and farming in the community. (*Master Plan Amendment – Phase 2*)<sup>34</sup>

### ***Land Use Management***

- Provide a future land use pattern that includes agriculture (farms);
- Continue and expand land use policies that guide development to suitable locations and at appropriate intensities;
- Plan for population densities in areas that do not exceed the carrying capacities of natural resources, especially groundwater;
- Protect and maintain the prevailing rural character, particularly in the Agricultural and Mountain Districts, and include some lands within the CDZ District, which includes historic settlement areas and scenic landscapes, which result from the natural topography, agricultural lands, woodlands and watercourses;
- Promote cooperation with adjoining municipalities...to advance consistent development and open space goals, policies and plans; and
- Advance the goals and objectives of Hillsborough Township through the incorporation of local policies and strategies that respond to the basic premises, intent and purposes of the State Development and Redevelopment Plan and the Somerset County Master Plan.

### ***Community Design***

- Promote flexible zoning provisions such as planned development and cluster options that may aid in avoiding development in critical areas and permanently preserving open space including farmland.

### ***Natural Resources***

- Maintain and enhance biological diversity through the protection of large contiguous tracts and corridors of recreation, forest, flood plain and other open space lands;
- Protect prime agricultural soils, soils of statewide importance and soils of local importance for their contribution to agricultural production; and
- Protect groundwater supply and quality through the adoption of aquifer management programs, including relevant standards for wellhead protection programs, and standards to protect groundwater recharge areas, such as impervious coverage limitations.

### ***Agriculture***

- Encourage agricultural preservation throughout Hillsborough, in recognition of the existing agricultural characteristics;
- Preserve a large, contiguous land base to assure that agriculture remains a viable, permanent land use;
- Coordinate agricultural preservation activities with the State Agriculture Development Committee, Somerset County Agricultural Development Board and other open space preservation activities within the township;
- Recognize agriculture as a significant economic industry in the community and encourage economic opportunities in this industry; and

- Encourage compatibility between agricultural operations and neighboring non-agricultural development through the right-to-farm ordinance.

### ***Transportation***

- In the Sourland Mountain, historic districts, and agricultural districts, promote a road system that remains narrow because of the physical constraints of the terrain and the limited traffic resulting from the restricted development opportunities; and
- Discourage further highway development or extension of the highway system into the agricultural, mountain and other scenic areas.



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- <sup>1</sup> New Jersey State Planning Commission. New Jersey State Development and Redevelopment Plan. March 2001.
- <sup>2</sup> Somerset County Regional Center Strategic Plan. November 2006. p. 113.
- <sup>3</sup> Somerset County. Cross Acceptance. Municipal PSPPM Amendment Maps.  
<http://www.co.somerset.nj.us/planweb/cross/maplist.htm> Accessed November 16, 2007.
- <sup>4</sup> Final Somerset County Cross-acceptance Report, March 2005.
- <sup>5</sup> New Jersey Department of Community Affairs. Office of Smart Growth. Plan Endorsement Process.  
<http://www.nj.gov/dca/osg/plan/endorsement.shtml>. Accessed January 16, 2009.
- <sup>6</sup> Personal communication with Robert Ringelheim, Township Planner. January 16, 2009.
- <sup>7</sup> New Jersey Department of Community Affairs, Office of Smart Growth. State Plan.  
[http://www.state.nj.us/dca/osg/plan/stateplan/policies\\_special.shtml](http://www.state.nj.us/dca/osg/plan/stateplan/policies_special.shtml) Accessed January 16, 2009.
- <sup>8</sup> Sourland Planning Council. <http://www.sourland.org>. Accessed January 16, 2009.
- <sup>9</sup> Draft Sourland Mountain Conservation Master Plan. Phase II. November 2008. Prepared for the Sourland Planning Council By Banisch Associates, Inc., Conservation Resources, Inc., Stony Brook Millstone Watershed Association  
[http://banisch.com/dl/sourlands\\_CMP\\_11-08.pdf](http://banisch.com/dl/sourlands_CMP_11-08.pdf). Accessed January 16, 2009.
- <sup>10</sup> *2008 Somerset County Comprehensive Farmland Preservation Plan*.
- <sup>11</sup> Municipal Cross-acceptance Population Projections: [http://www.co.somerset.nj.us/\\_pdffiles/scppopulation.pdf](http://www.co.somerset.nj.us/_pdffiles/scppopulation.pdf)
- <sup>12</sup> New Jersey Department of Environmental Protection. GIS. General Category Descriptions.  
<http://www.state.nj.us/dep/gis/categories.htm>. Accessed November 14, 2007.
- <sup>13</sup> Personal communication with Kevin Whatsey, Communications Specialist, New Jersey American Water. November 27, 2007.
- <sup>14</sup> Personal communication with Robert Ringelheim, Township Planner. November 12, 2007.
- <sup>15</sup> Hillsborough Township Master Plan 1965-1996, Utility Service Plan element. Section 5. p. 4
- <sup>16</sup> Hillsborough Township Master Plan 1965-1996, Utility Service Plan element. Section 5. p. 4
- <sup>17</sup> Personal communication with Laurette Kratina, Supervising Planner, Somerset County Planning Division. January 21, 2009.
- <sup>18</sup> Master Plan Amendment – Phase 2. Gateway, Town Center, Transit Oriented Village, Transitional, Research & Development, Corporate Development & General Industrial Zones. Adopted October 27, 2005. Chapter 8. Corporate Center District. p. 32.
- <sup>19</sup> State of New Jersey Department of Transportation. News Release. December 20, 2002.  
<http://www.state.nj.us/transportation/about/press/2002/122002a.shtml>.
- <sup>20</sup> Hillsborough Township Master Plan. 1965-1996. Utility Element. p. 2
- <sup>21</sup> Master Plan Amendment for the Agricultural and Mountain Districts. Adopted October 24, 2002. p. 11.
- <sup>22</sup> Hillsborough Development Regulations Ordinance. 188-99.6. OS-CL Open Space-Cultural Landscape District. Added 4-27-2004 by Ord. No. 2004-07

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<sup>23</sup> Master Plan Amendment – Phase 2. p. 32

<sup>24</sup> Town Center District. Ordinance 2007-25. <http://www.hillsborough-nj.org/documents/departments/ZonePlan/TownCenterDistrictOrd2007-25.pdf>. Accessed November 16, 2007.

<sup>25</sup> New Jersey Association of County Tax Boards. [www.njactb.org](http://www.njactb.org). Hillsborough Township Data. March 15, 2007

<sup>26</sup> Personal communication with Robert Ringelheim, Township Planner. November 12, 2007 and January 12, 2009.

<sup>27</sup> Personal communication with Sam Conard, Chair, Agricultural Advisory Committee. January 12, 2009.

<sup>28</sup> Hillsborough Development Regulations Ordinance. Definitions. 188-3. p. 188:10. Dated 30/01/2006.

<sup>29</sup> New Jersey Department of Labor and Workforce Development. Building Permits. [http://lwd.dol.state.nj.us/labor/lpa/industry/bp/bp\\_index.html](http://lwd.dol.state.nj.us/labor/lpa/industry/bp/bp_index.html). Accessed January 20, 2009.

<sup>30</sup> Hillsborough Township Tax Assessor. Debra Blaney. Faxed communication. January 21, 2009.

<sup>31</sup> New Jersey Statutes Annotated 40:55D: Municipal Land Use Law.

<sup>32</sup> New Jersey State Transfer-of-Development Rights Bank Board. *2006 Annual Report*. June 2007.

<sup>33</sup> Hillsborough Township TDR Workshop. October 30, 2007.

<sup>34</sup> Master Plan Amendment – Phase 2. Chapter 10. Appendices.



## **CHAPTER 4:**

# **HILLSBOROUGH TOWNSHIP'S FARMLAND PRESERVATION PROGRAM**

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Farmland is an irreplaceable natural resource, once lost it cannot be recreated or replaced. The farmers who work the land are not only stewards of the agricultural landscape; they are the stewards of the rural heritage and legacy that defines Hillsborough Township and its environs. The business of agriculture supports the local economy and provides a unique and bucolic quality of life for residents. Agriculture provides food and fiber, clean air, storm water management, groundwater recharge, wildlife habitat, and the beautiful scenic vistas that surround the regions' mountains and rivers.

Hillsborough Township has considerable agricultural resources and has shown consistent strong support the retention of agriculture and agricultural viability through its planning process, financial commitments to farmland preservation programs and support of State and County farmland preservation goals. There is still considerable agricultural infrastructure and an active and vital agricultural community in the township. Since the inception of farmland preservation, Hillsborough Township has permanently preserved 2,411 acres of farmland. Farmers and local officials in Hillsborough Township are firmly committed to farmland protection and continue to support the preservation of agricultural land throughout the County. At the present time, many additional acres are currently pending preservation, having submitted applications in various farmland preservation programs.

### **A. Agricultural Development Areas (ADAs)**

#### ***Geographic Information System Mapping/Current Location Map (See Appendix)***

The Somerset County Agriculture Development Board (CADB) developed the Somerset 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 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 proposed ADA area;
- The land must comprise no greater than 90% of the agricultural land mass of the County; and,
- Any attributes deemed appropriate by the Board must also be incorporated.

Somerset County initially established their ADA in 1983. As part of this Comprehensive Farmland Preservation Plan, the Somerset CADB has updated their ADA designating land capable of supporting agricultural production. In this process the CADB updated their ADA utilizing the following methodology:

- 1) The Somerset County Planning Board and Agriculture Board staff reviewed the criteria for creating an ADA, as set forth in the State's Enabling Statutes;
- 2) All farmland assessed properties and existing preserved farmland were mapped and reviewed;
- 3) The previously approved Somerset County Agriculture Priority Areas were reviewed,
- 4) State Planning Area Boundaries were reviewed;
- 5) These areas were overlaid onto a parcel-specific aerial photograph of Somerset County;
- 6) Somerset County Agriculture Development Board/Planning Board staff analyzed the aerial map and delineated the areas that fit the ADA criteria listed in the Agriculture Retention Act;
- 7) Staff used road boundaries in most instances, however where applicable lot lines, Planning Area boundaries and waterways were used. These boundaries were used in areas where existing or proposed development is prevalent in a specific area of the proposed ADA;
- 8) The updated map was reviewed by Planning Board staff specializing in transportation, smart growth, state planning, and GIS;
- 9) Following staff review, the proposed ADA was revised, adding a section of the ADA to Bernards and, using the Planning Area 2 boundary in eastern Franklin to cut out a large portion of existing and proposed development, rather than using the municipal boundary;
- 10) The proposed ADA Map was presented to the Somerset County Agriculture Development Board, who granted conceptual approval, allowing for further necessary changes to be made by Somerset County Agriculture Development Board/Planning Board staff. Final Approval by the CADB of the ADA is expected at its September 10, 2007 meeting;
- 11) Once Final Approval of the ADA is granted from the Somerset County Agriculture Development Board, the Somerset County Agriculture Development Board/Planning Board staff will hold a public hearing, where public comment will be heard;
- 12) The minutes from this public hearing, along with the Final ADA Map, write-up describing each section of the ADA, and spreadsheet showing the acreage breakdown of each section of the ADA will be submitted to the State Agriculture Development Committee for review and approval;
- 13) Once Final Approval of the ADA is received from the State Agriculture Development Committee, staff will file the map with the Somerset County Planning Board.

Utilizing the state's regulatory criteria for designating ADA and existing farmland assessment data, the County designated an ADA on a county-wide basis that does not

exceed 90% of the County's agricultural land base. A map of the Proposed ADA is included in the *Maps* Section of this Plan.

***County Criteria:***

- Land is currently in agricultural production or has strong potential for agricultural production or is farm assessed through a woodland management plan.
- Agriculture is the preferred, but not necessarily the exclusive use.
- Agriculture is a use permitted by current municipal zoning ordinance or is allowed as a non-conforming use.

***Description of the Somerset County ADA***

<b>Proposed Agriculture Development Areas</b>	<b>Total QFarm Parcels</b>		<b>Unpreserved QFarm Parcels</b>		<b>Pending QFarm Parcels</b>		<b>Preserved QFarm Parcels</b>	
	Number	Acreage	Number	Acreage	Number	Acreage	Number	Acreage
Millstone Valley	284	47,477	256	6,179	1	137	28	1,161
Northern Bernards	3	72	3	72		0		0
Eastern Montgomery	9	143	8	64		0	1	79
Pike Run	9	292	8	184	1	78	1	30
Bedens Brook	57	1,198	39	693		0	18	505
Bedens Brook East	10	225	10	171	1	54		0
Neshanic Valley	410	13,453	378	10,643	1	46	32	2,764
Upper Raritan	525	16,585	494	13,916	2	409	31	2,260
Warren	47	739	47	654	1	84		0
Bernards Dead River	37	3 884	37	884		0		0
Subtotal Project Areas:	1,391	41,068	1,280	33,461	7	808	111	6,799

Somerset County's farmland is distributed throughout the county. High concentrations of farmland surround the North Branch of the Raritan River as well as the Millstone River, Neshanic River, Bedens Brook, and South Branch of the Raritan River. These areas border regions of Morris, Hunterdon, and Mercer Counties that also contain high concentrations of farmland. The Somerset County ADA incorporates farms in these border regions, as well as one area of concentrated farmland in Warren Township. The ADA excludes farms that are isolated from other farms or are close to areas of suburban development or town centers. Municipalities included in the ADA are Bedminster, Bernards, Warren, Branchburg, Hillsborough, Montgomery, and Franklin Townships as well as Bernardsville, Far Hills, Peapack-Gladstone, and Millstone Boroughs. The ADA consists of ten distinct regions. (see *Proposed ADA Map*) The below table provides a summery of each ADA, following the table is a brief description of the proposed ADA for Somerset County.

Overall the County has 1,779 QFarm Assessed Parcels, totaling 48,127 acres. Of this, there are 1,391 QFarm Assessed Parcels within the proposed ADA totaling 41,068 acres. Therefore, 85% of the total farm assessed land in Somerset County is included within the proposed ADA.

### ***Somerset County ADAs Within Hillsborough Township***

Hillsborough Township includes portions of two of the ADAs listed above; the Millstone Valley ADA and the Neshanic Valley ADA.

#### **Millstone Valley ADA**

The Millstone ADA encompasses Millstone Borough and portions of eastern Hillsborough Township and southern Franklin Township. It includes a cluster of preserved farms in Hillsborough Township south of the Royce Brook Golf Course and east of the CSX railroad line. There are 1,161 acres of preserved farmland in this ADA in Somerset County. This ADA incorporates the South PIG Project Area in Hillsborough, which totals 809 acres.

#### **Neshanic Valley ADA**

Centered around the Sourland Mountain and the Neshanic River, the Neshanic ADA includes land in western Hillsborough, Branchburg Township south of Whiton Road, and northeastern Montgomery Township, and contains the largest number of preserved farms, totaling 2,764 acres. This ADA also incorporates a second concentration of farmland, which includes one preserved farm along Pike Run in eastern Montgomery Township and farmland adjacent to it. This ADA borders Raritan, Readington, and East Amwell Townships in Hunterdon County, municipalities where high concentrations of farmland exist. In Hillsborough Township, the Neshanic Valley ADA incorporates the Mill Lane PIG Project Area, totaling 782 acres, and the Amwell Valley PIG Project Area.

## **B. Farmland Preserved to Date by Program and Municipality**

In 1983, 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 Somerset County Board of Chosen Freeholders created the Somerset County Agriculture Development Board (CADB) in April 1983.

As of July 27, 2007, there are 67 permanently preserved farms in Somerset County, permanently protecting 6,710 acres. Seven towns in Somerset County have preserved farmland. The County has spent a total of \$20,327,038 to protect farmland in the County, just over 25% of the total cost share. The cost per acre varies throughout the County, but on average, over the course of the program, the average cost per acre is \$11,785.

Hillsborough Township has the largest number of acres preserved (2,367 acres). Bridgewater has preserved one farm which had the highest per acre cost in the County

(\$54,520). There has been federal funding in two towns (Bedminster and Franklin) and three towns (Bedminster, Franklin and Hillsborough) have each contributed municipal funding to farmland preservation projects.

***Farmland Preservation in Hillsborough Township – Program History (as of December 31, 2008)***

<b>Date Preserved</b>	<b>Farm Name</b>	<b>Acres</b>	<b>Type</b>	<b>Purchase Price</b>	<b>SADC Share</b>	<b>County Share</b>	<b>Municipal Share</b>
12/17/1993	Foxx	119.29	Traditional Easement	\$583,924.55	\$347,740.80	\$236,183.75	\$0.00
1/11/1994	Everett / Everlea Farms	93.31	Traditional Easement	\$692,923.86	\$411,184.80	\$281,739.06	\$0.00
1/11/1994	Everett / Everlea Farms	134.76	Traditional Easement				
3/18/1997	Conard	82.37	Traditional Easement				
12/19/1997	D'Altrui / D.I. Horse Farm	116.36	Traditional Easement	\$1,001,913.56	\$651,243.82	\$350,669.75	\$0.00
7/14/1998	SCADB/S. Kanach	114.80	Traditional Easement	\$945,450.00	\$575,865.00	\$369,585.00	\$0.00
7/14/1998	Taylor /Black Horse Stable	37.87	Traditional Easement	\$300,072.00	\$210,050.40	\$90,021.60	\$0.00
10/9/1998	Conard	138.96	Traditional Easement	\$1,528,856.00	\$1,223,084.80	\$305,771.20	\$0.00
10/6/1999	Osterman	101.40	Traditional Easement				
11/22/1999	Martin / LaBaw Farm	40.68	Traditional Easement	\$288,813.80	\$181,017.10	\$107,796.70	\$0.00
9/20/2000	Triangle Associates	57.17	Traditional Easement	\$594,588.80	\$416,212.16	\$178,376.64	\$0.00
10/24/2000	Elibacher	21.98	Traditional Easement	\$106,680.22	\$73,990.37	\$32,689.85	\$0.00
5/31/2001	Jones / Davis Farm	41.64	Traditional Easement	\$420,519.56	\$252,311.74	\$168,207.83	\$0.00
6/28/2001	Norz	41.26	Traditional Easement	\$338,419.99	\$206,209.26	\$132,210.73	\$0.00
6/29/2001	SCADB/Hilltop/VanCleef	158.89	Traditional Easement	\$627,628.54	\$440,134.44	\$187,494.10	\$0.00
6/29/2001	SCADB/T. Kanach	351.11	Traditional Easement	\$3,010,810.27	\$1,821,408.54	\$1,189,401.73	\$0.00
7/20/2001	Sully, LLC	28.08	Traditional Easement	\$289,071.53	\$173,442.92	\$115,628.61	\$0.00
11/14/2003	Wengryn Farm	70.10	Traditional Easement	\$764,096.54	\$458,457.92	\$305,638.62	\$0.00
12/17/2004	Conard /Warmke	75.31	PIG	\$1,697,939.75	\$916,512.00	\$390,713.88	\$390,713.88
12/20/2004	Conard	26.25	PIG	\$685,355.00	\$299,904.00	\$192,725.50	\$192,725.50
3/28/2005	Mill Lane Associates	20.25	PIG	\$236,964.78	\$142,178.87	\$47,392.96	\$47,392.96
4/28/2005	Urban / Heflich Family LLC	46.00	Traditional Easement	\$946,854.30	\$568,112.58	\$378,741.72	\$0.00
6/20/2005	Young	29.44	Traditional Easement	\$204,732.00	\$127,957.50	\$76,774.50	\$0.00
6/24/2005	Daniel	79.50	PIG	\$1,101,362.00	\$656,259.84	\$222,551.08	\$222,551.08
6/29/2005	Bothers Farm Trust/ Gunther	158.48	PIG	\$2,298,047.00	\$1,378,828.20	\$459,609.40	\$459,609.40
7/7/2005	Cunningham	62.86	Traditional Easement	\$1,003,374.00	\$602,024.00	\$401,350.00	\$0.00
4/19/2006	J&M Giarusso	43.40	SADC EP	\$694,432.00	\$694,432.00	\$0.00	\$0.00
10/25/2006	Durling	27.92	Traditional Easement	\$2,913,503.70	\$1,748,102.20	\$1,165,401.48	\$0.00
10/25/2006	Durling	47.53	Traditional Easement				
4/23/2008	Zamek	46.20	PIG	\$836,262.90	\$485,731.08	\$161,910.36	\$188,621.46
<b>TOTALS</b>	<b>30 Farms</b>	<b>2,413.16</b>		<b>\$24,112,596.65</b>	<b>\$15,062,396.34</b>	<b>\$7,548,586.05</b>	<b>\$1,501,614.28</b>

Municipality	Preserved Acres	Total Cost	SADC Share	Federal Grant	County Share	Municipal Share	Cost/Acre
Bedminster	1,353	\$21,838,692	\$ 15,842,563	\$ 1,027,931	\$ 4,103,397	\$ 864,802	\$ 16,146
Branchburg	890	\$ 9,671,651	\$ 6,228,779	\$ -	\$ 3,442,873	\$ -	\$ 10,747
Bridgewater	21	\$ 1,144,914	\$ 801,440	\$ -	\$ 343,474	\$ -	\$ 54,520
Franklin	736	\$15,728,481	\$ 8,667,572	\$ 505,020	\$ 2,663,085	\$ 3,892,803	\$ 21,363
Hillsborough	2,377	\$24,478,110	\$ 15,338,291	\$ -	\$ 7,826,826	\$ 1,312,993	\$ 10,342
Montgomery	1,299	\$ 6,208,624	\$ 3,831,281	\$ -	\$ 2,307,699	\$ -	\$ 4,780
Peapack & Gladstone	34	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Totals:	6,710	\$79,070,472	\$ 50,709,926	\$ 1,532,951	\$ 20,687,354	\$ 6,070,598	\$ 11,785
		Percent Cost Share:	64.13%	1.94%	26.16%	7.68%	

### ***County Easement Purchase***

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. 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.

To be eligible for the County Easement Purchase program, a landowner must complete an application. In the past these applications were distributed once a year. With the new County Planning Incentive Grant program there will no longer be an annual application date for the County Easement Purchase program. Following review of the application and a site visit by the Somerset CADB are two independent appraisals. Each appraisal determines 2 values: one to determine the land's fair market value, and one to determine its agricultural value. The difference between these two values is the price of the farms' "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.

Fifty-three farms have been preserved through the County Easement purchase program in six towns, protecting 4,464 acres of farmland in Somerset County. The County application for the traditional easement purchase program is included within the *Appendix*.

### ***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, which functions like the County Agricultural Development Board (CADB), is necessary. Additionally, the county and township 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. Somerset County and Hillsborough Township have developed *Comprehensive Farmland Preservation Plans* in order to be 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 that are the focus of the Municipal PIG. In order to qualify for this program, the town must have an agricultural advisory board and a source of funding for farmland preservation. Currently there are seven communities in Somerset County enrolled in the Municipal Planning Incentive Grant program: 1) Bedminster Township 2) Bernards Township 3) Branchburg Township 4) Franklin Township 5) Hillsborough Township 6) Montgomery Township 7) Peapack and Gladstone Borough

The table below details the municipal Planning Incentive Grant Program Hillsborough Township. Six farms totaling 405.99 acres have been preserved in Hillsborough using the municipal PIG. In the *Appendix* are the County criteria and checklists for municipal planning incentive grants.

<b>Closing Date</b>	<b>Farm Name</b>	<b>Acres</b>	<b>Purchase Price</b>	<b>SADC Share</b>	<b>County Share</b>	<b>Municipal Share</b>
12/17/2004	Conard /Warmke	75.31	\$1,697,939.75	\$916,512.00	\$390,713.88	\$390,713.88
12/20/2004	Conard	26.25	\$685,355.00	\$299,904.00	\$192,725.50	\$192,725.50
3/28/2005	Mill Lane Associates	20.25	\$236,964.78	\$142,178.87	\$47,392.96	\$47,392.96
6/24/2005	Daniel	79.50	\$1,101,362.00	\$656,259.84	\$222,551.08	\$222,551.08
6/29/2005	Bothers Farm Trust/ Gunther	158.48	\$2,298,047.00	\$1,378,828.20	\$459,609.40	\$459,609.40
4/23/2008	Zamek	46.20	\$836,262.90	\$485,731.08	\$161,910.36	\$188,621.46
<b>TOTALS</b>	<b>6 Farms</b>	<b>405.99</b>	<b>\$6,855,931.43</b>	<b>\$3,879,413.99</b>	<b>\$1,474,903.18</b>	<b>\$1,501,614.28</b>

### ***Comparison of “Old” and “New” Municipal Planning Incentive Grant (PIG) Programs as Implemented in Hillsborough Township***

The four existing, established Planning Incentive Grant Project (PIG) Areas in Hillsborough Township continue to be the focus of targeted farmland preservation efforts in the township. These areas were developed with considerable forethought and integration with and as part of other planning efforts in the township, the State and Somerset County Planning Board and Agriculture Development Committees (CADB). As such, the project areas in Hillsborough will remain the same as previously established. The focus of preservation efforts will be toward 1) preserving farms previously identified in these four areas, 2) considering preservation farms contiguous and adjoining

established PIG areas as having a higher priority than isolated farms in other areas of the township.

It must be noted that the new SADC regulations differ from prior regulations with respect to old regulations mainly in requiring much more comprehensive analysis of the agricultural resources, trends and needs within the township, county and State. And also differ in eligibility of various zoning criteria related to deadlines for completing projects and appraisals.

To set forth these changes the SADC has published Policy P-50, a transition policy to address changing from old, existing to new rules governing Farmland Preservation Programs which is included in its entirety as an appendix to this document.

### Hillsborough Township

The municipal PIG for Hillsborough divides the Township into three project areas: the South PIG Project Area, the Mill Lane PIG Project Area, and the Amwell Valley PIG Project Area. The location of the Mill Lane PIG project area is off East Mountain Road in the northern part of the Township. The South PIG Project Area is located between Hillsborough Road and County Line Road near the Montgomery border east of Route 206. The Amwell Valley PIG Project Area is on the westernmost edge of Hillsborough Township, bordering East Amwell Township.

The South PIG Project Area contains ten farms that are PIG targeted for preservation. There are currently four farms totaling 304 acres in this project area already preserved. The 2006 net total funding for this project area was \$2,525,000.

The Mill Lane PIG Project Area contains six farms PIG targeted for preservation. There are currently eleven preserved farms totaling 777 acres. The 2006 net total funding for this project area was \$3,000,000.

Created in 2006 the Amwell Valley PIG Project Area is the largest and most recent project area. The Amwell Valley PIG Project Area targeted farms total 2,269 acres. The 2006 net total funding for this project area was \$1,500,000.

### ***SADC Direct Easement Purchase***

Also important to Somerset 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 the purchase of farmland 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. 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 usually receive monetary contributions from the County, but may under special circumstances include local contributions to assist in the preservation of farms through the Direct Easement program. The state has preserved four farms on 401 acres in Somerset County at a cost of \$5,664,847 in state funds.

To date, one farm in Hillsborough Township, totaling 43 acres was preserved through the SADC Direct Easement Purchase Program (SADCEP) in 2006 for a price of \$694,432 or \$16,000 per acre.

### ***SADC Fee Simple Purchase***

A fee simple acquisition involves an entire property being purchased for certified market value. In this type of acquisition, the landowner does not retain any rights. The land becomes restricted so that it becomes permanently preserved for agriculture. The property is then resold at auction; the SADC does not retain ownership of the farm. To qualify to participate in this program, the farmland must be within an ADA and be eligible for Farmland Assessment.

This program seeks to preserve priority farms that are strategically located in each county. Priority farms are those that meet or exceed the county average in size and quality score. Quality scores are determined based on a number of factors, including soil quality, proportion of tillable acres, proximity to other preserved farms and local support for agriculture. Applications for farms not meeting these criteria still will be accepted and considered for approval on a case-by-case basis.

Applications will be accepted year-round. An applicant farm that is strategically located and meets or exceeds the minimum criteria for size and quality score will qualify for immediate consideration for preservation.

The SADC and landowner will enter into a 120-day option agreement in which the landowner agrees not to market the property for that time period. This provides time for two independent appraisers to evaluate the land. Based on the findings of those appraisers and the recommendations of its own review appraiser, the SADC will certify a fair-market value and make an offer. If the offer is accepted, the landowner and SADC will enter into a sale agreement. The SADC will order a survey and title search and work directly with the landowner through closing.

The entire process – from application to closing – can be completed in about 12 to 18 months provided there are no major complications associated with survey, title or related issues.

### ***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 and help to preserve farmland throughout the County. These grants are obtained through an application process, in which the land is valued by independent appraisers. Four farms have been preserved in Somerset County, two in Bedminster by The Nature Conservancy, one in Montgomery by the Montgomery Friends of Open Space, and one in Peapack and Gladstone by The Nature Conservancy.

To date no farms have been preserved through the Nonprofit Grant Program in Hillsborough Township, but based on the active land preservation efforts of Hillsborough Township by nonprofit conservation organizations and the financial advantages of leveraging of funds through creative land preservation partnerships the future possibility of accessing this funding program in Hillsborough Township is strong.

### ***Transfer of Development Rights***

The transfer of development rights is a growth management tool that transfers development rights from one location, a preservation area, to another, an identified growth area. The development rights are used to allow for development at a higher density than what the previous zoning of the receiving area allowed. To date, this program has not been used by Hillsborough Township to preserve farmland.

The Township of Hillsborough intends to implement a Transfer of Development Rights (TDR) program to preserve the Sourland Mountain region and existing agricultural areas throughout the township. Using sending area credits, the township hopes to establish a mixed use Town Center, a Transit Oriented Village along the West Trenton Rail Line and a Corporate Center.

## **C. 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. 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.

Soils of Statewide Importance and Prime Agricultural Soils in production outside Sewer Service Areas are additional priorities of the Strategic Targeting Project.

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 Strategic Targeting Project calls for careful evaluation of

information gathered through an extensive outreach commitment as part of a planning process that will result in a coordinated landowner contact effort. The Project will be incorporated as a key component of the Department of Agriculture's Smart Growth Plan, and will be updated periodically to maintain its effectiveness in strategically prioritizing farmland preservation investments.

Hillsborough Township and the Somerset CADB, through the completion of their 2007 Comprehensive Farmland Preservation Plans, meet each of the goals as outlined in the Strategic Targeting Project.

#### ***Municipal Planning Incentive Grant Program - Targeted Farms and Project Areas/Agricultural Advisory Committee Coordination***

Hillsborough Township has been very effective in maximizing its Farmland Preservation Program resources by creating, and actively acquiring farmland easements in, three different Municipal Planning Incentive Grant Project Areas: the Mill Lane PIG Project Area, the Amwell Valley PIG Project Area and the South PIG Project Area (*see Appendix for project area summary forms attached*).

Hillsborough has an active Agricultural Advisory Committee which works closely and often works jointly with its Open Space Advisory Committee.

### **D. 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. Additionally, those in municipally approved 8-year programs also enjoy greater protections from nuisance complaints, emergency fuel and water rationing, zoning changes and eminent domain actions.

In Hillsborough Township currently there are no farms enrolled in the 8-Year Program at present the AAC does not actively promote the program to landowners. As 8-Year Programs have been highly successful in other townships, information sessions could be held annually by the municipality and the AAC at some logical time such as prior to County Program application deadlines.

### **E. 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 funds and nonprofit grant funds are becoming increasingly important to preserving agricultural landscapes.

The SADC and County have preserved farms in Hillsborough Township without Township assistance. There has been no separate municipal program for preserving farmland; however, Hillsborough Township has been very active in evaluating and attempting to implement a Transfer of Development Rights Program. In addition, the Open Lands Ratio Subdivision has been used effectively as planning tool to preserve farmland. This type of subdivision requires clustering of residential units in exchange for a small increase in overall density. The benefits are that the Open Lands Ratio Subdivision dictates that 65% of the overall site will be preserved as farmland. To date, this type of subdivision has been used successfully on three development projects in Hillsborough Township.

Historically, Hillsborough Township has managed parcels acquired as open space whenever possible as active farmland. This is not a temporary situation but rather a conscious, long term commitment to continuation of agriculture and retention of agricultural services and land base in the township.

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 Somerset 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. Hillsborough Township has successfully coordinated farmland and open space preservation on the Bothers farm in which the “Greenway portion of the farm was separated out and preserved as open space and the prime farmland acres were preserved as farmland. In another example, Hillsborough Township and D&R Greenway Land Trust have collaborated in the Montgomery Road and the Neshanic River area to preserve a greenway among and including some preserved farms. In this case the 49-acre Zamek farm was preserved with a farmland easement with a perimeter trail corridor excepted out which provided a greenway linking several preserved open space parcels including the Taverner, Burshnic, Scudder and Azimi properties. This assemblage is flanked by the preserved Kanach farm to the west and the Osterman farm to the east. This assemblage is being added to with the recent application of the nearby 116-acre Granskie/Thompson farm to the Somerset County Farmland Preservation Program.

As with the Zamek Farm, the AAC will be involved in plans for trails through ADAs as well as through and adjoining pending preserved farms.

Twelve towns in Somerset County currently have municipal Open Space trust funds (see Table above). Working with these towns and N.J. Green Acres, the Somerset CADB is in a better position to coordinate farmland preservation with open space preservation.

TOWNS	Municipal Open Space fund	Municipal Tax Rate (per \$100)	Green Acres Planning Incentive Program (if Yes, date enrolled)	Open Space Plan
Bedminster Township	Yes	0.020	Yes - 1997	Yes
Bernards Township	Yes	0.041	No	Yes
Bernardsville Borough	Yes	0.020	Yes - 2003	Yes
Bound Brook Borough	No	0.000	No	No
Branchburg Township	Yes	0.050	Yes - 2004	Yes
Bridgewater Township	Yes	0.040	Yes - 1997	Yes
Far Hills Borough	No	0.000	No	No
Franklin Township	Yes	0.050	Yes - 2000	Yes
Green Brook Township	Yes	0.016	No	Yes
Hillsborough Township	Yes	0.041	Yes - 1996	Yes
Manville Borough	No	0.000	No	No
Millstone Borough	No	0.000	No	No
Montgomery Township	Yes	0.040	Yes - 1996	Yes
North Plainfield Borough	No	0.000	No	No
Peapack/ Gladstone Borough	Yes	0.031	Yes - 1999	Yes
Raritan Borough	No	0.000	No	No
Rocky Hill Borough	No	0.000	No	No
Somerville Borough	No	0.000	No	No
South Bound Brook Borough	No	0.000	No	No
Warren Township	Yes	0.021	Yes - 2000	Yes
Watchung Borough	Yes	0.021	No	Yes

## **F. Farmland Preservation Program Funding Expended to Date by Source**

### ***Somerset County Program History and Funding Expended to Date by Source***

In 1997 the residents of Somerset County approved the doubling of the Somerset County Open Space Tax from \$0.015 per \$100 to \$0.030 per \$100 of assessed property evaluation. Since 1990, the overall allocation to open space preservation in Somerset County has been \$149,040,894.

To date Somerset County has expended \$20,327,038 on 69 projects preserving 6,710 acres. The state has contributed \$50,709,925, towns have contributed \$6,070,598, and federal funds have contributed \$1,532,951. The total expended on farmland projects in Somerset County is \$79,070,472.

### ***Hillsborough Township Program History and Funding Expended to Date by Source***

In 1998 Hillsborough Township initiated a dedicated tax for Farmland and Open Space preservation. Currently this tax is set at 0.041/\$100 and yields over \$1,000,000 per year of which 1/3 is dedicated to farmland preservation.

Funds expended in Hillsborough Township for the 30 farmland preservation projects totaling 2,411 acres are \$24,112,596. The State has contributed \$15,338,291, the County has contributed \$7,826,826, and Hillsborough Township has contributed a total cost share of \$1,312,993. (*NOTE: Discrepancies in these numbers are a result of Somerset County's reporting as of July 2007 and Hillsborough Township reporting as of the end of 2008*)

## **G. Monitoring the Easements**

To verify compliance with the deed restrictions on preserved property is taking place, holder of the deed of easement is responsible for annual inspections of preserved farms. The SADC is responsible for the monitoring of farms preserved through the Direct Easement and Fee Simple programs, as well as any Municipal PIG preserved farms if the County is not a funding partner. These inspections consist of completion of a form during a field visit to the farm. The inspectors take note of the following:

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

The Township and the AAC would notify the appropriate agency if violations are suspected.

## **H. Coordination with Transfer of Development Rights Programs**

Transfer of Development Rights (TDR) may be used in conjunction with the traditional Purchase of Development Rights (PDR) program; these two programs are not mutually exclusive. To date, this has not been used in Hillsborough Township or elsewhere in Somerset County.

Planning for TDR could compliment farmland preservation and agriculture retention efforts by educating local residents and official of some of the benefits of TDR including: providing an alternative to losing land equity, which could result from future down-zoning or regulation; minimizing incidents of conflict as development potential is transferred out of agricultural or environmentally sensitive areas, with adjacent residential uses; helping maintain the character of the community by transferring development away from agricultural, historic, and environmentally or socially important areas; and, targeting growth where it is desired and where appropriate infrastructure exists.





## **CHAPTER 5:**

# **FUTURE OF FARMLAND PRESERVATION IN HILLSBOROUGH TOWNSHIP**

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### **A. Preservation Goals – 1, 5 and 10 year Targets**

#### ***Hillsborough Township Farmland Preservation Goals***

At 54.7 square miles, or 35,008 acres, Hillsborough Township is the largest municipality in Somerset County. According to the 2004 Farmland Assessment report, the township had the highest number of farmland assessed acreage in the county, 12,226 acres, representing 28.4% of the county's 43,040 acres of farmland assessed property. In addition, 7,930 of the township's total farmland assessed acres were devoted to active agricultural use, representing 30% of all active agricultural land (26,421 acres) in the county. Hillsborough also ranked 12<sup>th</sup> in the state on the 2003/2004 Farmland Assessment tabulation of the 50 municipalities with the highest concentrations of agricultural land. (*Farmland Assessment Data*)<sup>i</sup>

Hillsborough Township has considerable agricultural resources and has shown consistent strong support the retention of agriculture and agricultural viability through its planning process, financial commitments to farmland preservation programs and support of state and county farmland preservation goals. Due to the location of Hillsborough Township in a rapidly suburbanizing area of central New Jersey, increasing land values and pressure from residential development and other non agricultural uses, it is essential that measures be taken to protect and support the existing agricultural base of land and active farmers in the township

There is still considerable agricultural infrastructure and an active and vital agricultural community in the township and the Amwell Valley region. Hillsborough Township retains large contiguous productive farmland areas with 12,226 acres of important farmland soils currently under farmland assessment. Since the inception of farmland preservation, Hillsborough Township has permanently preserved 2,283 acres of farmland. Farmers and local officials in Hillsborough Township are firmly committed to farmland protection and continue to support the preservation of agricultural land throughout the county. At the present time, hundreds of additional acres are pending preservation having submitted applications in various farmland preservation programs.

Currently, funding is limited both at the county and state levels. Municipal tax dedicated to farmland and open space is also a finite resource. In addition, land values historically have risen in Hillsborough Township. By working with the full range potential funding partners, preservation tools and funding sources, a realistic goal for Hillsborough would be the preservation of an additional 1,000 acres by 2017:

One year target – 100 acres  
Five year target – 500 acres  
Ten year target – 1,000 acres

The above preserved acreage goals are subject to upward revision if any of several variables changes. These include:

- If land values stabilize or decrease as has been the trend in early 2009 and imminent threat of development decreases in the upcoming 10 years;
- If the SADC funds are renewed or increased at the State level through a new funding referendum;
- If Somerset County implements a more aggressive funding program for land preservation to assist township resources;
- If the Hillsborough voters decide to increase the portion of municipal taxes dedicated to preservation of farmland and open space;
- If there is continued effective use of the Open Lands Ration Subdivision resulting in increased dedicated, municipally owned preserved farmland at no cost in public funds; and/or
- If Hillsborough Township successfully implements TDR.

The application of TDR may be one of the most effective tools because it does not depend on the availability of dedicated funds and can be applied to large projects. Duke Farms, with over 1,000 acres of unpreserved farmland is a perfect candidate for TDR. Just applying TDR to Duke Farms would effectively double our projections without impacting traditional funding resources, leaving them available to preserve other land. Obviously, land in addition to Duke Farms would be subject to TDR which would increase preservation even further.

If TDR was adopted and utilized and some of above scenarios also occur, it's reasonable to infer that a revised goal of 300 acres per year would be possible. This would result in 1,500 acres after 5 years and 3,000 acres preserved after 10 years.

As noted elsewhere in this report, the total active agricultural in Hillsborough is 7,930 acres of which 6,897.75 meets Minimum Eligibility Criteria for soils and tillable acreage. Of the 7,930 acres actively farmed at the present time, 2,283 acres are already preserved leaving 5,647 acres of active farmland unpreserved. Preserving 3,000 more acres in the next 10 years would represent 53% of this total leaving 2,647 acres unpreserved. Because some properties typically will not have willing sellers or may have other complicating factors such a family or estate issues, this seems to be a reasonable upper limit of land that could be expected to be preserved in the ten year time frame even under more favorable circumstances.

#### ***Relationship to Somerset County Farmland Preservation Goals***

Somerset County has set ambitious goals for their farmland preservation program. The County Board of Chosen Freeholders in the *2001 Somerset County Agriculture Retention and Development Master Plan* set a target goal of preserving 16,000 acres by 2011. There are 6,710 acres of farmland currently preserved within Somerset County. There

are an additional 808 acres of pending farmland applications, bringing the total to 7,518 acres. In order for the county to reach their 2011 goal, an additional 9,290 acres (including the pending farmland applications) will need to be preserved over the next four years totaling 2,322 acres a year.

Somerset County is 196,288 acres (307 square miles) in size. Of this, 48,127 acres are under farmland assessment, which includes croplands, woodlands, farm structures and wetlands/waterways that occur on an agricultural property. The *2002 Census of Agriculture* identifies 36,237 acres in Somerset County as land in farms, which excludes some farmland assessed parcels that are not in active agricultural production.

Since 1983, Somerset County has preserved 6,710 acres of farmland. Using the 36,237 acres identified as farm property by the *2002 Census of Agriculture*, this leaves 29,527 acres of unprotected farmland remaining in Somerset County, or 82% of the County's agricultural base. Based upon the State's Minimum Eligibility Criteria for productive soils and tillable land 18,544 acres are potentially eligible for farmland preservation in Somerset County.

As noted above, funding is limited both at the County and State levels. In addition, land values continue to rise in Somerset County as a whole. By combining all available land preservation tools and funding sources, a realistic yet ambitious goal for Somerset County would be the preservation of an additional 10,000 acres by 2017:

One year target: 1,000 acres

Five year target: 5,000 acres

Ten year target: 10,000 acres

## **B. Project Area Summaries**

### ***Project Areas in Somerset County***

The Somerset CADB has identified thirteen distinct project areas within the county's Agricultural 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 based upon the public input and comments at the second Public Hearing, by analyzing the county's soils and tillable land areas, as well as productive farmland and existing preserved farmland clusters. Mapping information developed by the Garden State Greenways program was also used in the development of the Project Areas. The Project Areas conform to the Agriculture Development Areas and in the case of the three largest ADA's (Millstone Valley, Neshanic Valley and Upper Raritan) the ADA's were divided along to reduce the size of the project area and highlight the concentration of agricultural productive land and continuity of preserved farmland belts. Descriptions of each of the project areas can be found in *Chapter 4* as they align with the proposed Agriculture Development Areas.

In each case the project areas conform to the SADC statutory guidelines (N.J.A.C. 2:76-17.2) in that each project area contains any of the following:

- Targeted farms located within an ADA;

- Lands from which an application for the sale of a development easement has been granted final approval by the municipality, county and/or SADC;
- Lands from which development easements have already been purchased;
- Other land permanently deed restricted for agricultural use;
- Lands enrolled in an eight-year farmland preservation program or municipally approved farmland preservation programs; or
- Other permanently preserved lands dedicated for open space purposes that are compatible with agriculture.

For all of these Project Areas, it is important to note that only those farms that are located within the designated ADA are those which are suitable for preservation. The thirteen project areas are as follows:

- 1) Millstone Valley East
- 2) Millstone Valley West
- 3) Northern Bernards
- 4) Eastern Montgomery
- 5) Pike Run
- 6) Bedens Brook
- 7) Bedens Brook East
- 8) Neshanic Valley North
- 9) Neshanic Valley South
- 10) Upper Raritan West
- 11) Upper Raritan East
- 12) Warren
- 13) Bernards Dead River

The below Table summarizes the acreage and parcels within each of the proposed Projects Areas:

Proposed Project Areas	Total QFarm Parcels		Unpreserved QFarm Parcels		Pending QFarm Parcels		Preserved QFarm Parcels	
	Number	Acreage	Number	Acreage	Number	Acreage	Number	Acreage
Millstone Valley East	207	4,576	189	3,756	1	137	18	683
Millstone Valley West	77	2,901	67	2,423	-	-	10	478
Northern Bernards	3	72	3	72	-	-	-	-
Eastern Montgomery	9	143	8	64	-	-	1	79
Pike Run	9	292	8	184	1	78	1	30
Bedens Brook	57	1,198	39	693	-	-	18	505
Bedens Brook East	10	225	10	171	1	54	-	-
Neshanic Valley North	321	11,374	293	8,981	1	46	28	2,347
Neshanic Valley South	89	2,079	85	1,662	-	-	4	417
Upper Raritan East	161	3,294	161	2,935	1	358	-	-
Upper Raritan West	364	13,292	333	10,980	1	51	31	2,260
Warren	47	739	47	654	1	84	-	-
Bernards Dead River	37	884	37	884	-	-	-	-
Subtotal Project Areas:	1,391	41,068	1,280	33,461	7	808	111	6,799

### ***Project Areas in Hillsborough Township***

Portions of the Somerset County Project Areas below are located in Hillsborough Township. Tables below indicate statistics for each project area in Somerset County including areas outside Hillsborough Township. These previously approved PIG Project Areas will be used to focus the Township's overall preservation of farmland and future PIG program under the new regulations. See appendix for Project Area Target Properties maps.

<b>Millstone Valley West</b>	<b>Acres</b>	<b>Total Acres in Project Area</b>	<b>Ratio</b>	<b>Percent of Project Area</b>
Total Preserved Farmland	478	4,502	55/518	10.62%
Pending Farms	-	4,502	0/1	0.00%
Total Open Space	-	4,502	0/1	0.00%
Prime, Statewide, Unique Soils	3,384	4,502	215/286	75.17%
QFarm Parcels with Productive Soils	2,136	4,502	445/938	47.44%
QFarm parcels with Tillable Land	2,082	4,502	43/93	46.24%
QFarm Parcels with Soils and Tillable Land	1,900	4,502	84/199	42.21%

<b>Neshanic Valley North</b>	<b>Acres of ...</b>	<b>Total Acres in Project Area</b>	<b>Ratio</b>	<b>Percent of Project Area with...</b>
Total Preserved Farmland	2,347	24,288	66/683	9.66%
Pending Farms	46	24,288	1/528	0.19%
Total Open Space	3,527	24,288	35/241	14.52%
Prime, Statewide, Unique Soils	15,222	24,288	591/943	62.67%
QFarm Parcels with Productive Soils	6,875	24,288	122/431	28.31%
QFarm Parcels with Tillable Land	6,424	24,288	196/741	26.45%
QFarm Parcels with Soils and Tillable Land	5,269	24,288	64/295	21.70%

In Hillsborough Township alone, the Neshanic Valley ADA covers 19,738.57 acres and the Millstone Valley ADA covers 4,063 acres.

Hillsborough Township has three approved PIG project areas; the Amwell Valley PIG Project Area consisting of 2,269 acres, the Mill Lane PIG Project Area consisting of 782.1 acres and the South PIG Project Area consisting of 703.29 acres. These previously approved PIG Project Areas will be used to focus the Township's overall preservation of farmland and future PIG program under the new regulations. Priority in new applications will be given to farms either in or adjacent to existing PIG areas.

### ***Amwell Valley PIG Project Area***

The Amwell Valley PIG Project Area consists of 2,269.08 acres and is located in the western portion of Hillsborough Township. With in this project area there are 56 total farms, 8 preserved farms totaling 646.33 acres and 23 targeted farms totaling 1,024.48

acres. The Amwell Valley project is the largest PIG project in Hillsborough Township. In this project area there are 764.34 acres and 16 farms which meet both the Minimum Eligibility Criteria for soils and tillable land.

This project area covers much of the area between the East Amwell border eastward toward the Mill Lane PIG Project Area. The eastern portion of the Amwell Valley PIG Project Area is almost completely preserved. Moving westward, in the center of the project area there is a concentration of smaller farms bordered by preserved open space. The western portion of the project area bordering East Amwell has an assemblage of large farms on the north flank of the Sourland Mountains including several owned by Thompson, Lanwin Development Higgins, and Granskie.

#### ***Mill Lane PIG Project Area***

The Mill Land PIG Project Area consists of 782.1 acres and is located in the north-central portion of Hillsborough Township. With in this project area there are 16 total farms, 4 preserved farms totaling 348.0 acres and 6 targeted farms totaling 339 acres. In this project area there are 284.47 acres and 8 farms which meet both the Minimum Eligibility Criteria for soils and tillable land. The entire western end of the Mill Land PIG Project is preserved. All remaining target farms (Doyle, PID Associates and Dorell) are concentrated at the east end of the project area.

#### ***South PIG Project Area***

The South PIG Project Area consists of 808.93 acres and is located in the southeastern portion of Hillsborough Township. With in this project area there are 17 total farms, 7 preserved farms totaling 417.12 acres and 7 targeted farms totaling 262.2 acres. In this project area there are 467.67 acres and 8 farms which meet both the Minimum Eligibility Criteria (*see page 5-7*) for soils and tillable land.

The South PIG Project Area is very active and there is excellent potential for the remainder of this project area to be preserved in the foreseeable future. Owners of several of the PIG targeted farms are currently making applications for Farmland Preservation including the Van Nuys Farms and Trustees of Trustees of Maple Lane Farm. After the above farms are preserved most of the South PIG Project Area will be competed with the exception of 4 smaller farms; Rhoda, 16.1 acres, Conard, 6.23 acres, and Hyman, 9.58 acres. Recently NJDOT has acquired Gale and Wentworth LLC and portions of the Trustees of Maple Lane Farm as properties to be used in reforestation which will effectively provide preserved buffers for the other farms in the project area. The Route 206 Bypass will not have any further effect on the South PIG area because the plan has been rerouted to another area.

### **C. Municipal and County Minimum Eligibility Criteria Coordination**

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:

- The size of the total project area (in acres);

- The total acreage of preserved farmland in the project area;
- The total acreage of pending applications for farmland preservation in each project area;
- The acreage of publicly held open space in each project area; and
- 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.

### ***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)

Hillsborough Township conforms to the Minimum Eligibility Standards of both the State and County. There are no separate municipal Minimum Eligibility Standards for Hillsborough Township; therefore the Township will use County's approach to minimum standards.

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%);
- The land must 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 be eligible for allocation of development credits pursuant to a TDR program.

It is important to note that 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. Within the identified project areas, Somerset 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. 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.

#### Farm Size Requirements

<i>SIZE</i>	<i>MINIMUM TILLABLE</i>
0-6.667 acres	75% tillable
6.667-10 acres	5 acres tillable
10-50 acres	50% tillable
50+ acres	25 acres tillable

*Information on Map and Plan regarding farms with agricultural soils is a representation of the GIS data analysis and is subject to individual site review. Farm applications may be submitted that meet the SADC Minimum Eligibility Criteria that are not shown on this map. Any property included within the County’s ADA it is potentially eligible for preservation.*

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.

The Project Area Summaries and the farmland meeting the Minimum Eligibility Criteria for each project area are presented in the below tables: in Somerset County, there are a total of 18,544 acres of farm assessed land (QFarm Parcels) that meets both the Minimum Eligibility Criteria for soils and tillable land. Hillsborough Township has a total of 6,897.75 acres of farm assessed land that meets both the Minimum Eligibility Criteria for soils and tillable land.

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.”* The SADC has released this rank score for Fiscal Year 2009 for Somerset County; the minimum score for an Eligible Farm is 47. A detailed score listing is included within the *Appendix*. Utilizing this Minimum Score may allow the Somerset CADB increased flexibility for identifying potential farmland preservation projects. The new SADC “eligible farm” standard only applies to the County PIG Program.

Hillsborough Township may consider preserving farmland that does not meet minimum standards of the SADC or County programs if there is reason to do so.

#### **D. Municipal and County Ranking Criteria used to Prioritize Farms**

Hillsborough Township conforms to the Minimum Eligibility Standards of both the State and County. There are no separate municipal Minimum Eligibility Standards for Hillsborough Township; therefore the Township will use County’s approach to minimum standards.

The Somerset CADB utilizes the state ranking criteria as the basis for calculating the rank of each farm. All farms that apply for preservation must attend a “pre-proposal” meeting with the CADB to review their application.

Application ranking may be impacted by the availability of funding. As funding grows scarcer, ranking is likely to become increasingly competitive. Hillsborough Township will coordinate rankings with Somerset County, however properties that miss County eligibility may still be considered for preservation if they are of high or unique value to Hillsborough Township. In cases where projects meet minimum State and County Minimum Eligibility Criteria, but are not ranked high enough, Hillsborough Township will make every effort to fund these projects through its Municipal PIG Program. However, if County and State minimum eligibility standards can’t be met by a project, the State and County funding is therefore not be accessible, the township may then decide to proceed with municipal funds only.

Hillsborough Township typically has 1-2 applications per year and historically has not needed to apply ranking criteria to eligible farms which otherwise meet State and County criteria. As noted above there is a preference for preserving contiguous farmland either falling within or adjoining to our existing PIG areas.

#### ***County Policies Related to Farmland Preservation Applications***

The Somerset 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 not currently protected in the State of New Jersey NJ Right-to-Farm regulations as outlined on the *SADC website*

(<http://www.nj.gov/agriculture/sadc/rtfprogram/rtfact/#>)<sup>ii</sup> However, 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 the State Agricultural Development Committee.

*House replacement:* The policy of the State Agricultural 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. Hillsborough Township is consistent with SADC and Somerset County CADB policies.

*Residual dwelling site opportunity allocation:* Residual Dwelling Site Opportunities (RDSOs) are lingering potential housing prospects located within a deed-restricted farm. By designating an area as an RDSO, the landowner is implying that the land will be used for a residential unit or other structure as referred to in N.J.A.C. 2:76-6.17. These prospective residential units can be allocated to parcels that are up to 100 acres in size. The purpose of the building in question must be for “single-family residential housing and its appurtenant uses” (*SADC Appraiser Handbook 2007*).<sup>2</sup> To qualify as an RDSO, the SADC requires that the use of the residential unit be for agricultural purposes and “at least one person residing in the residential unit shall be regularly engaged in common farm site practices.” (*SADC submission procedures*). Historically, there have been no RDSO’s included in any of the existing preserved farms in Hillsborough Township. On the issue of approving RDSO’s, Hillsborough Township is consistent with SADC and Somerset County CADB policies.

### ***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. 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. On the issue of Division of the Premises, Hillsborough Township is consistent with SADC and Somerset County CADB policies.

### ***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. Exceptions are not a practice that is encouraged by the SADC and when they occur, it is recommended that they should be as small as possible. There are two types of exceptions that can occur; severable and non-severable.

*a. 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 who will be excluded from the restrictions of the Deed of Easement and may be sold as a separate lot in the future.” (*SADC Appraiser Handbook 2007*) A severable exception is made “if a landowner wants to be able to sell the excepted area separate from the deed-restricted farm.”

*b. 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.” (*SADC Appraiser Handbook 2007*) 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.

Historically, Hillsborough has taken the position that exceptions should be limited to the greatest extent possible, but will be considered on a case by case basis and should have the least negative impact on the farm as well as the property owner.

## **F. Funding Plan**

### ***Hillsborough Township Municipal Funding Sources***

The Hillsborough Township dedicated Open Space Tax was initiated in 1998. There have been no further referenda since 1998. The current municipal open space tax rate is \$0.041, with \$1,533,745 collected in 2008. The current account balance is over \$17,313,000.

The ordinance establishing the Open Space Fund did not provide a specific breakdown for Open Space vs. Farmland. The allocation of funding amount the various Open Space and Farmland Preservation Program areas in Hillsborough Township is based on current need and access to funds on a case by case basis and input from our Agricultural and Open Space Advisory Committees. A conservative estimate of the amount to allocated to farmland would be 1/3 (33%) per year. There are 2 Township open space (ROSI) parcels that are presently being farmed- Block 5, Lot 37.01 (60 acres) and Block 171, Lots 2, 6, 6C (123 acres).

**Open Space Taxes Collected by Hillsborough Township**  
(Figures are from Abstract of Ratables)

<b>Year</b>	<b>Open Space Taxes Collected</b>
1998	\$ 500,000
1999	\$ 983,831
2000	\$ 1,043,767
2001	\$ 1,077,279
2002	\$ 1,229,078
2003	\$ 1,412,812
2004	\$ 1,432,811
2005	\$ 1,441,456
2006	\$ 1,452,857
2007	\$ 1,477,541

### ***Somerset County Funding Sources***

Prior to the establishment of the dedicated Trust, Somerset County funded farmland preservation through general county capital funds. The residents of Somerset County overwhelmingly voted to approve the doubling of the Somerset County Open Space Tax of \$0.015 per \$100 to \$0.030 per \$100 of assessed property evaluation in 1997.

The overall allocation to open space preservation in Somerset County since 1990 is \$149,040,894. The Trust Fund is shared among prior debt payments, the Open Space Master Plan, Agricultural Preservation, the Greenways Partnership, and Historic Preservation. (Note: the 2007 allocation has not been finalized by the Somerset County Tax Board).

On average the amount generated by the Open Space Trust Fund increased approximately 5% per year. As growth increased in Somerset County, the tax rate brought in a greater sum of monies to the Open Space Trust Fund and since 2001 the amount generated has increased at a rate of 9% to 11% annually.

To date Somerset County has expended \$20,327,038 on 69 projects preserving 6,710 acres.

### **Somerset County Open Space Taxes Collected (Figures are from Abstract of Year Ratables)**

<b>Year</b>	<b>Open Space Taxes Collected</b>
1990	3,400,000.00
1991	3,492,000.00
1992	3,418,700.00
1993	3,442,000.00
1994	3,500,000.00
1995	3,590,000.00
1996	3,590,000.00
1997	3,820,000.00
1998	7,847,371.00
1999	8,130,000.00
2001	9,535,999.36
2002	1,082,942.68
2003	12,113,459.72
2004	13,513,077.28
2005	15,154,637.36
2006	16,769,762.80
2007	18,345,970.49

### ***Hillsborough Cost Estimate and Funding Plan***

Despite the recent economic downturn, the value of agricultural easements in the region including the target area has been increasing in the last several years. Cost estimates of preserving the target parcels was determined using information from several sources and weighing the size and quality of the group of target properties. Recent Farmland Preservation appraisals certified by the SADC, recent appraisals of agricultural easements

not yet certified and drive-by estimates of appraisers for some target parcels and direct consultation with SADC and CADB staff on valuation were all used.

Valuations based on recent appraisals of agricultural easements on several farms in the township were available due to ongoing land preservation efforts of Hillsborough Township. These were: \$22,500/acre for Block 169 Lot 5, 48 acres; and \$19,900/acre for Block 168 Lot 12, 46.4 acres. Averaging the above gives a value of \$21,200/acre, however, the above properties are all relatively small and/or highly developable and will most likely have a higher value than other parcels in the project area when appraised. Typically, larger parcels and those with development constraints appraise at lower values per acre than smaller highly developable properties. An appraisal estimate from a local appraiser experienced in Farmland preservation appraisals who had done a previous appraisal on Block 165 Lot 4, 102.61 acres, in the Amwell Valley PIG Project area was somewhat lower due to the larger size, topography and other restrictions on this site. This property is considered more typical of other parcels in the application.

The value for the preserved Young Farm in the project area was \$7,200 acre, but is not recent (2004) and it needs to be understood that, by definition, PIG projects are multi-year endeavors requiring several years to implement. Estimating values for agricultural easement must take into account the trends in land values over the next several years in the project timeline.

Taking all available information into account, the current per acre value of agricultural easements in the Hillsborough Township is likely near \$20,000 per acre. Despite the current economic downturn, the historic long term trend of steeply rising land values in the area have also been taken into account, and a valuation estimate of \$20,000 per acre was selected as a realistic projection over the next few years. Based on this per acre value, the SADC sliding scale indicates that the SADC cost share will be 60%.

Based on the above, the total cost of acquiring the agricultural easements on the lists of target farms in the three approved Hillsborough Township PIG Project Areas is estimated at \$33,761,200. It should be noted that this cost exceeds the anticipated cash stream from Hillsborough Township and the various farmland preservation programs. Various leveraging strategies and other funding tools listed below can be used to extend available resources for easement acquisition.

### ***Hillsborough Multi-Year Plan***

#### **Estimated percentage of State funds in the application**

Based on a \$20,000 per acre easement value, the SADC cost share formula indicates that the SADC cost share will be a 60%, and both the county and municipal cost share at a level will be 20%.

The multi-year aggregate spending plan for the three approved PIG Projects in Hillsborough Township will extend for 10 years. Hillsborough collects approximately \$1,000,000 per year in its dedicated open space tax, with 1/3 or about \$300,000 dedicated

to farmland preservation. Hillsborough proposes to dedicate a minimum of \$3 million to the as its local share over the next 10 years.

If matched by the full 60% state share and 20% county share, this minimum amount of local funding would yield the following amount for acquisition:

State PIG funding	\$ 9 million
County cost share	\$ 3 million
Local cost share	<u>\$ 3 million</u>
Total	\$15 million

Preservation of all targeted farms in the project area will exceed \$20 million. The above cash stream alone will not be sufficient to preserve the entire project area. Therefore all available leveraging strategies will be required to extend the available resources.

***Leveraging strategies:***

- *Re-sale of Township owned, previously preserved properties.* Hillsborough Township can recover funds expended to acquire and preserve farms by auctioning deed restricted farms to private farmers. This has the dual advantage of restoring funds to the program and usually allowing farmers to acquire deed restricted farms at lower prices than unrestricted farms.
- *Bargain sales and other financial tools.* The use of full or partial donations, so-called” bargain sales “is a standard and commonly used tool in open space preservation to extend limited financial resources. Landowners can benefit from certain tax advantages by selling land or easement for less than full market value which qualifies as a charitable donation. Estate planning and how transactions are planned and structured in advance can provide other benefits that allow framers and farm families to stay on the land. Education and outreach to farmers is about these financial benefits critical to successfully obtaining this type of leveraging. Typical savings to the acquisition funding programs of 25% or more are common depending on the individual situation of each landowner. Looking at the \$20 + million price tag of this project area, utilization of bargain sales averaging even 10% would save over \$2 million.
- *Option Agreements.* Option agreements can secure properties under contract while extending the timeline to assemble and expend funding.
- *Installment Purchase Agreements (IPAs)* - Installment sales have been used creatively and to great advantage within various Farmland Preservation Programs in New Jersey to greatly extend payment time schedules to leverage funds and use or capture interest income for the benefit of the programs and participating landowners.
- *Alternate Open Space Program Funding.* Joint ventures – it is sometimes possible to combine farmland preservation with open space open space acquisition programs and Green Acres, Nonprofit, Township Open Space and County Open Space funding. Green Acres funding to Hillsborough Township through its Green Acres Municipal Planning Incentive Grant and other non-farmland money can be used to acquire portions of some parcels. Typically

these are the portions of farms with lower agricultural value such as woodlands, steep slopes and wetlands. In certain cases this additional funding can be substantial, even greater than the Farmland share. It is significant to note that that in Hillsborough Township, 2/3 of the dedicated Open Space tax is allocated to open space acquisitions.

- *Other Available Grants.* Regional and local Nonprofit groups like D&R Greenway Land Trust have the ability to access Nonprofit funds for both open space and farmland acquisitions which can be used for up to 50% of acquisition costs. Somerset County has Open Space Partnership grants available on a project by project basis which can provide a portion of acquisition costs.
- *Federal Conservation Programs.* Funding from the Natural Resource Conservation Service such as the Conservation Reserve Program, Grassland Reserve Program and several other incentive programs can be used to help acquire agricultural land or easements. The Amwell Valley West PIG Project area is suitable for agricultural conservation programs targeted at protecting resources like erodible soils or endangered grassland birds. The Duke Foundation through Duke Farms targeting a regional acquisition effort aimed at habitat conservation and agricultural viability known as the “Raritan Piedmont Wildlife Habitat Project” whose goal is to consolidate a corridor of preserved farmland extending from the western Amwell Valley over to Duke Farms
- *Federal Farmland Preservation Funds.* Federal Farmland funds are a previously little-used program which may have a larger importance within the 5-year life of the project.
- *Limited Development Strategies and Transfer of Development Rights.* Hillsborough has been creative and successful in retaining agriculture on several critical parcels east of the Mill Land Project Area near Duke Farms through clustering of units and transfer of density to dedicated receiving parcels

Working with the SADC Direct Easement Purchase Program is a way to move some of the better farms into preservation more quickly and at lower cost to the township, thereby providing additional leveraging. Recent recommendations by the SADC Process Review Committee may help to make this program very efficient in moving quickly to acquire the larger, better quality farms. Some of the farms in this project area would be viable candidates for the SADC Direct program.

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

Somerset CADB will fund one-half of the difference between the state match and the total cost for preserving a farm through the Municipal Planning Incentive Grant Program, generally the county contributes 20% of the funding cost-share for a municipal PIG project. The Somerset CADB is supportive of donation/bargain sales and has not recently preserved farms using an installment purchase. 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 Somerset 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.
- **Farmland Preservation Grant to Nonprofits** - Nonprofit Conservation Organizations can apply for funds from the SADC Nonprofit Farmland Preservation Program for up to 50% of the purchase price of fee simple purchase of farmland or farmland easements. The remaining 50% must be matched by non-State sources such as municipal or county cost share of landowner donation of a portion of the value of the interest being acquired.

#### ***Cost Projections and Funding Plan Associated with Preservation Goals***

The Somerset County Open Space Trust Fund will generate approximately \$18 million in 2007. The dispersion of trust fund monies as well as the setting of the rate collected is decided by the Freeholders annually. The agricultural preservation program tends to average about \$1 to \$2 million per year; however the Freeholders encourage the Planning Division and CADB to seek out the best parcels and ask for more if needed. The farmland program needs less money than the open space program since the farmland program tends to buy easements where the open space programs tend to buy fee simple.

Since 2004, in Somerset County the average cost per acre has increased from \$19,154 an acre to \$36,438 an acre in 2007, nearly a 50% increase (see *Program History Table* in *Chapter 4* and below Table). On average, the county pays between 25% and 30% of the cost of an easement with the state, towns, and in some cases the federal government, paying the remaining share. Since 1987, the average price of purchasing a development easement in Somerset County is \$11,785 per acre.

<b>Municipality</b>	<b>Acres</b>	<b>Total Cost</b>	<b>SADC Share</b>	<b>Federal Grant</b>	<b>County Share</b>	<b>Municipal Share</b>	<b>Cost/Acre</b>
<i>Total 1987:</i>	86	\$ 601,160	\$ 300,580	\$ -	\$ 300,580	\$ -	\$ 6,998
<i>Total 1989:</i>	59	\$ 815,708	\$ 516,404	\$ -	\$ 299,304	\$ -	\$ 13,852
<i>Total 1991:</i>	76	\$ 476,217	\$ 295,905	\$ -	\$ 180,312	\$ -	\$ 6,298
<i>Total 1992:</i>	249	\$ 5,934,545	\$ 3,560,727	\$ -	\$ 2,373,818	\$ -	\$ 23,794
<i>Total 1993:</i>	203	\$ 1,255,437	\$ 750,648	\$ -	\$ 504,789	\$ -	\$ 6,177
<i>Total 1994:</i>	576	\$ 3,941,450	\$ 2,360,300	\$ -	\$ 1,581,149	\$ -	\$ 6,848
<i>Total 1997:</i>	535	\$ 3,479,540	\$ 2,443,398	\$ -	\$ 1,036,143	\$ -	\$ 6,502
<i>Total 1998:</i>	519	\$ 4,457,315	\$ 3,102,909	\$ -	\$ 1,354,406	\$ -	\$ 8,586
<i>Total 1999:</i>	142	\$ 683,767	\$ 458,549	\$ -	\$ 225,218	\$ -	\$ 4,813
<i>Total 2000:</i>	153	\$ 1,308,984	\$ 885,217	\$ -	\$ 423,767	\$ -	\$ 8,540
<i>Total 2001:</i>	1,510	\$ 6,914,681	\$ 4,632,463	\$ -	\$ 2,282,218	\$ -	\$ 4,579
<i>Total 2002:</i>	86	\$ 1,383,213	\$ 980,164	\$ -	\$ 403,049	\$ -	\$ 16,166



<i>Total 2003:</i>	<i>372</i>	<i>\$ 1,118,794</i>	<i>\$ 706,746</i>	<i>\$ -</i>	<i>\$ 412,048</i>	<i>\$ -</i>	<i>\$ 3,006</i>
<i>Total 2004:</i>	<i>545</i>	<i>\$ 10,446,004</i>	<i>\$ 8,042,153</i>	<i>\$ -</i>	<i>\$ 699,425</i>	<i>\$ 1,704,426</i>	<i>\$ 19,154</i>
<i>Total 2005:</i>	<i>1,012</i>	<i>\$ 19,679,354</i>	<i>\$ 11,491,675</i>	<i>\$ 505,020</i>	<i>\$ 5,724,061</i>	<i>\$ 1,958,597</i>	<i>\$ 19,455</i>
<i>Total 2006:</i>	<i>442</i>	<i>\$ 11,292,627</i>	<i>\$ 7,563,510</i>	<i>\$ 1,027,931</i>	<i>\$ 1,797,586</i>	<i>\$ 903,600</i>	<i>\$ 25,558</i>
<i>Total 2007:</i>	<i>145</i>	<i>\$ 5,281,678</i>	<i>\$ 2,618,577</i>	<i>\$ -</i>	<i>\$ 729,166</i>	<i>\$ 1,503,974</i>	<i>\$ 36,438</i>
<b>TOTALS:</b>	<b>6,710</b>	<b>\$ 79,070,472</b>	<b>\$ 50,709,925</b>	<b>\$ 1,532,951</b>	<b>\$ 20,327,038</b>	<b>\$ 6,070,598</b>	<b>\$ 11,785</b>

For the 10-year financial analysis, seven 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 Somerset CADB and the SADC. These are described below:

- 1) Assume 5% funding growth for Somerset County Open Space tax levy;
- 2) Assume 10% annual increase in the average cost per acre of purchasing an easement;
- 3) Assume county funding is reduced 10% for administrative costs and due diligence;
- 4) Assume county funding for farmland is not encumbered by prior obligations;
- 5) Assume the county cost share is between 25% and 30%, but for this analysis a variety of cost shares are calculated, using 30% as the minimum participation;
- 6) Assume the starting allocation to the farmland program is \$1.5 million; and
- 7) Assume the starting average cost per acre for a farmland easement is \$20,000.

Using these assumptions, the following analysis was completed to calculate the funding available to Somerset County for farmland preservation:

Year		Funding Available Less Administration Due Diligence	Funding Available (No County Direct Easement)	Average per Acre Cost
1	2007	\$1,350,000.00	\$1,350,000.00	\$20,000.00
2	2008	1,417,500.00	1,417,500.00	22,000.00
3	2009	1,488,375.00	1,488,375.00	24,200.00
4	2010	1,562,793.75	1,562,793.75	26,620.00
5	2011	1,640,933.44	1,640,933.44	29,282.00
6	2012	1,722,980.11	1,722,980.11	32,210.20
7	2013	1,809,129.11	1,809,129.11	35,431.22
8	2014	1,899,585.57	1,899,585.57	38,974.34
9	2015	1,994,564.85	1,994,564.85	42,871.78
10	2016	2,094,293.09	2,094,293.09	47,158.95

Using the above funding formula, and the average cost per acre in Somerset County, an analysis was completed to calculate the amount of land that could be purchased in Somerset County. At a 30% cost share with the state, the county could preserve slightly more than 1,841 acres each year. Due to uncertainty in the availability of state funding, the analysis was run at 10% intervals. With no funding from the state, the ability of the county to purchase and preserve farmland would be extremely limited. This table also includes municipal PIG projects, since the county cost shares in these as well.

### ***Alternate Funding Projections***

The above funding projections were based on fairly conservative evaluation criteria and the uncertain future of State and County funding when this plan was written. Clearly the economic downturn in the real estate market in late 2008 continuing through 2009 will lower land costs and possibly increase the number of willing sellers at certified appraised values. Therefore the tables below were created showing land costs as not increasing over the next 10 years.

Year	Acquisition Goal	Total Projected Cost	Estimated Local Cost Share	Estimated County Cost Share	Estimated State Cost Share
1	100	\$200,000	\$40,000	\$40,000	\$120,000
5	500	\$10,000,000	\$2,000,000	\$2,000,000	\$6,000,000
10	1,000	\$20,000,000	\$4,000,000	\$4,000,000	\$12,000,000

Year	Acquisition Goal	Total Projected Cost	Estimated Local Cost Share	Estimated County Cost Share	Estimated State Cost Share
1	300	6,000,000	1,200,000	1,200,000	3,600,000
5	1,500	30,000,000	6,000,000	6,000,000	18,000,000
10	3,000	60,000,000	12,000,000	12,000,000	36,000,000

It is possible that an aggressive use of installment purchase agreements to lock in more opportunities at today's easement values will allow Hillsborough Township to increase the pace of preservation over the next 5 years. Low- and no-cost option agreements as well as obtaining a Right of First Refusal may be utilized to lock in reasonable prices for some targeted farms.

In addition as noted earlier in this chapter, successful implementation of TDR could have a significant positive impact on Farmland Preserved. It was estimated by Township Planner Robert Ringelheim that TDR could effectively double the acreage of Farmland and Open Space that would otherwise be preserved without TDR.

## **G. Farmland Preservation Program /Agriculture Advisory Committee CADB Administrative Resources**

### ***Municipal Staffing or Consulting Resources***

#### ***Appointment of a Lead Contact and Coordinator***

The lead contact for this project is Robert Ringelheim, Township Planner.

Robert Ringelheim  
Municipal Building  
379 South Branch Road  
Hillsborough, NJ 08844  
Phone (908) 369-8382

Fax (908) 369-9718  
[rringelheim@hillsborough-nj.org](mailto:rringelheim@hillsborough-nj.org)

***Agricultural Advisory Committee***

Regular Members (5) – 3-year term

Appointed by Mayor with Consent of Township Committee

David Rock  
Hillsborough, NJ 08844  
Email:  
rockd@pt.fdah.com  
12-31-11

Sam Conard, Chairman  
Hillsborough, NJ 08844  
Email: estsam@patmedia.net  
12-31-11

Arthur Stafford-Taylor  
Hillsborough, NJ 08844  
Email: blackhorsestable@earthlink.net  
12-31-10

Ken Osterman  
Neshanic, NJ 08853  
12-31-10

Lynn Bell  
Neshanic, NJ 08853  
12-31-10

Liaison  
Carl Suraci  
12-31-09

***Consulting Resources***

Hillsborough Township has also used consulting services of D&R Greenway Land Trust Inc., a private nonprofit land preservation organization located at One Preservation Place, Princeton, NJ, 08540. D&R Greenway Land Trust supplies contract services to Hillsborough Township for landowner negotiations and securing funding partnerships for both farmland preservation and open space. D&R Greenway also supplies GIS mapping services related to land preservation projects in Hillsborough.

***Somerset County Agriculture Development Committee Resources***

The Somerset County Planning Division oversees Somerset County's land preservation program with the County's Agriculture Development Board focus on the farmland

preservation program. The farmland program is overseen by Tara Kenyon, Senior Planner, Tony McCracken, Assistant Planning Director, and Bob Bzik, Planning Director.

The Somerset County Agriculture Development Board (CADB) meets the second Monday of each month. The CADB is composed of six members and four ex-officio/non-voting members including the Rutgers Cooperative Extension Agricultural Agent, U.S. Natural Resource Conservation Service, County Planning Board and a representative from the Freeholder Board. Mark Kirby is the Chairman of the Somerset County CADB.

### ***Legal support***

Legal support for Hillsborough Townships' farmland preservation and open space programs is provided by Township Attorney Albert Cruz of the law firm DiFrancesco, Bateman, Coley, Yospin, Kunzman, Davis & Lehrer, P.C. located at 15 Mountain Boulevard, Warren, NJ 07059-5686.

### ***Database Development***

The Somerset County Planning Division tracks all farmland preservation projects, including their applications and status.

### ***Geographic Information System Resources***

The GIS services provider to Hillsborough Township is National Geomatica. Other significant GIS resources used by Hillsborough Township include D&R Greenway Land Trust who consults for the township and has GIS capability which is used to target and preserve farmland and open space.

## **H. Factors Limiting Farmland Preservation Implementation**

### ***Funding***

Funding is a critical factor for Hillsborough Township's farmland preservation program as well as at the county and state levels. The rate of farmland preservation in Somerset County has been attributable to the availability of state funds and the ability of the county to leverage its own funding with state and local financing. Somerset County strongly supports the municipal PIG program and would like to see it grow. Funding from the state is critical to the integrity of the municipal PIG program. Due to the current uncertainty in state funding for farmland preservation, Somerset County's program faces financial challenges as it moves forward in purchasing and preserving land during the next ten years.

### ***Projected Costs***

The value of a development easement in Somerset County will vary based upon where the easement is located. In 2007 the cost of an easement varied from \$15,000 to \$67,000 per acre, a tremendous variation and expense. In addition, the average value of a development easement in Somerset County has nearly doubled over the past three years. This trend is likely to continue into the future. Applying innovative tools to purchase and

preserve land, including both PDR (Purchase of Development Rights) and TDR (Transfer of Development Rights), is one way in which Somerset County may be able to expand its program and leverage limited financial resources.

### ***Land Supply and Landowner Interest***

Land resources are limited in Somerset County and farmers are facing and increasing competition among users for land and water. Challenges to the farmland preservation program include the available supply of farmland, the cost of purchasing that land, potential limitations of the preservation program once the land is preserved, and the infrastructure to support farming operations into the future. Flexibility in funding and preservation programs will enhance and sustain the agricultural program in Somerset County.

Landowner interest remains high and applications continue to be submitted to the CADB for their review. However, as Hillsborough's Farmland Preservation Program matures, it is a logical outcome that as time goes on, generally, only the more complicated acquisition projects will be left to preserve. It is recommended that increased effort in active landowner outreach be used in the future to keep farmers interested in the program. This will also serve to educate landowners about program changes and new opportunities and to engage new landowners or family members. It is recommended that annual landowner information and outreach meetings to keep their programs viable be held by the Township AAC similar to meetings held with great success in several central NJ communities such as Delaware and Readington Townships in Hunterdon County.

Hillsborough has in the past, and will continue to use innovative partnerships, which can be seen by the popularity and success of the municipal PIG program, and local conservation projects with local nonprofit groups, including The Nature Conservancy and D&R Greenway. It will take the effort, creativity and teamwork of landowners, government officials, nonprofit organizations, and local residents to ensure the farmland preservation program remains popular, supported and successful.

Project Areas in Somerset County were designed with sound planning and both existing and proposed land uses in mind. Developed areas of the county and those earmarked for development are excluded from the Project Areas. The agricultural preservation program is targeting those farms that represent productive, viable farms, with the resources available to support them. The *2002 Census of Agriculture* identifies 36,237 acres of land in farms, of which 18,544 acres meet both the soils and tillable land Minimum Eligibility Criteria and are potentially eligible for farmland preservation based upon the new SADC Criteria. Focusing on preservation will result in a sustainable supply of agricultural land for farming to continue into the future for the county.

In Hillsborough Township there are 12,226 acres of land in farms, of which 6,897.75 acres meet both the soils and tillable land Minimum Eligibility Criteria and are potentially eligible for farmland preservation based upon the new SADC Criteria.

It is important to note: if the cost of development rights dropped significantly, program capacity would be expected to increase. Even though farmland preservation is a relatively expensive investment in Hillsborough Township, the low-term costs are significantly less than the anticipated cost of development, as the preserved land will require minimal use of Municipal services. Using assumptions commonly used by planning boards, if 20 acres land is developed, there could be an estimated 10 new residences built, with an average of 2.2 children. The average cost of educating a child in New Jersey is conservatively estimated at \$12,000 per child, per year. Using these numbers, the education costs saved over 5 years by preserving land is \$132,000. These costs are expected to continue to rise over the next decade.

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<sup>i</sup> New Jersey Department of Agriculture. State Agriculture Development Committee. 2003/2004 Farmland Assessment Data. Highest Municipal Concentration of Agricultural Land.

<sup>ii</sup> New Jersey Department of Agriculture, State Agriculture Development Committee. Home page.  
<http://www.state.nj.us/agriculture/sadc/sadc.htm>



## **CHAPTER 6:**

## **ECONOMIC DEVELOPMENT**

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Preserving farmland and providing a positive climate for the business of farming has been a focus of municipal planning and development in Hillsborough Township. The members of the Township Committee, Planning Board and its sub-board, the Agricultural Advisory Committee (AAC), support the long-term use of agricultural land in the township. They recognize the need to provide an atmosphere in which agriculture can continue to be a viable industry, one that balances the needs for development, open space and quality of life.

The AAC is directly and administratively involved with the preservation and enhancement of farming in the township. This involvement is focused not solely on acquisition but also on assisting with Right to Farm disputes, working with all residents to ensure farm friendly atmospheres, and coordinating with the state, county and other organizations to maximize the agricultural potential of the township, including an awareness of the need to support agriculture from an economic development perspective. This chapter considers what can be done going forward to strengthen the business of agriculture in the township.

It is important to note that overall market values are not compiled on the municipal level. Thus much of the economic development analysis to follow is based on data reported only every five years at the county level as part of the National Census of Agriculture. The next Census report is scheduled for release in February 2009 based on 2007 data.

### **A. Consistency with N.J. Department of Agriculture Economic Development Strategies**

At the state level, New Jersey offers Hillsborough Township farmers a number of support services and programs ranging from technical advice to farm loans. One of these is the New Jersey Department of Agriculture (NJDA) *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 NJDA *Agricultural Smart Growth Plan for New Jersey, 2006*. The *Tool Kit* embraces the five components that have been identified by the NJDA as critical for the future of farming: Farmland Preservation, Innovative Conservation Planning, Economic Development, Agriculture Industry Sustainability, and Natural Resource Conservation. (*Agricultural Smart Growth Tool Kit*)<sup>1</sup>

As part of this emphasis on the business of agriculture, the 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*)<sup>2</sup>

Hillsborough is the premier farming community in Somerset County. In 2002, 54.5% of Somerset County’s 442 farms had sales of less than \$2,500. Another 20.5% reported sales between \$2,500 and \$9,999, and 13% of farms reported between \$10,000 and \$39,999 in sales. Only 5% had sales between \$40,000 and \$99,999 and 6.5% had sales of \$100,000 or more. Comparatively, the statewide average for farms with sales of less than \$2,500 was 53% and 10.7% for sales of \$100,000 or more.

While Somerset County boasts a high percentage of farms making a profit, the average net cash returns per farm when averaged across all county farms (including those with net losses) falls to \$3,059, versus a statewide average of \$15,074. One factor contributing to this disparity may be that much of the hay production in the county is used by the farmer growing it and, therefore, is not reflected in the sales figures.

It is important that the township’s focus remains on ways to help farmers increase their profitability and coordinate with federal, state and county agencies other organizations, both in the public and private sector to find solutions. These include:

- Better ways to manage farms as a business;
- Recognizing trends in agriculture;
- Exploring ways to diversify, add value and maximize profitability;
- Providing technical advice and assistance with choosing and marketing farm products; and
- Promoting advances in technology that may help them farmers increase efficiency and production.

Hillsborough endorses and supports the recommendations outlined in the 2007 Economic Development Strategies Report. Through its AAC, the Township will continue to work with the County Agriculture Development Board to expand opportunities for agritourism including new markets for agricultural products, including community supported agriculture, where appropriate. In addition the Township will partner with county, state, and federal agencies to sponsor forums on programs and opportunities for farmers to expand and diversity their businesses and operations.

***Progress Implementing Recommendations in prior Farmland Preservation Plan.***

The 2002 Master Plan Amendment for the Agricultural and Mountain Districts contains a number of recommendations with respect to agriculture and farm land preservation:

- To encourage the preservation of contiguous areas of farm land, a larger minimum lot size was recommended. Along with lot size averaging and

clustering options, it was indicated that the proper balance can be achieved between permitted densities and lot area requirements. The Township subsequently adopted new zoning for the AG, Agricultural District, which requires a minimum 10 acre lot size along with options to allow lot size averaging and to provide open lands ratio subdivisions which require 65% of the farm property to be preserved for agriculture and increases the permitted density on the remaining portion.

- Regulations were adopted to support the Duke Farms goals for natural, cultural, and historic resource conservation. A new Open Space-Cultural Landscape District was created for the core area of the property while leaving the remaining lands in the AG district.
- To date, the AG district has not been expanded in the area near Township Line Road and Hillsborough Road, as recommended in the 2002 Master Plan Amendment. This area has a significant number of preserved farms, and the remaining properties are targeted preservation which may include use of Transfer of Development Rights (TDR).
- Due to severe environmental constraints, it was recommended that the minimum lot size in the Mountain District be significantly increased. The Township subsequently adopted an ordinance to require a minimum of 15 acre lot size in the Mountain District with lot size averaging permitted.

The following is a brief discussion of each of the sectors of the township and county's agriculture industry as they relate to the *2007 Economics Development Strategies* report. For each of the sectors, the 2007 report encourages farmers to continually seek new local, state, and interstate markets to strengthen market share. Hillsborough Township is committed to promoting a sustainable, economic basis for farming. In order to achieve this goal, the township will continue to support and work with Somerset CADB in their efforts to direct agricultural programs and opportunities to ensure farmers' operations are profitable.

### ***Produce***

Major efforts by the NJDA are directed at increasing the demand for New Jersey grown produce through branding, agritourism, farm direct sales programs, and farm markets. The NJDA *2007 Economic Development Strategies* include all of these activities. (*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. Farms with appropriate activities, as well as roadside stands and pick-your-own farms, benefit from this promotion.

Vegetable and fruit crops are a leading agricultural commodity in New Jersey, representing 15% of all farms in New Jersey, according to the *2002 Census of Agriculture*. However, in Somerset County vegetable and fruit farms represent just 5% of County farms by 2002 North American Industry Classification (NAIC). Vegetable farms in Hillsborough represent 32% of the total acreage in vegetables for Somerset County.

Farmers who focus on other primary crops, may also grow produce to provide supplemental income and visibility by offering this product for sale at roadside stands.

The NJDA *Jersey Fresh* website lists<sup>3</sup> one community market, four roadside markets, and three pick-your-owns (some farms are listed in more than one category), in Hillsborough Township. In addition, five restaurants<sup>4</sup> listed on the *Jersey Fresh* website as serving Jersey produced and harvested products in season (*Jersey Fresh/Jersey Seafood*) are located in Hillsborough.

Strategies to promote local produce, increase marketing opportunities, and encourage farmers include:

- Investigate the feasibility of more farmers diversifying into vegetable and/or fruit production. According to Dr. Ernest Thurlow of the Somerset-Union Soil Conservation District, soils in this area would support this type of production; (*Dr. Ernest Thurlow*)<sup>5</sup>
- Promote existing community/farmers' markets, farm/roadside stands and pick-your-own operations and seek to introduce new outlets;
- Ensure residents are aware of the farming community, its products and benefits;
- Explore expansion/diversification into value-added produce products;
- Encourage farmers to explore diversifying into produce crops that serve the diverse needs of growing ethnic populations;
- Communicate to farmers the availability of state promotional campaigns and free signage;
- Encourage more participation in the *Jersey Fresh Hospitality Program* from local restaurants, specialty and grocery markets, and institutional food services such as schools, help farmers connect with these outlets; and
- Encourage farms to offer Community Supported Agriculture or to enter into "Contract Growing".

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

This is the highest ranking category of agricultural commodities in Somerset County in 2002, bringing in \$6.1 million, representing 74% of total crop sales and 40% of total agricultural sales, versus 54% and 48% statewide. In 2001, Hillsborough Township has the greatest acreage in trees and shrubs of any town in Somerset County.

There are ten garden centers and nurseries in Hillsborough listed on NJDA's *Jersey Grown* website<sup>6</sup>, one of which is also listed as *Jersey Grown* certified suppliers, eligible to market using the *Jersey Grown* branding. Many of these, plus another eleven nurseries and dealers (including landscape services and floral shops) are listed in the NJDA's directory of current state certifications. (*Certified Nurseries and Plant Dealers*)<sup>7</sup>

Some strategies to follow are:

- Explore the feasibility of more farmers diversifying a portion of their output into this sector, including ways to deal with the challenges of irrigation needs/expenses, increased labor demands and short-term lease issues versus the start-up costs to change over;

- Support efforts by NJDA to ensure plant health and disease-free material;
- Increase consumer awareness of the *Jersey Grown* brand;
- Seek contracts with large box store operations;
- Promote “drive up” operations where consumers can buy directly from the nursery or greenhouse; and
- Encourage a) municipal support for irrigation (often necessary for sod and other crop cultivation in this area) and b) research into alternative water management strategies, such as drip tape.

### ***Dairy***

In 2002, dairy ranked as the second highest sales producing sector in Somerset County, at \$1.3 million. This \$1.3 million represents a small percentage of the state’s sales, reported at \$29.1 million. Just five farms in Somerset County were listed as dairy producers on the 2002 *Census of Agriculture*, down from nine in 1997 and significantly down from the 1970s when dairy was the dominant form of agriculture, accounting for some 40% of the County’s then 371 farms.<sup>8</sup> According to Nicholas Polanin of the Somerset County Rutgers Cooperative Research and Extension (RCE), just two dairy farms remain in Somerset in 2007, one of which is in Hillsborough Township.<sup>9</sup>

Strategies for augmenting the dairy industry might include:

- 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,
- Aggressively market value-added dairy products.

### ***Field and Forage Crops***

In 2002, wheat for grain moved into the top five commodities in Somerset County for acreage. Forage crops remained number one, at 8,525 acres versus wheat at 2,043 and corn for grain at 1,823. Soybeans dropped to fourth, at 1,640 acres, with corn for silage fifth at 813 acres. The continued decline of soybeans and certain grain crops is, in many cases, attributed by farmers to the increasing battle they must wage against wildlife damage, particularly that of deer.

In 2001, Hillsborough Township ranked highest in total acreage of field crops. They had planted more barley, corn, hay, oats, soybean, and wheat than any other town in Somerset County. (*Farmland Assessment*)

Strategies for Hillsborough Township to consider include:

- Educate farmers about any improved management practices and ways to improve yield per acre;
- Alert farmers to any available workshops on pasture and cropland management;
- Encourage diversification to row crops that meet newly emerging markets;
- Encourage transition to certified organic or naturally grown bean and grain crops to increase their value;

- Engage the Somerset County Business Partnership<sup>10</sup> in a campaign to promote the County as a site for construction of biofuels processing plant(s);
- Publicize to farmers the availability of state-sponsored grain marketing sessions;
- Inform producers about the role of crop insurance; and
- Investigate availability of free deer fencing programs, as well as other measures for deterrence of wildlife.

### ***Livestock and Poultry***

Operations include cattle and calves, sheep and goats, hogs, and poultry.<sup>11</sup> Livestock historically has been a strong agricultural sector in Somerset County, and Hillsborough Township is the leader in Somerset County in livestock production for Somerset County. In 2002, total livestock sales came in at \$6.8 million, versus \$4 million in 1997, and, represented 45% of total agricultural sales for the County.

To strengthen and expand its place in the economy, some non-dairy cattle, sheep, hogs, and poultry strategies may include:

- Ensure animal health;
- Explore various additional products and markets;
- Seek more opportunities for production contracts with poultry and livestock processors;
- Investigate outlets for dairy products for goats, and educate farmers about the benefits of diversifying into this sector;
- Assist farmers with farming techniques, regulatory requirements and the latest research for livestock and poultry; and
- Promote the agritourism portion of livestock.

### ***Organic Farming***

Two farms in Hillsborough are listed on the Northeast Organic Farming Association of New Jersey website<sup>12</sup>. These include the Carriage Farm, which raises custom heifers, and Runnin' Free Organic Farms which provides eggs, fruit, poultry and vegetables. With a base of affluent consumers in the region and increased consumer awareness regarding food production, organic products and the markets that support them should continue to gain a stronghold and become more "mainstream" as people demand high quality, readily accessible and affordable organic products.

Certification of organic farms is regulated by the 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 overseen by laws or regulations, as is organic farming. Natural farming is somewhat less costly and time consuming than "organic," and therefore may be a viable option for some farmers, and their potential customers.

Farmers may be encouraged to expand or diversify into this sector and may look to:

- Improve marketing of organic and natural produce;
- Explore various additional markets;

- Promote agritourism for organic and natural farms stands;
- Promote the *Jersey Organic* Brand when established by the NJDA;
- Educate growers about organic and natural regulatory and certification requirements and about the availability of federal funds to help offset certification costs; and
- Explore ways to support organic food growing and processing.

### ***Equine***

The 2002 *Census of Agriculture* reported some 1,046 horses and ponies on 123 farms in Somerset County. There are relatively few equine operations in Hillsborough. Sales of horses, ponies, mules, burros and donkeys in Somerset County totaled \$661,000, or 5% of total agricultural sales.

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

- Educate farmers about the benefits of the new equine rules, when adopted, to commercial and preserved equine operations, and educate municipalities about the rights of equine farmers; and
- Promote the agritourism aspect of the equine industry through farm tours, horse and pony rides, and boarding and riding lessons.

### ***Agritourism***

This sector can benefit agriculture both from an individual farmer's perspective and from the perspective of increased visibility for, and understanding and appreciation of, farming by local residents and visitors. Agritourism can be an important contributor toward the long term sustainability of the agricultural industry. According to the 2007 *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," and "...Agritourism is critical to ensuring the future viability of agriculture in the state." Agritourism can draw its clientele not only from the county and region but also, across state borders, from New York and Pennsylvania.

Agritourism in Hillsborough is evidenced by the one community market, two roadside market and three pick your owns listed on the NJDA *Jersey Fresh* website<sup>13</sup>. A few other farms in Somerset County offer on-site activities, such as hay rides, corn mazes and farm tours.

Local strategies may include:

- Organizing farm tours as part of local school and community programs;
- Implementing a permanent signage program to alert and direct tourists and local residents to agritourism destinations; and
- Working with schools and farmers to develop and promote an expanded curriculum of opportunities for school tours to farms.

### ***General Economic Development Strategies***

“Many different agencies, councils, and organizations, working through a variety of programs, have the common goal of assisting New Jersey’s agricultural community,” according to the *2007 Economic Development Strategies*. “Strengthened communication and coordination between agencies and programs can result in multiple benefits for the agricultural community.” (page 26)

Ways to communicate to farmers include press releases to local papers and handouts developed for distribution at venues where farmers congregate, such as public meetings, farm organization meetings, fairs, workshops. Some of the general strategies that can be helpful to farmers include:

- New Market Opportunities;
- Labor Issues and Worker Training;
- Farmland Assessment and Crop Insurance and Technical Assistance; and
- Processed Foods.

### ***Other Documents that Address Agricultural Economic Development***

Several documents that address agricultural economic development in Somerset County are discussed in *Chapter 3*, including the *1965/1966 Master Plan*, *1987 County Master Plan*, *1998 Re-Examination Report*, *2001 Agriculture Retention and Development Master Plan*, *2002 Master Plan Amendment for the Agricultural and Mountain Conservation Districts*, *2005 Master Plan Amendment*, *Somerset County Farmland Preservation Plan 2008 Update*, *2007 Somerset County Smart Growth Strategic Plan*, *Somerset County Regional Center Strategic Plan*, *State Development and Redevelopment Plan*, and the *2004 Smart Growth Report*. The important component of each of these Plans is to:

- Strengthen agricultural viability as a land-based economic enterprise;
- Retain agriculture as an economic sector and industry;
- Preserve agriculture as a lifestyle and increase the viability of agriculture;
- Maximize farmland preservation; and
- Strengthen the agricultural preservation program.

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

### ***Institutional Strategies***

#### ***Farmer Support***

Farmers at all levels can benefit from support. There are a variety of resources at the state level, published on the State Agriculture Development Committee (SADC) website. One such program, *Farm Link*,<sup>14</sup> serves as a resource and referral center for new farmers, farmers seeking access to land and farming opportunities, landowners seeking farmers, and farmers working on estate and farm transfer plans. A linking service lists farmland for lease, partnership and farm manager opportunities, preserved farms for sale (including auctions of preserved farms), apprenticeship, internship and other opportunities for gaining farming experience. According to Dave Kimmel<sup>15</sup>, who oversees the program, the site has led to several matches. The SADC’s *Farm Link* website also offers Estate Planning Tools<sup>16</sup> for farmers interested in preserving their property.

The NJDOA website<sup>17</sup> offers a variety of technical and financial resources for agritourism assistance including First Pioneer Farm Credit, deer fencing, and farmers' market assistance.

In addition, the NJDA's Strategic Plan through June 2006 (*New Jersey Department of Agriculture Strategic Plan*<sup>18</sup>) lists among its objectives to increase the profitability of New Jersey's agricultural industry through new market opportunities and to create additional income for farmers (*page 15*), specifically by:

- Providing information on a variety of available grant opportunities through news releases, the NJDA website and one-on-one contacts; and,
- Assisting with application submissions for Value-Added producer grants through USDA Rural Development.

The state, Rutgers Cooperative Research and Extension (RCE) and supply companies, such as fertilizer and pesticide merchandisers, also provide seasonal workshops for farmers. In addition, the Somerset CADB is looking into grant opportunities to fund workshops and operational support for farmers, including the possibility of providing computers to help with the management and marketing of farms.

Another opportunity is the New Jersey Agricultural Leadership Development Program (NJALDP),<sup>19</sup> sponsored by the New Jersey Agricultural Society, "a two-year professional development opportunity, which is designed specifically for individuals in farming and agribusiness."

### ***Marketing / Advertising / Public Relation Support***

Marketing and advertising are critical to profitability. According to the 1999 Survey of Somerset County Farmland Owners, some Somerset County farm operations market their crops to regional wholesale outlets (grain elevators, such as Perdue in south Jersey and Penfield in New York State and the Livestock Cooperative Auction in Hackettstown, which deals in crops and eggs as well as livestock). Many more directly market to consumers from farm stands or more often out of the barn on the farm. Some market through participation in community markets as well. Additional marketing tools include:

- Advertising;
- Direct Marketing;
- Visibility at community events;
- Festivals and Tour; and
- Signage.

Jersey Fresh point-of-sale signs and other materials, both free and fee-based, can be ordered from the NJDA's Marketing and Development Web pages<sup>20</sup>. Farm stands are often seasonal businesses that need to capture potential sales at harvest time. Signs that give directions to the farm stand and let customers know what's available are vitally important. Hillsborough Township can review their ordinances to ensure they make allowances for farm signage. Having farm friendly ordinances in place can make it easier for farmers to promote their products and can minimize right-to-farm complaints in cases where farmers run up against opposition to their signage, whether from neighboring



residents or municipal officials. Farm signage can also benefit the municipality by drawing more visitors, and thus more dollars, to the area, benefiting other business in the community as well as the farmer.

### ***Community Farmers Markets***

- Explore the feasibility of starting new markets with local farmers. The New Jersey Council of Farmers and Communities<sup>22</sup>, a non-profit organization serving as a liaison between New Jersey Farm families and 35 market members, can help with logistics of startups and ongoing management; and,
- Explore organizing a pool of farmers who would be interested in cooperative stands at local events.

### ***Community Supported Agriculture***

According to the University of Massachusetts extension “CSA is a partnership of mutual commitment between a farm and a community of supporters which provides a direct link between the production and consumption of food. Supporters cover a farm’s yearly operating budget by purchasing a share of the season’s harvest.” At present there are no CSAs in Hillsborough, however when the abundant farming resource base and proximity to interested markets are considered, if CSAs were to become established they would likely be supported.

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

There is an ongoing need for farmers to keep up to date with the latest information on agricultural practices and new market opportunities, as they strive to maximize their profitability and achieve their farming goals. Ways the township can help include:

- Coordinate with Rutgers Extension and NJDA to research and market agricultural education;
- Seek grants to fund farmer education; and
- Consider working with nonprofit organization(s) to develop a teaching farm on preserved land.

### **New Jersey Agricultural Experiment Station (NJAES) and Rutgers Cooperative Research and Extension**

According to the NJAES website *Jersey Fresh* Information Exchange,<sup>23</sup> Rutgers Cooperative Extension (RCE) launched an innovative produce distribution and merchandising pilot project in 2004 to help New Jersey farmers get their products into new retail locations, such as white-table restaurants and grocery chains. Less than a month after a kickoff meeting that brought New Jersey growers face-to-face with noted New Jersey chefs, national chain grocers and multi-state distributors, these new relationships had already turned into critically needed new sales.

RCE, Somerset County CADB and Hillsborough can join hands in attempt to expand the program to include local growers and additional grocers (Wegmans in Bridgewater was a participant in the program) and restaurants.

## Rutgers School of Environmental and Biological Sciences

Hillsborough can touch base periodically with Rutgers regarding any opportunities for farm research, test/experimental projects that might be appropriate for local farms. The RCE can keep farmers abreast, through the *Green and Growing* newsletter and the RCE website, of any upcoming special workshops or information or appropriate continuing education curriculum.

### **Businesses**

#### ***Input Suppliers and Services***

Local farmers obtain farm supplies from a number of sources in and near the county, such as Belle Mead Farmers Coop; Neshanic Home & Garden; Somerset Grain, Feed & Supply, Bernardsville; and the Raritan Agway. Additional Agways are nearby in Clinton, Flemington, and Washington. Feed and hay supplies for livestock and equine often come from the farm itself or from other farms in the county. In its 2006 Directory of Facilities, the NJDA *New Jersey Equine* Advisory Board offers three listings in Somerset County for saddle shops and feed supply: The Horse and Rider Shop, Hillsborough; Coach Stop Saddlery, Ltd., Bedminster; and Raritan Agway. In addition, four Somerset County operations are listed on the *Jersey Grown* website as certified suppliers of nursery product.

For new machinery, local farmers generally look out of county, to Tractor Supply in Washington, to New Holland dealers in Lawrenceville or Washington, or to a dealer over the state border in Elizabethtown, Pennsylvania, who will deliver and pick up. In-county, the Storr Tractor Company is located in Somerville, and nearby, in Middlesex County, Binder Machinery is located in South Plainfield. A couple of farmers noted that they have bought “remotely,” ordering equipment and parts either over the phone or by Internet and getting delivery by UPS or FedEx.

For equipment repairs, about half of the farmers often choose to “do it themselves” although that becomes increasingly more difficult as the new equipment becomes more sophisticated. A few offer repair services to other farmers and there is a dealer in Ringoes (Hunterdon County), D&R Equipment, that does repairs and sells used machinery, short line machinery, mowers, balers, sheep wranglers and the like. A farmer in Jugtown (Hunterdon County) also does repairs and will come to the farm or have the farmer drop off the equipment.

When it comes to needing the services of a veterinarian, both livestock and equine operations find that large-animal veterinarians are few and far between. Local farmers mentioned one in Hopewell (Mercer), one in Belle Mead (Somerset), several in Warren County, and a major equine hospital in Ringoes. (*Mark W. Kirby and Peter Staats*)<sup>24</sup> The Equine Board’s 2006 Directory of Facilities lists many equine practitioners in Somerset County, although several appear to be associated with companies such as Ethicon and Johnson & Johnson and probably service their private farms.

### ***Product Distributors and Processors***

Hay and other forage crops are often sold locally, to other farms, equine operations, landscapers and nurseries as baled straw, or used for the farmer's own livestock and other uses. Some grain crops also are sold locally to small farmers with a few animals. In addition, there are three in-county feed outlets that process their own feed -- one does just feed; two are combination feed mill and garden center; all are located in Hillsborough. (Mark W. Kirby)<sup>25</sup> Generally, however, grains are sold to large grain brokers, such as the one in Yardville, also out of county. Other outlets include the Perdue grain elevators in Bordentown and Bridgeton or Penfield in New York State. Another potential outlet is an ethanol plant in Pennsylvania, which can process up to 30 million bushels of corn and needs to draw from beyond its own area, which produces only 10 million bushels.

For livestock sales, there are two options in the state: the popular Livestock Cooperative Auction in Hackettstown auction or a more distant opportunity at Cowtown, in Swedesboro. At the Hackettstown auction, farmers sell one on one to other farmers or in lots to wholesalers.

Those wishing to directly market their meat products must use a federally licensed processor. The nearest facility is in Green Village, Morris County. (Peter Staats)<sup>26</sup>

In summary, the Township would benefit from increased availability of equipment, equipment repair and large livestock veterinarians. The Township will continue to work with County and State agencies to assist the agriculture community in securing these services.

### **Anticipated Agricultural Trends**

#### ***Market Location***

Certainly from a market location perspective Hillsborough Township is in a strong position. In the 1990s Somerset County was one of the fastest growing counties in the state and the second most affluent county in the United States according to the U.S. Census Bureau's *2004 American Community Survey*. In 2005 it boasted a median household income of \$88,532, and a population of 315,000 people in 114,000 households, predominantly single unit structures (71%). Many of these housing units are fairly new, with fully 28% having been built since 1990. (*2005 American Community Survey*)<sup>27</sup> In addition, the County is centrally located in a metropolitan area that includes New York and Philadelphia and other affluent New Jersey counties.

#### ***Product Demand***

In Somerset County, crop sales in 2002 (a drought year) were down from 1997, a peak year, but higher than 1987. Livestock sales were up, but not as high as in 1997. Nursery, greenhouse and sod represented 74% of all crop sales. Looking forward, this segment of the agricultural industry should continue to be a healthy, viable sector since it feeds the landscape and garden center industry that serves New Jersey's burgeoning population of homes and businesses that make use of these services.

If biofuel processing becomes a reality in New Jersey, this should serve the local farmers well, since it would serve as an additional outlet for the grain sector. The combination of high crop loss from wildlife damage and high input costs for fertilizers would have to be addressed before farmers might be willing to invest more acreage in such crops.

Other avenues to explore include the following areas put forth in the *2001 Agriculture Retention and Development Master Plan*:

- Changing the Farm Operation's Mix of Products
- Value-adding
- Economic Development through Preservation
- Agriculture Enterprise District

As is the case with many New Jersey farming communities, Hillsborough Township is located near large population centers, primarily northeast and southwest of the Township. Agritourism opportunities (including such operations as pick-your-own farms) and farm markets offer additional marketing ventures for the local farming community. With the increased demand for landscaping products, a locally grown initiative citing the economic support to farmers and the benefits of native and locally grown and harvested plants could prove beneficial to the local farming community and to New Jersey agriculture as well. The Township will continue to work with existing agencies to pursue these objectives.

### ***Agricultural Support Needs***

As part of the *2001 Agriculture Retention and Development Master Plan* several conclusions were drawn as to how the local municipality can support agriculture. These are consistent with the recommendations of Hillsborough Township and include:

- A positive municipal regulatory environment;
- Supporting agricultural economic development activities;
- The effective use of municipal marketing and advertising;
- Municipal support for irrigation and greenhouse additions as ways to intensify farm production. Financial and regulatory support will be necessary to bring about suggested changes;
- Connection needs to be made between state value-added agricultural programs and local farm operations; and,
- Educate other business leaders about the extent and character of agriculture in the County, and the potential business activities that might be created or attracted to serve these farm operations.

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

The infrastructure the farmers most need is on the regulatory and technical assistance side. Increase municipal support through flexible land use regulations and ordinances that take into consideration the special needs of the agricultural operations. In addition help with financial and planning matters through workshops and other educational and counseling services provided by the state. Additional support could come from a concerted effort to promote agritourism through signage, publications, website and media promotion.

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

The township can work with other local municipalities toward understanding the importance of agriculture to the economy and the importance of an agriculture-friendly environment in support of the agricultural sector of the community. Right to Farm and accommodations for agricultural vehicle movement and the building of an awareness of and provisions supportive of agriculture into municipal master plans and zoning ordinances are the kind of support agriculture needs in order to be an economically viable sector.

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

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

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

The following Somerset County organizations support the agricultural community in Hillsborough Township:

- Somerset County Business Partnership;
- Somerset County Agriculture Development Board;
- Somerset County Board of Agriculture;
- Rutgers Cooperative Research and Extension Service;
- Somerset-Union Soil Conservation District; and
- Municipal Agriculture Advisory Committees.

The Township and the AAC will continue to work with county and state organizations to conduct workshops, seminars and other educational forums to explore additional markets and strategies to enhance the agriculture industry in Hillsborough. The AAC continues to coordinate with the Planning Board to assure agricultural needs are incorporated into zoning revisions.

The agricultural community is encouraged to participate and join in local business organizations. The farming and agricultural community is represented on the Economic and Business Development Community (EDBC) which represents business in the Township. The AAC presents the agriculture perspective to local business organizations whenever advantageous.

### ***Agricultural Support Implementation***

Some suggestions for future agricultural support have been discussed through this chapter and document, including workshops and other educational opportunities at the state, county and local level that may require funding through the many grant opportunities available from state and federal programs. In addition, support for farmland preservation, one of the chief ways to protect and ensure the continued presence of agriculture, comes from the local and county open space trust fund, SADC dollars through programs such as Planning Incentive Grants and soil and water conservation grants and federal dollars from federal programs such as the Farm and Ranch Lands Protection Program.

Listed below are County organizations that support or potentially can offer support to the business of agriculture, along with their 2007 agriculture or agritourism-related goals, as outlined in the 2007 Citizens' Guide to Somerset County Services, accessible from the County website<sup>28</sup> under Email Subscriptions to County Documents, Reports and Publications.

- Planning Division and CADB;
- Rutgers Cooperative Extension;
- Soil-Conservation District;
- Somerset County Vocational and Technical Schools;
- Somerset County Business Partnership (SCBP); and
- Cultural & Heritage Commission – In 2006, the Commission initiated and widely promoted a successful new annual collaborative county-wide tourism event: Weekend Journey through the Past (*Weekend Journey through the Past*)<sup>29</sup>, involving 23 historic sites/heritage organizations and attracting hundreds of people from ten New Jersey counties and a total of six states. A goal for 2007 is to further develop and expand this event.

Given the realities of budgetary constraints, the Township will evaluate and provide funding for those initiatives deemed to have a significant return on investment for the Township and local farming community. A preference for more regional (e.g. County and State) initiatives is more advantageous from a municipal standpoint. The expertise and associated resource support at those levels offer opportunities for success and effectiveness. The Township will provide its fair share of expenses for those initiatives deemed most promising.

The Township looks to the county and state for guidance and leadership in implementing regional initiatives. The Township can help with newsletters or web messages to publicize and encourage participation in more regional initiatives. The AAC will also consider cost-benefit factors deciding whether a survey of local farmers would be effective in determining future agricultural needs.

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- <sup>1</sup> New Jersey Department of Agriculture. Agricultural Smart Growth Tool Kit “Planning for Agriculture. <http://www.state.nj.us/agriculture/toolkit.htm>. Accessed June 2006.
- <sup>2</sup> New Jersey Department of Agriculture (NJDOA). 2007 Economic Development Strategies.
- <sup>3</sup> NJDA *Jersey Fresh* website. <http://www.state.nj.us/jerseyfresh/>.
- <sup>4</sup> *Jersey Fresh* website. Restaurants. [www.state.nj.us/jerseyfresh/jfrestaurants.htm](http://www.state.nj.us/jerseyfresh/jfrestaurants.htm).
- <sup>5</sup> Personal communication with Dr. Ernest Thurlow of the Somerset-Union Soil Conservation District, phone conversation, July 18, 2007.
- <sup>6</sup> New Jersey Department of Agriculture, Jersey Grown Garden Centers and Nurseries, <http://www.jerseygrown.nj.gov/cgi-bin/agriculture/jerseygrown/gcnsearch.pl?county1=somerset>. Accessed Dec. 3, 2007.
- <sup>7</sup> New Jersey Department of Agriculture, Certified Nurseries and Plant Dealers, July 2, 2007. <http://www.state.nj.us/agriculture/divisions/pi/pdf/NJWEBDIR.pdf>. Accessed July 27, 2007.
- <sup>8</sup> Agriculture Retention & Development Master Plan. June 2001. page v
- <sup>9</sup> Conversation between Consultant Megan Haidet and Nicholas Polanin, November 2007.
- <sup>10</sup> Somerset County Business Partnership. <http://www.somersetbusinesspartnership.com>.
- <sup>11</sup> On the 2002 *Census of Agriculture*, horses, ponies, mules, burros and donkeys have been included, for the first time, under Livestock and Poultry; however, for the purposes of this document, and in alignment with the categories put forward by the NJDA in its economic development strategies, they are discussed later in this chapter in a separate section on the equine industry.
- <sup>12</sup> Northeast Organic Farming Association of New Jersey website, [www.nofanj.org](http://www.nofanj.org).
- <sup>13</sup> NJDA *Jersey Fresh* website. [www.state.nj.us/jerseyfresh](http://www.state.nj.us/jerseyfresh).
- <sup>14</sup> Farm Link. <http://www.state.nj.us/agriculture/sadc/farmlink.htm>
- <sup>15</sup> Phone conversation with Dave Kimmel, SADC, July 2007.
- <sup>16</sup> SADC, Farm Link, Resources for Resources for Estate, Farm Succession, and Farm Transition Planning. <http://www.nj.gov/agriculture/sadc/farmowners.htm#resource2> Accessed August 2007
- <sup>17</sup> NJDOA. Technical and Financial Services. <http://www.state.nj.us/agriculture/grants/> Accessed August 2007
- <sup>18</sup> New Jersey Department of Agriculture Strategic Plan (Through June 2006; Revised December 7, 2004) <http://www.state.nj.us/agriculture/pdf/doaplan.pdf> Accessed July 2007.

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<sup>19</sup> New Jersey Agricultural Leadership Development Program (NJALDP).  
*<http://www.njagsociety.org/njaldp/njaldp.htm>*

<sup>20</sup> NJDA Marketing and Development. *JerseyFresh*.  
*<http://www.state.nj.us/agriculture/divisions/md/prog/jerseyfresh.html#3>*.

<sup>21</sup> New Jersey Council of Farmers and Communities. *[www.ncjfc.org](http://www.ncjfc.org)*.

<sup>22</sup> New Jersey Council of Farmers and Communities. *[www.ncjfc.org](http://www.ncjfc.org)*.

<sup>23</sup> *Jersey Fresh* Information Exchange. *<http://njfarmfresh.rutgers.edu/>*.

<sup>24</sup> Personal conversation with Mark W. Kirby, farmer and Chair of CADB and Peter Staats, Vice-Chair, June 27, 2007.

<sup>25</sup> Phone conversation with Mark W. Kirby, farmer and Chair of CADB, July 18, 2007.

<sup>26</sup> Personal conversation with Peter Staats, Vice-Chair, CADB, July 25, 2007.

<sup>27</sup> Somerset County, New Jersey, Population and Housing Narrative Profile: 2005 American Community Survey.

<sup>28</sup> Somerset County website. *<http://www.co.somerset.nj.us>*.

<sup>29</sup> Cultural and Heritage Commission. Weekend Journey through the Past.  
*<http://64.226.219.208/schistoryweekend>*





## **CHAPTER 7:**

# **NATURAL RESOURCE CONSERVATION**

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One of the cornerstones of a successful, long term farmland preservation program is the conservation of natural resources on farms, without which the long term sustainability and viability of farmland would be in doubt. Hillsborough Township recognizes the conservation of these natural resources as a long term goal, and a necessary part of farmland preservation.

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

There are numerous entities, both public and private, which administer, fund, and provide technical guidance for Hillsborough farmers relative to natural resource conservation. These entities are in place to assist farmers with natural resource conservation issues, and are assets for farmers to assist in the management of the land and water upon which their farms depend.

#### ***Natural Resource Conservation Service***

An important partner in support of natural resource conservation for the agricultural community is the United States Department of Agriculture (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 for such conservation programs as the Wildlife Habitat Incentive Program (WHIP) and Environmental Quality Incentive Program (EQIP). (*Information For Farmers*)<sup>1</sup>

The local NRCS office serving Somerset, Hunterdon and Union Counties is located at 687 Pittstown Road, Suite 2 in Franklin Township (mailing address of Frenchtown). Hillsborough farmers may utilize this local NRCS office for technical assistance with conservation issues. NRCS will also reach out directly to landowners if they know of a farmer who is in need of assistance or can use the guidance of the NRCS staff. The local NRCS office also helps to prepare Conservation Plans for Somerset County farmers. These Conservation Plans nearly always include strategies to conserve soil and water, but 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. (*Evan Madlinger*)<sup>2</sup>

Although Conservation Plans are not a prerequisite for landowners intending to preserve their land, plans are required within one year of preservation. Conservation Plans are required when applying for natural resource programs such as WHIP and 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 Somerset County Soil Conservation District gives final approval on all Conservation Plans and program contracts, and the USDA Farm Service Agency (FSA) assists NRCS in administration of an additional natural resource conservation program entitled Conservation Reserve Enhancement Program (CREP). (*Evan Madlinger*)

The phone number for the local NRCS office is (908) 782-4614, and the District Conservationist is Gail Bartok. She can also be reached at [gail.bartok@nj.usda.gov](mailto:gail.bartok@nj.usda.gov). Ms. Bartok and her staff (listed below) can be contacted by Hillsborough Township farmers for assistance, and more information on the availability of NRCS programs in Somerset County.

- Evan Madlinger – Soil Conservationist
- Shirley Sakos – Program Assistant
- Suzanne Ohl – Soil Conservation Technician

An additional resource for Hillsborough Township farmers is the “Field Office Technical Guide” (Guide), which is published by NRCS. It contains technical information detailing the development and implementation of soil, water, air, flora, and fauna resource conservation practices, and is used to develop Conservation and Resource Management Plans. (*eFOTG*)<sup>3</sup> 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. (*Gail Bartok*)<sup>4</sup> Conservation practices discussed in the Guide that are pertinent for, and used in, Somerset County include:

- Riparian buffers, including necessary buffer widths and appropriate plant species;
  - No till and minimum till practices;
  - Prescribed grazing and pasture rotation;
  - Soil erosion control via vegetation stabilization of farm field storm water gullies;
  - Nutrient management, including manure and fertilizers; and,
  - Animal waste control, including heavy use area concrete protection pads, which keep animal waste off the ground, and use of 3-sided animal waste storage facilities, both of which minimize manure contact with soils, groundwater and surface water.
- (*Evan Madlinger*)

### ***Somerset County Soil Conservation District***

An additional 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 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 ...” (*NJDA Agricultural and Natural Resources*)<sup>5</sup>

The SSCC coordinates and supports the work of the state’s 15 local soil conservation districts (SCD), one of which is the Somerset County SCD. The Somerset 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. (*NJDA Agricultural and Natural Resources*)

The Somerset County SCD office is located in the 4-H Center at 308 Milltown Road in Bridgewater. Somerset County Farmers may approach this local SCD office (as well as the local NRCS office) with a Request for Assistance (RFA) to apply for funds from natural resource conservation grant programs such as WHIP and EQIP. If approved, the RFA is forwarded to the local NRCS office in Franklin Township for processing. The administration of the RFA includes preparation of a Conservation Plan and grant program contract, as previously described. The Somerset County SCD is involved in review of Conservation Plans and grant program contracts, and must give final approval to both. (*Ernest Thurlow*)<sup>6</sup>

The phone number for the Somerset County SCD office is (908) 526-2701, and the District Manager is Ernest Thurlow. He can also be reached at [thurlow@county.somerset.nj.us](mailto:thurlow@county.somerset.nj.us), and can be contacted by Somerset County farmers for assistance. It is noteworthy that Mr. Thurlow is also an ex-officio member of the Somerset CADB. (*Ernest Thurlow*)

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

### ***Rutgers Cooperative Extension of Somerset County***

The Rutgers Cooperative Extension (RCE) of Somerset County provides both field and technical research which is focused on 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 of Somerset County addresses “agricultural, environmental, and ecological concerns, and promoting the use of science-based knowledge and management techniques, agriculture and resource management

agents and specialists provide professional expertise and training through a wide array of programming and outreach.” (*New Jersey Agricultural Experiment Station*)<sup>7</sup> Furthermore the RCE of Somerset County has the following objectives:

- To provide educational tools necessary for proper resource management decisions;
  - To improve the knowledge and appreciation of agriculture and environmental resources;
  - To strengthen the relationships between agricultural and residential communities; and,
  - To encourage the proper use and development of management strategies.
- (*New Jersey Agricultural Experiment Station*)

The RCE of Somerset County is located in the 4-H Center at 310 Milltown Road in Bridgewater. However, extension agents are regional in location. Names, specialties and contact information include:

Nicholas Polanin – Specialty: forestry, woodland management, Christmas tree production, urban and community forestry  
County Agent II (Associate Professor, Rutgers University, N.J. Agricultural Experiment Station, School of Environmental and Biological Sciences)  
Rutgers New Jersey Agricultural Experiment Station  
Cooperative Extension of Somerset County  
310 Milltown Ave., Bridgewater, NJ 08807  
908-526-6293 / Fax 908-704-1821  
Email: polanin@aesop.rutgers.edu

William J. Bamka – Specialty: field crops - soybean, grains  
County Agricultural Agent  
Cooperative Extension of Burlington County  
Rutgers New Jersey Agricultural Experiment Station  
2 Academy Drive  
Westampton, NJ 08060-3826  
Phone: 609-265-5757  
Fax: 609-265-5613  
Email: bamka@njaes.rutgers.edu

Robert Mickel – Specialty: livestock, pasture  
County Agricultural Agent and Regional Livestock Agent  
Cooperative Extension of Hunterdon County  
Rutgers New Jersey Agricultural Experiment Station  
6 Gauntt Place  
PO Box 2900  
Flemington, NJ 08822-2900  
Phone: 908-788-1338  
Fax: 908-806-4735  
Email: mickel@njaes.rutgers.edu

Win Cowgill – Specialty: tree fruit, orchards  
County Agricultural Agent and Regional Fruit Agent  
Cooperative Extension of Hunterdon County  
Rutgers New Jersey Agricultural Experiment Station  
6 Gauntt Place  
PO Box 2900  
Flemington, NJ 08822-2900  
Phone: 908-788-1339  
Fax: 908-806-4735  
Email: cowgill@njaes.rutgers.edu

Peter J. Nitzsche – Specialty: small fruit - strawberries, blueberries, etc., and vegetables  
County Agricultural Agent  
Cooperative Extension of Morris County  
Rutgers New Jersey Agricultural Experiment Station  
P.O. Box 900 - Court House  
Morristown, NJ 07963-0900  
Phone: 973-285-8300, ext. 226  
Fax: 973-605-8195  
Email: nitzsche@njaes.rutgers.edu  
(Nick Polanin)<sup>8</sup>

The Township refers farmers to these regional organizations for help and guidance. The Township does not have the technical expertise of these regional organizations, and replicating it would not be cost effective. Hillsborough looks to these agencies for the agricultural knowledge and guidance to the agricultural community. The AAC and Township will provide referral services for farmers to utilize these agencies and points-of-contact.

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

### ***SADC Soil and Water Conservation Grant Program***

In the past, the New Jersey Department of Agriculture State Agriculture Development Committee (SADC) has provided soil and water conservation grants to farms that are permanently preserved or are enrolled in the eight year preservation program, with priority for preserved farms. The eight year program is currently unfunded, but efforts are underway to restore such funding. (*Ernest Thurlow*) The purpose of the grants and program is to protect Somerset County agricultural lands from soil erosion.

These grants fund soil and water conservation projects approved by the Somerset County Soil Conservation District (district), with the program administered by both the district and the local NRCS office in Franklin Township. Once the district deems the conservation project necessary and feasible, applications are forwarded to the NJ State Soil Conservation

Committee, which recommends projects to the SADC for funding approvals. (*Soil and Water Conservation Grants*)<sup>9</sup> Traditionally, 50% of the costs of approved soil and water conservation projects are paid with grant funds, but up to 75% has also been approved in the past. (*Ernest Thurlow*) Hopefully these funds will be restored so that conservation projects can continue in Somerset County.

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*)

### ***Federal and New Jersey Conservation Programs***

The following is a synopsis of the natural resource conservation programs funded by the 2002 Farm Bill. They are implemented by NRCS and the Somerset County SCD, and also to a minor degree the Farm Service Agency, also part of USDA. These programs are the backbone of natural resource conservation efforts in Somerset County. Hillsborough supports these programs. To date, there has been no readily available public information to determine the local participation level in these programs in Hillsborough Township.

- *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. (*NRCS Conservation Programs*)<sup>10</sup> 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 can be fully funded by NRCS and NJDA. (*Ken Bingham*)<sup>11</sup> Within Somerset County, CREP has been “slow getting started” due to strict eligibility requirements. This includes requirements that the land must have been cropped for 4 of the 6 years between 1998 and 2002, and detailed paperwork documentation is required when applying. CRP is more widely used in Somerset County than CREP. (*Evan Madlinger*)
- *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. (*NRCS Conservation Programs*) At present, CIG is not being used in Somerset County. (*Evan Madlinger*)
- *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. (*NRCS Conservation Programs*) EQIP is the most popular and widely used conservation program in Somerset County, and is the most well funded of all the programs, receiving approximately \$4 million statewide on an annual basis. Nationally, the proposed 2007 Farm Bill would raise authorized EQIP funding to \$1 Billion. (*Jim Baird*) In Somerset County, between 2005 and 2007 there are 2,056 contracted acres, with 10 active contracts. However, newly enrolled acreage has declined from 2005 to 2006, and again from 2006 to 2007. (*Janice Reid*)<sup>12</sup>

- *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 ranchland in agricultural use. The USDA partners with state, tribal, or local governments, and non-governmental organizations. (*NRCS Conservation Programs*) Farmers accepting funds through this program must adhere to strict impervious surface limitations. In New Jersey, this program receives approximately \$500,000 to \$1 million annually. (*Kent Hardmeyer*)<sup>13</sup> The local NRCS office prepares the Conservation Plans used in the Program, which is then administered by the NJDA. To date, acreage in Somerset County is not available for this report. (*Evan Madlinger*) Nationally, the proposed 2007 Farm Bill would raise authorized FRPP funding to \$300 million. (*Jim Baird*)<sup>14</sup>
- *Grassland Reserve Program (GRP)* - GRP offered landowners the opportunity to protect, restore, and enhance grasslands on their property, which play a vital role in protecting water quality and providing wildlife habitat. This program was coordinated through several federal agencies (*NRCS Conservation Programs*), but has become inactive in Somerset County. (*Evan Madlinger*) 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. (*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 create wetlands on otherwise productive agricultural lands. As a result, the WRP has not been used in Somerset County. However, it is reported that Duke Farms has applied to enroll approximately 450 acres in WRP, and that “several hundred” of the eligible acres are in Hillsborough Township. The application is pending. (*Tim Dunne*)<sup>15</sup>
- *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. Since its inception in 1998, WHIP has been a popular program for non-federal landowners interested in wildlife habitat management in New Jersey. (*NRCS Conservation Programs*) WHIP is second only to EQIP in use for

Somerset County, with 1,800 contracted acres and 8 active contracts since 2005. There are 3 farms in Hillsborough Township enrolled in WHIP. (*Janice Reid*)

- *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. (*Forest Stewardship Program*)<sup>16</sup>

As of 2007, in Hillsborough Township there are 9 properties, for a total of 1,097 acres, enrolled in the Forest Stewardship Program. (*Jim Haase*)<sup>17</sup>

- *NJDEP Landowner Incentive Program* - The New Jersey Department of Environmental Protection's Nongame and Endangered Species Program 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. (*Landowner Incentive Program pamphlet*)<sup>18</sup> 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 farmer products such as corn. In Somerset County there are a total of 235 acres enrolled in LIP on two farms, however neither of these are located in Hillsborough Township. (*Kim Korth*)<sup>19</sup>

### ***Other Programs***

- *New Jersey Department of Environmental Protection* - The New Jersey Department of Environmental Protection (NJDEP)'s 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. (*Private Lands Management Program*)<sup>20</sup> Properties in Hillsborough Township 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*)<sup>21</sup>



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 BFM is an important partner for Somerset County's farmland preservation efforts.

- *Private non-profit groups and local community support* - 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 local 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 individuals spend countless hours providing and sharing their expertise, as well as raising and contributing money. They are an invaluable asset for Somerset County's agricultural community and landscape, including natural resource conservation and stewardship.

Somerset County has the support of a variety of organizations, including the Somerset County Board of Agriculture, New Jersey Farm Bureau, 4-H (including the annual 4-H Fair), and Future Farmers of America.

Local and regional non-profit organizations also contribute to the permanent protection of farmland. These groups include D&R Greenway Land Trust, Hunterdon Land Trust Alliance, Montgomery Friends of Open Space, Morris Land Conservancy, The Nature Conservancy, New Jersey Audubon Society, and New Jersey Conservation Foundation.

## **C. Water Resources**

The protection of the water resource as it relates to agriculture and farmland preservation in Hillsborough Township 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 the use of synthetic chemicals such as fertilizers, herbicides, pesticides, and fungicides so as to lessen impacts to groundwater;
- Providing riparian buffers along watercourses, so as to protect streams from the above mentioned synthetic chemicals, and from soil erosion;
- 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.

Hillsborough Township's population has grown in the last several decades, and will likely continue to do so for the foreseeable future. As such, competing demands for water will likely increase, as well as conflicts between agricultural and non-agricultural users.

Emphasis is also 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." (2006 *Agricultural Smart Growth Plan*)<sup>22</sup>

#### ***Water Supply Characteristics, Limitations, Conservation, and Allocation***

The physiographic and geologic layout of Hillsborough Township dictates water supply, availability and recharge, as well as location of agriculture. As discussed in the *Natural Resource Inventory for Somerset County, New Jersey*, the County "... exhibits four distinct geologic regions which are reflected in its topography".

The major (water) aquifer in Somerset County is known as the Brunswick Shale. It has a limited capacity for water storage, and is usually filled during periods of normal precipitation. The limited ability of this aquifer to accept and transmit water is exhibited in the extreme differences between minimum and maximum flow in streams overlying the shale. In areas underlain by highly fractured shale containing mineral voids, the groundwater storage capacity is moderately high. Large diameter industrial wells in the Brunswick Formation of the Raritan Valley typically yield over 200 gallons per minute, and can exceed 500 gallons per minute.

Groundwater recharge is derived primarily from the local region. It comes either from precipitation falling on intake or outcrop areas, vertical leakage from nearby runoff, or from infiltration from adjacent water bodies. Variables such as depth to water table, runoff, vegetation, soil type, soil thickness, temperature, and topography can affect the amount of water available and able to enter the aquifer. Most of the natural infiltration occurs between late fall and early spring, when the ground is not frozen and vegetation is in early growth or dormant. It is possible for the prolonged withdrawal of water to exceed the recharge potential in an aquifer, resulting in diminution of available water which can be economically pumped. Over-development can cause a serious and continuous decline in the water supply.

Natural groundwater quality is considered to be generally good. However, this quality can be affected by infiltration from surface sources, particularly in populated and industrialized areas. Contamination can come from such diverse sources as malfunctioning or improperly

designed septic systems; infiltration of agricultural fertilizers such as nitrates, and pesticides; salt run-off from winter road de-icing; gas and oil products from leaking underground storage tanks; leachate from landfills; and, industrial discharges. (*Natural Resource Inventory for Somerset County, New Jersey*)<sup>23</sup>

Although Hillsborough currently has adequate supplies of water in its Agricultural District, continued growth, possible droughts, and environmental stewardship point to the need to conserve water to ensure its continued availability for residents and farmers.

“The State Agricultural Development Committee supports the NJDA Agricultural Smart Growth Plan (approved by the State Board of Agriculture), and encourages 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.” (*2006 Agricultural Smart Growth Plan*)

With nursery and greenhouse, sod, and vegetable farming, it is possible to implement conservation strategies such as drip irrigation, or watering crops in the cooler parts of the day so as to minimize evaporation. Water re-use is another possible option. For livestock, floats and timers in watering troughs can conserve water by negating the need for constantly running water to keep troughs full. (*Ernest Thurlow*)

## **D. Waste Management Planning**

Hillsborough is not experiencing any issues with waste management at the present time. However, awareness of potential issues and knowledge of solutions or procedures for avoidance enhance the viability of the Township’s agricultural community. The Township and AAC continue to strive to keep abreast of events, procedures, practices and subject matter experts for referral to local farmers. Management of livestock waste has serious 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 also a sign of good environmental stewardship, as is recycling of farm by-products whenever possible.

### ***Concentrated Animal Feeding Operations & Animal Feed Operations***

Concentrated Animal Feeding Operations (CAFO) are defined at N.J.A.C. 7:14A-2.13 (New Jersey Pollutant Discharge Elimination System (NJPDES) as: (*New Jersey Discharger*)<sup>24</sup>

- Operations with more than 1,000 slaughter or feeder cattle, 700 dairy cattle, 2,500 swine, 500 horses or other animal populations. Somerset County does not have any operations that fit into this category; 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. A number of Somerset 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 (AFO) have the potential to, or 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 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. (*2006 Agricultural Smart Growth Plan*) 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. (*Monique Purcell*)<sup>25</sup> The strategy emphasizes the use of cost-effective voluntary measures, limiting the need for permits. (*2006 Agricultural Smart Growth Plan*)

#### ***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 also saves 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.

However, the nursery and greenhouse industry in the county does offer recycling opportunities for such things as nursery film, and potting and pesticide containers. Discussions with the Somerset County Solid Waste Management Division indicate that the county does not do any type of agricultural recycling, and has no plans to do such. One of the reasons cited is lack of space at county facilities to operate such a recycling program. However, it was indicated that Somerset County may be interested in partnering with a neighboring county if it is logistically feasible to transport materials from Somerset County to the partner county. (*Diana Vigilante*)<sup>26</sup>

The Sussex County Municipal Utilities Authority (MUA) is currently working with the NJDA to develop a program for recycling nursery film in Sussex 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. As a natural resource conservation measure, the Somerset County agriculture community may wish to approach the Sussex County MUA to learn about their recycling initiative as a model for a future program in Somerset County.

## **E. Energy Conservation Planning**

Promoting increased energy conservation, and renewable and local energy, is one of the emerging priorities of Hillsborough Township, and an important component of its overall sustainability planning. Setting energy efficiency goals makes sense for all economic sectors, including agriculture, and can be part of a basic business plan. There are a number of promising alternatives ranging from solar to wind turbines, which provide farmers a balance of economic and environmental benefits. Identifying which technologies make the most sense for Hillsborough farms, educating farmers, and encouraging their application are important implementation action steps. Creating a stable and predictable regulatory environment, both at the state and local level, is also critical and one that the county should strongly promote. (*Robert Bzik*)

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*)<sup>27</sup>

The Township is investigating various approaches to the issue of energy equipment on its farms. Optimally, the Township would like to maximize local energy generation to reduce foreign imports and minimize pollution. Debate about large scale energy production on

farms has not reached town wide consensus. The continued discussion of this topic at all levels will result in an optimization of energy generation with minimization of impact on arable land.

In the *2002 Master Plan Amendments*, the Township offers some management approaches to help promote energy conservation, including:

- Promote alternative means of transportation, such as bicycling and walking;
- Adopt development regulations that provide for compact residential neighborhoods;
- Encourage energy conservation through subdivision design, building design, building orientation, and the valuation of microclimate conditions such as solar access and wind direction;
- Recommend landscaping standards that provide buildings with maximum solar access, shading, and wind protection; and
- Encourage the maximum recovery of recyclable materials and the use of renewable energy sources.

### ***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*)<sup>28</sup> EQIP does provide some funding for solar panels, and farmers interested in using this alternate energy source can contact the local NRCS office in Franklin Township for more information.

Other programs available to help agricultural producers take advantage of this technology include 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.

### ***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 Somerset County, has ample and consistent enough wind power to make turbine energy feasible. (*2006 Agricultural Smart Growth Plan*) One possible roadblock to use of wind turbines, is that few, if any, municipal ordinances allow the use of wind turbines. Currently there is an ordinance under review with the Hillsborough Township Planning Board and Township Committee regarding wind turbines on farm properties. This Ordinance was adopted in 2007.

### ***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 may also reduce dependence on foreign oil, and the harmful environmental effects of oil drilling. Also, unlike the gasoline additive MTBE, Ethanol will not contaminate groundwater. (*Agriculture and Green Energy*) Corn, a dominant field crop in Hillsborough Township (along with hay and soybeans), could position 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).

### ***Bio-diesel***

Petroleum diesel is an emitter of sulfur emissions, a major air pollutant. Bio-diesel, made from the oils of soybeans, is an alternative to petroleum diesel. This organic fuel can be blended and used in diesel engines without modification. The result is a significant reduction of the harmful fumes produced by pure petroleum diesel. (*Agriculture and Green Energy*) As of 2004, there were 526 acres of soybeans that were farmland assessed in Hillsborough Township.<sup>29</sup>

## **F. Outreach and Incentives**

### ***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's Clean Energy Program*: Administered by the New Jersey Board of Public Utilities, this program provides financial incentives to install clean energy systems, including fuel cells, solar energy, small wind and sustainable biomass equipment. Financial incentives are in the form of rebates, grants and loans. Additional information is at [www.njcep.com/](http://www.njcep.com/).<sup>30</sup>
- *Renewable Energy Systems and Energy Efficiency Improvements Program*: As part of the 2002 Federal 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 reportedly continue this funding. Additional information can be found at the following website: [www.rurdev.usda.gov/rbs/farmbill/index.html](http://www.rurdev.usda.gov/rbs/farmbill/index.html).<sup>31</sup>
- *Biomass Research and Development Initiative Grants*: The United States Departments of Agriculture and Energy support 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 lead to greater commercialization. Additional information is available at the following website: (*Agriculture and Green Energy*) <http://www.state.nj.us/agriculture/news/hottopics/topics060222.html>.<sup>32</sup>

The Township looks to the County and state to take the lead in these initiatives. Hillsborough can help by publicizing and referring programs. The AAC will host seminars and encourage local farmers to attend these educational opportunities.



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<sup>1</sup> United States Department of Agriculture, Natural Resources Conservation Service, Information For Farmers <http://www.nj.nrcs.usda.gov/farmers.html>. Accessed April 9, 2007.

<sup>2</sup> Personal communication with Evan Madlinger, United States Department of Agriculture, Natural Resources Conservation Service, July 16, 2007.

<sup>3</sup> United States Department of Agriculture, Natural Resources Conservation Service. Welcome to eFOTG (Electronic Field Office Technical Guide). <http://www.nrcs.usda.gov/technical/efotg/>. Accessed July 21, 2007.

<sup>4</sup> Personal communication with Gail Bartok, District Conservationist, USDA, NRCS. August 20, 2007.

<sup>5</sup> New Jersey Department of Agriculture, Agricultural and Natural Resources. <http://www.state.nj.us/agriculture/divisions/anr/>. Accessed April 10, 2007.

<sup>6</sup> Personal communication with Ernest Thurlow, District Manager, Somerset County Soil Conservation District. July 16, 2007.

<sup>7</sup> New Jersey Agricultural Experiment Station, Rutgers Cooperative Extension of Somerset County. <http://somerset.RCE.rutgers.edu/ag/>. Accessed July 21, 2007.

<sup>8</sup> Personal Communication with Nick Polanin, Rutgers Cooperative Extension of Somerset County. July 12, 2007.

<sup>9</sup> New Jersey Department of Agriculture, Soil and Water Conservation Grants. <http://www.state.nj.us/agriculture/grants/soil.html>. Accessed April 14, 2007.

<sup>10</sup> United States Department of Agriculture, New Jersey NRCS Conservation Programs. <http://www.nj.nrcs.usda.gov/programs/>. Accessed April 9, 2007.

<sup>11</sup> Personal Communication with Ken Bingham, United States Department of Agriculture, Farm Service Agency. June 11, 2007.

<sup>12</sup> Personal communication with Janice Reid, Assistant State Conservationist, United States Department of Agriculture, Natural Resources Conservation Service. June 26, 2007.

<sup>13</sup> Personal communication with Kent Hardmeyer, United States Department of Agriculture, Natural Resources Conservation Service, May 15, 2007.

<sup>14</sup> Personal Communication with Jim Baird, Mid-Atlantic Region Director, American Farmland Trust. June 26, 2007.

<sup>15</sup> Personal communication with Tim Dunne, United States Department of Agriculture, Natural Resources Conservation Service. June 25, 2007.

<sup>16</sup> United States Department of Agriculture, Forest Service, Forest Stewardship Program. <http://www.fs.fed.us/spf/coop/programs/loa/fsp.shtml>. Accessed July 21, 2007.

<sup>17</sup> Personal communication with Jim Haase, New Jersey Department of Environmental Protection, New Jersey Forest Service. November 15, 2007.

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<sup>18</sup> New Jersey Department of Environmental Protection, Division of Fish and Wildlife. Landowner Incentive Program pamphlet.

<sup>19</sup> Personal communication with Kim Korth, New Jersey Department of Environmental Protection, Non-game Endangered Species Program. November 15, 2007.

<sup>20</sup> New Jersey Department of Environmental Protection, Division of Parks and Forestry, Private Lands Management Program. [http://www.nj.gov/dep/parksandforests/forest/njfs\\_private\\_lands\\_mgt.html](http://www.nj.gov/dep/parksandforests/forest/njfs_private_lands_mgt.html). Accessed April 13, 2007.

<sup>21</sup> Personal Communication with Jim Barresi, Assistant Director, New Jersey Department of Environmental Protection, Division of Parks and Forestry. June 12, 2007.

<sup>22</sup> New Jersey Department of Agriculture, 2006 Agricultural Smart Growth Plan <http://www.state.nj.us/agriculture/pdf/smartgrowthplan.pdf>. Accessed April 9, 2007.

<sup>23</sup> Somerset County Planning Board, Natural Resource Inventory for Somerset County, New Jersey. Undated

<sup>24</sup> 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 17, 2007.

<sup>25</sup> Personal communication with Monique Purcell, New Jersey Department of Agriculture, Division of Agriculture and Natural Resources. April 18, 2007.

<sup>26</sup> Personal communication with Diana Vigilante, Manager, Somerset County Solid Waste Management Division. July 19, 2007.

<sup>27</sup> Personal communication with Steve Bruder, SADC. August 23, 2007.

<sup>28</sup> New Jersey Department of Agriculture, Agriculture and Green Energy. <http://www.state.nj.us/agriculture/news/hottopics/topics060222.html>. Accessed April 2, 2007.

<sup>29</sup> New Jersey Farmland Assessment. County Summary. Somerset County. 2004 (tax year 2005).

<sup>30</sup> New Jersey's Clean Energy Program. [www.njcep.com](http://www.njcep.com)

<sup>31</sup> USDA, Rural Development Program. 2002 Farm Bill Initiative: The Renewable Energy and Energy Efficiency Program; USDA Farm Bill Section 9006. <http://www.rurdev.usda.gov/rbs/farmbill/index.html>.

<sup>32</sup> NJDA, Agriculture and Green Energy. <http://www.state.nj.us/agriculture/news/hottopics/topics060222.html>.



## CHAPTER 8:

# AGRICULTURAL INDUSTRY SUSTAINABILITY, RETENTION, AND PROMOTION

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“Sustainable agriculture” can mean something different to every farmer in the agriculture community. Sustainable agriculture is typically defined as an integrated system of plant and animal practices with three main goals - environmental health, economic profitability and social and economic equity. Practices such as integrated pest management (IPM), rotational grazing, soil conservation, cover crops, planting riparian buffers, management of agriculture impervious cover, and crop/landscape diversity are some methods to help farmers protect the quality of the environment and conserve the resources that sustain agriculture. The “*Sustainable Agriculture and Education Report*” points out that “sustainable agriculture” is more than a set of prescribed practices, since a “key goal is to understand agriculture from an ecological perspective - in terms of nutrient and energy dynamics and interaction of plants, animals, insects and other organisms in agri-ecosystems, and then balance it with profit, community and consumer needs”. (SARE 1997)<sup>1</sup>

Sustainable agriculture is also grounded in the premise of creating an environment that is supportive of agriculture as an industry by blending innovative marketing strategies such as farmers markets, buy local programs and community supported agriculture, with comprehensive planning, economic development and natural conservation practices. Strategies at the local level including agriculture-friendly zoning, clustering, lot averaging and Transfer of Development Rights are a few of the land use planning techniques supported by Hillsborough Township. Incorporating agriculture into economic development plans by engaging and integrating agriculture into traditional business-support systems through the local Chamber of Commerce and business owners will help create economic development incentives to support farm-related businesses.

Hillsborough Township has launched an innovative initiative, “Sustainable Hillsborough”, to help envision and guide the future of Hillsborough. This effort is a partnership between the Township of Hillsborough, the Stony Brook-Millstone Watershed Association and the New Jersey Sustainable State Institute. The hope is to engage citizens, municipal officials, non-profit organizations and community leaders to formulate and implement a Sustainable Community Plan for the Township of Hillsborough. (*Sustainable Hillsborough*)<sup>2</sup> This effort of community visioning builds upon Hillsborough’s history of participating in sustainable development, dating back to 1999 when the township began to develop strategies for the protection of open space, farmlands and rural areas. This project, funded by the Building Livable Communities Grant from the Municipal Land Use Center at The College of New Jersey, is still in the draft stage. While this report may resemble some aspects of a Master Plan it will represent the much broader view of a sustainable community, including a healthy vibrant

community, the environment, transportation, the economy, energy and the community's carbon footprint. The Sustainable Hillsborough Steering Committee is composed of individuals from local government, charitable organizations, the business community and clergy.

## **A. Existing Agricultural Industry Support**

### ***Right to Farm***

To ensure farmers have the ability to continue accepted agricultural operations, the Right to Farm Act 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.” (*Right to Farm Program*)<sup>3</sup> 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's implement the Right to Farm Act on the state and local levels. (*Farmland Preservation*)<sup>4</sup>

The SADC works to maximize protections for commercial farmers under the Right to Farm Act by developing Agricultural Management Practices (AMPs), tracking Right to Farm cases, offering a conflict resolution process, and reviewing rules proposed by other state agencies for the impact they may have on agriculture. In order to qualify for Right to Farm protection a farm must meet the definition of a “commercial farm” in the Right to Farm Act; be operated in conformance with federal and state law; comply with AMPs recommended by the SADC, or site specific AMPs developed by the Somerset County Agriculture Development Board (CADB) at the request of a commercial farmer; must not be a direct threat to public health and safety; and, must 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*)<sup>5</sup>. The Somerset CADB has developed a “Policy for Development and Recommendation of Site Specific Agricultural Management Practices” that closely mirrors guidelines of the SADC.

Right to Farm Ordinances are necessary if a municipality or property owner wishes to enter into the farmland preservation program.

The Township's Right-to-Farm Ordinance was adopted in 1982. The Ordinance does not include a Real Estate Transfer Statement. The Ordinance does include references to the normal activities of farming including “*spraying, spreading of animal wastes, fertilizing irrigation and other activities that are indigenous to farming.*” It also states that round the clock operations are to be expected. The existing ordinance is not as specific as the SADC's model but infers much of the same objectives. The Township's Right-to-Farm Ordinance will be evaluated for possible updating during the next review of the Master Plan.

If needed, the Township does look to the County Agriculture Development Board for its resolution of conflicts. Accepting the role of being the first stop for conflicts, the AAC could assist with conflict resolutions.

The SADC does not report any Right to Farm cases or conflict resolution decisions for Hillsborough Township or Somerset County.

### ***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 \$5.00 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.

*(New Jersey's Farmland Assessment Act)*<sup>6</sup>

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 are necessary 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. Maintained buildings are not only critical to the farmer but also add to farm “aesthetics” for the larger community, helping to support agritourism, an important element of agricultural sustainability in Somerset County.

Hillsborough Township is 54.7 square miles, or 35,008 acres. Of the 12,226 farmland assessed acres in the Township, 7,930 acres were devoted to active agricultural use, representing 30% of all active agricultural land (26,421 acres) in the County. General trends in Hillsborough Township include:

- A downward trend in overall farmland assessed acreage since 1983, when there were 17,265 farmland assessed acres, while as of 2004 there were 12,226 acres;
- Harvested cropland in farmland assessment was 8,678 acres in 1983, which has steadily decreased to a 2004 figure of 5,722 acres;
- Pastured cropland in farmland assessment was at 1,012 acres in 1983, decreasing steadily to 392 acres in 2004;
- Permanent pasture acreage in farmland assessment decreased from a 1983 figure of 2,884 acres to 2004 when there were 1,816 acres;
- Equine acreage in farmland assessment has decreased from 406 acres to just 86 acres in 2004, although equine acres in Somerset County has exhibited an overall increase since it was first measured in 2000;
- The total County acreage (for active agricultural use, woodlands and equine) in farmland assessment mirrors these overall downward trends. In 1983 there were 14,319.5 acres while in 2004 there were 12,226 acres, a nearly 15% decrease of farmland assessed acreage; and
- Overall active agricultural acreage in farmland assessment decreased from 12,575 acres in 1983 to 7,930 acres in 2004.

*(Somerset County Agricultural Profile)<sup>7</sup>*

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.

The Township does consider the retention of farmland assessment as a vital foundation for the preservation of agriculture. Without it, development pressures would transform agricultural lands to suburbs. The Township favors the retention of the existing laws and regulations as a balance between farmland retention and assuring adequate funding for municipal services.

## **B. Additional Strategies to Sustain, Retain, and Promote Agriculture in Hillsborough Township**

### ***Regulatory Flexibility and Permit Streamlining***

Municipalities play a key role in the preservation of farming as an industry. Without strong and active support from municipal governments, farming can be too costly and burdensome to be profitable or worthwhile. In towns with a sizable acreage of assessed farmland, zoning powers can be utilized to require buffers between agriculture and other uses to minimize conflict. The aforementioned Right to Farm Ordinances are an active example of municipalities' support for agriculture. However, the support of municipal governments must not only be on paper, but also be actively practiced so that agriculture is seen as an important and permanent part of the community. An example is enforcing farmers' rights to move slow moving farm vehicles on town roads, which assists farmers in running their agriculture business. Such actions create an atmosphere favorable to agriculture, and its economics and profitability.

The viability of farming in New Jersey is impacted by many issues, including government regulation, development pressures and the economics of the marketplace. While land preservation is vital for maintaining a sufficient land base suitable for farming, sustaining Hillsborough Township's strong agricultural base requires support on many fronts, one of which is flexibility in government regulation. (*Agricultural Smart Growth Plan 2006*)<sup>8</sup> The *2006 Agricultural Smart Growth Plan for New Jersey* identified the following as important relative to regulatory flexibility and priority:

*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, thereby creating a farmer-friendly environment. Pertinent examples are the strong Right to Farm Ordinances in seven of the twenty-one 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. The Somerset 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 *2006 Agricultural Smart Growth Plan for New Jersey* when making important decisions regarding existing and proposed infrastructure, developing and amending regulations and programs, and protecting environmental and historic resources. These agencies should coordinate with NJDA to ensure that regulations and programs are attuned to the needs of Somerset County farmers;

*Agriculture-Friendly Zoning:* This refers to a comprehensive land use practice that coordinates zoning and land use policy in a proactive way. The desired result is that it encourages agribusiness while at the same time reducing the incidence of farmer-homeowner nuisance issues. 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*) As enumerated in the 2001 Master Plan, the Somerset County CADB can "... encourage municipalities to use their planning and zoning powers to promote and enhance agriculture". (*2001 Master Plan*)

### ***Agricultural Vehicle Movement***

In recent years, as many portions of the rural landscape have 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, barns, etc. Residents 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 paces can, and do, cause conflict between farmers and suburban dwellers. They can also create unsafe road conditions as residents and farmers “compete” for road space.

Since many farm vehicles travel over local roads, Hillsborough Township should continue to support local agricultural business’ right to do so. The SADC model Right to Farm ordinance recognizes as a specific right the operation and transportation of large, slow moving equipment over roads. Hillsborough Township should consider specifically protect the right to transport tractors and slow moving farm equipment on local roads in their Right to Farm Ordinances.

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

If local non-agriculture residents are to enjoy the scenic vistas, fresh produce, clean air and limited traffic congestion that Somerset County’s agriculture provides, they must be more 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 4-H Fair, held yearly in Bridgewater Township, is a prime example of advertising the importance and permanence of agriculture in Somerset County.

### ***Agricultural Labor and Training***

An adequate labor supply is integral to farming. Measured in farmed acreage, Hillsborough has a relatively small industry for produce products compared with field crops such as corn, soybeans, and hay, and nursery products. Harvesting of the latter farm products is more mechanized, and/or not as labor intensive as produce or equine. Using Somerset County as an example, produce (fruits, berries and vegetables) occupy approximately 98% less land than field crops and nursery products. As of 2004, 356 acres were devoted to fruit, berries and vegetables, while 16,489 acres were devoted to field crops and nursery products. (*Somerset County Agricultural Profile*) Since the overall portion of agriculture in Somerset County devoted to labor intensive farming is small farm labor housing, a large issue in counties with high farm labor populations, is for the most part, not a pressing concern in Hillsborough.



The U.S. Census of Agriculture reports that in 1992 hired farm labor costs in New Jersey were \$115.2 million and rose to \$142.9 million in 1997, representing 26.7% and 27.8% of total farm production costs respectively, a rise of 1.1%. In Somerset County hired farm labor costs for 1992 were \$2.2 million, which decreased in 1997 to \$2.1 million, representing 21.6 % and 17.4 % of total farm production costs respectively, a decrease of 4.2% (more recent county figures are not available). (*Ag Census*)<sup>9</sup> Rising farm labor costs in Somerset County are not currently impacting agriculture sustainability, which is due at least in part to the continued strong trend of mechanized, non-labor intensive crop farming in the county. (*Nick Polanin*)<sup>10</sup>

To sustain a modern, diverse and stable food and agricultural industry, education and progressive, ongoing training for farmers 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 Somerset County agricultural land owners and operators is to collaborate with the Rutgers Cooperative Extension (RCE) of Somerset County (associated with Cook College, Rutgers University). There is not a minimum or maximum size farm to which the RCE will lend assistance, so long as it is farmland assessed.

During the growing season, RCE of Somerset County coordinates with other RCE offices in northwest New Jersey to conduct on-site farm meetings regarding a range of agricultural issues including vegetable growing, safe operation of farm equipment, and programs to certify and recertify farmers for pesticide application licenses. (*Nick Polanin*)

The RCE of Somerset County performs applied research on area farms to further knowledge on a wide range of issues pertaining to agricultural plants and animals. Results of any research are used to advise local farmers on an as needed basis.

Discussions with Raritan Valley Community College (RVCC) 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 and continuing education course(s), or certificate programs, if requested to do so by the Somerset County Agriculture Development Board, or the wider agriculture community. (*Dr. Maxwell Stevens*)<sup>11</sup>

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*)

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*)<sup>12</sup> Some of the programs which may be applicable include Customized Training Initiative, Basic Skills Program, and Occupational Safety and Health Training Program.

### ***Management of Nuisance and Crop Damaging Wildlife***

Management of nuisance and crop damaging wildlife is critical to the short and long term sustainability of Hillsborough Township's agriculture industry. Crop damage from wildlife leads to economic loss for the farmer and/or landowner and is a serious problem with huge crop loss in certain instances. Most damage is caused by a multitude of insects as well as deer, turkey, Canada Geese and other wildlife. (*Nick Polanin*) It is imperative to not only control and manage damage to crops, but also to do so 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).

Deer exclusion fencing may be effective for protecting produce since produce is grown on relatively small plots of land. However it is not cost effective to erect deer fencing on very large tracts of land where, for example, corn may be grown. One way farmers may control damage from deer is through hunting of crop damaging animals. This hunting is allowed on private lands through depredation permits, issued by the New Jersey Department of Environmental Protection's (NJDEP) Fish and Wildlife Program.

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 helps to ensure that the public can enjoy high quality, pest-free agricultural products. (*Programs*)<sup>13</sup> Protection of forest resources is important to Hillsborough farmers who harvest wood as part of woodland management plans on their farmland assessed properties.

One important 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*)<sup>14</sup> However, aerial spray treatments of the chemical insecticide *Bacillus thuringiensis* are utilized when gypsy moth cycles are at a peak and natural controls are not sufficient to control defoliation. In Somerset County, 108 acres in Hillsborough Township required aerial spraying in 2007, and other spraying will likely be required in the future. (*Gypsy Moth Suppression*)

The Township's AAC will assess the benefits and costs of expanding its role in anticipating future directions for agriculture. Some possibilities include surveying the needs of local farmers and closer coordination with county, state and federal agricultural agencies.

### ***Agricultural Education and Promotion***

The federal government is a key partner in supporting Somerset County agriculture. There are several federal programs that support, or could support, the agricultural industry in Somerset 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 is an effective partner to assist the agricultural community. (*Rural Development*)<sup>15</sup>
- *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. (*Internal Revenue Service*)<sup>16</sup>

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*)<sup>17</sup> These bills would provide income averaging similar to the federal program described above.

- *USDA Farm Service Agriculture Program* - Farming is a business which can be cyclical and unpredictable, with factors such as weather and market conditions affecting crops and profitability, both 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 loan programs are available, and 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 Loan Programs*)<sup>18</sup>

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*)<sup>19</sup> In Somerset County farm loans have been as follows:

- Fiscal year 2007 had two loans, with an average loan of \$200,000. They were used to refinance a farm and to refinance operating debt.
- Fiscal year 2006 had 3 loans, with an average loan of \$107,000. They were used to refinance operating debt and for lines of credit.
- No loans for Somerset County are reported in 2005.

(*Virginia Brophy*)<sup>20</sup>

The FSA office for Somerset County is located at 687 Pittstown Road, Suite 2 in Frenchtown, at the same location as the NRCS office discussed in Chapter 7. The County Executive Agent is Doreen Beruck, and she may be reached at (908) 782-4614, or at [Doreen.Beruck@nj.usda.gov](mailto:Doreen.Beruck@nj.usda.gov) for assistance.

## **Township of Hillsborough: Vision for Farmland Preservation**

### ***The Mission Statement of the Hillsborough Township Agricultural Advisory Committee:***

The Agricultural Advisory Committee's mission is to ensure the viability and sustainability of the agricultural economy and industry in Hillsborough Township. Located within easy reach of consumer markets in suburban New Jersey, Pennsylvania and New York, the AAC seeks to permanently preserve agricultural lands in the Township to protect the livelihoods of the many farmers in the town. Protecting the agricultural lands and its supporting infrastructure will ensure the Township's rural landscape remains secure.

### ***Goals of the Hillsborough Township Agricultural Advisory Committee:***

The Township's Agricultural Advisory Committee seeks to preserve agricultural land in the Township where the farmer is interested in participating in preservation programs and where the land is currently in agricultural production or has a strong potential for sustained agricultural production in the future. To date, the AAC has helped in the preservation of approximately 2,367 acres of farmland, and its goal is to preserve an additional 1,000 acres within the next ten years.

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- <sup>1</sup> Sustainable Agriculture Research and Education (SARE), Exploring Sustainability in Agriculture: Ways to Enhance Profits, Protect the Environment and Improve Quality of Life. <http://www.sare.org/publications/explore/explore.pdf>. Accessed Nov. 14, 2007.
- <sup>2</sup> Sustainable Hillsborough, Who are we, <http://sustainablehillsborough.org/>. Accessed Nov. 19, 2007.
- <sup>3</sup> 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.
- <sup>4</sup> New Jersey's Great Northwest Skylands, Farmland Preservation, <http://www.njskylands.com/fmpres.htm>. Accessed May 28, 2007.
- <sup>5</sup> New Jersey Department of Agriculture, State Agriculture Development Committee, Right to Farm (RTF) Program: Eligibility Criteria for RTF Act Protection. <http://www.state.nj.us/agriculture/sadc/rtfcriteria.htm> Accessed March 25, 2007.
- <sup>6</sup> New Jersey Department of Agriculture, New Jersey's Farmland Assessment Act, An Informational Guide on Basic Requirements. July 2006.
- <sup>7</sup> New Jersey Department of Agriculture, State Agriculture Development Committee, Somerset County Agricultural Profile.
- <sup>8</sup> New Jersey Department of Agriculture, Agricultural Smart Growth Plan 2006. <http://www.state.nj.us/agriculture/pdf/smartgrowthplan.pdf>. Accessed March 27, 2007.
- <sup>9</sup> 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 July 17, 2007.
- <sup>10</sup> Personal communication with Nick Polanin, Rutgers Cooperative Research and Extension of Somerset County, July 12, 2007 and/or August 20, 2007.
- <sup>11</sup> Personal communication with Dr. Maxwell Stevens, Interim Senior Vice President for Academic Affairs, Raritan Valley Community College. July 25, 2007.
- <sup>12</sup> New Jersey Department of Agriculture, Training. <http://www.state.nj.us/agriculture/grants/training.html>. Accessed April 4, 2007.
- <sup>13</sup> New Jersey Department of Agriculture, Division of Plant Industry, Programs. <http://www.state.nj.us/agriculture/divisions/pi/prog/>. Accessed April 1, 2007.
- <sup>14</sup> New Jersey Department of Agriculture, Division of Plant Industry, Gypsy Moth Suppression. <http://www.nj.gov/agriculture/divisions/pi/prog/gypsymoth.html>. Accessed April 1, 2007.
- <sup>15</sup> United States Department of Agriculture, Rural Development, About Us. <http://www.rurdev.usda.gov/rd/index.html>. Accessed April 3, 2007.
- <sup>16</sup> United States Department of the Treasury, Internal Revenue Service, Farmers May Harvest Lower Taxes by Averaging Income. <http://www.irs.gov/businesses/small/article/0,,id=123985,00.html>. Accessed April 3, 2007.
- <sup>17</sup> Personal Communication with Ben Kurtzman, Legislative Specialist, American Farmland Trust. April 4, 2007 and/or August 20, 2007.

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<sup>18</sup> United States Department of Agriculture, Farm Service Agency, Farm Loan Programs, Background. <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=landing>. Accessed April 3, 2007.

<sup>19</sup> United States Department of Agriculture, Farm Service Agency, Farm Loan Programs, Direct Farm Loans. <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=dfl>. Accessed April 3, 2007.

<sup>20</sup> Personal Communication with Virginia Brophy, USDA, Farm Service Agency. July 31, 2007.

# Hillsborough Sourland Region

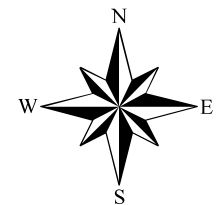
Hillsborough Township, New Jersey

D&R GREENWAY  
LAND TRUST

D&R Greenway Land Trust  
1 Preservation Pl  
Princeton, NJ 08540  
Map Created October 3, 2007



The Land Conservancy of New Jersey  
Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005



0 0.5 1 2 3  
Miles

Bridgewater Township

Raritan  
Borough

Somerville  
Borough

Manville  
Borough

Millstone  
Borough

Readington  
Township

Branchburg  
Township

Hillsborough  
Township

SOMERSET  
COUNTY

Franklin  
Township

Montgomery  
Township

Roacky Hill  
Borough

MIDDLESEX  
COUNTY

South Brunswick  
Township

Plainsboro Township

Princeton  
Township

Princeton  
Borough

Lawrence  
Township

Pennington  
Borough

MERCER  
COUNTY

Hopewell  
Township

Hopewell  
Borough

East Amwell  
Township

Raritan  
Township

Flemington  
Borough

HUNTERDON  
COUNTY

Delaware  
Township

Franklin  
Township

Lambertville  
City

West Amwell  
Township

- Sourland Boundary
- Municipal Boundaries
- County Boundaries

Data Sources: NJDEP

Data acquired from the New Jersey  
Department of Environmental Protection  
but this secondary map product has not  
been verified or authorized by that agency.



# Land Use Land Cover

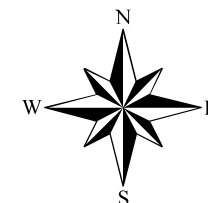
Hillsborough Township, New Jersey



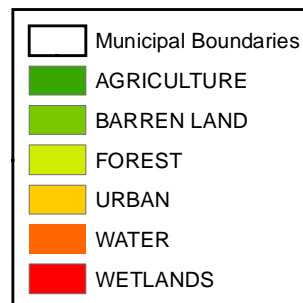
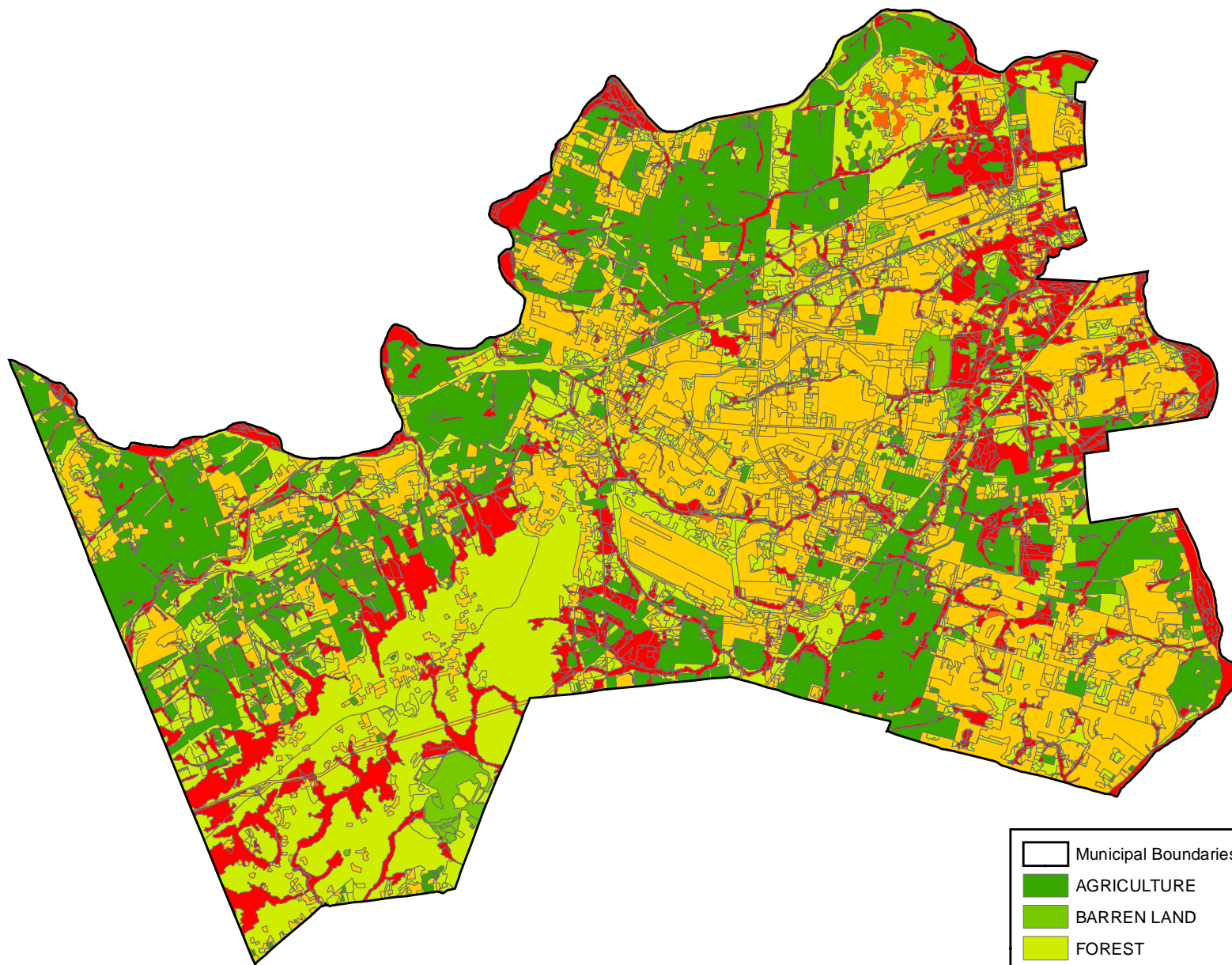
D&R Greenway Land Trust  
1 Preservation Pl  
Princeton, NJ 08540  
Map Created October 3, 2007



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Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005



0 0.5 1 2 Miles

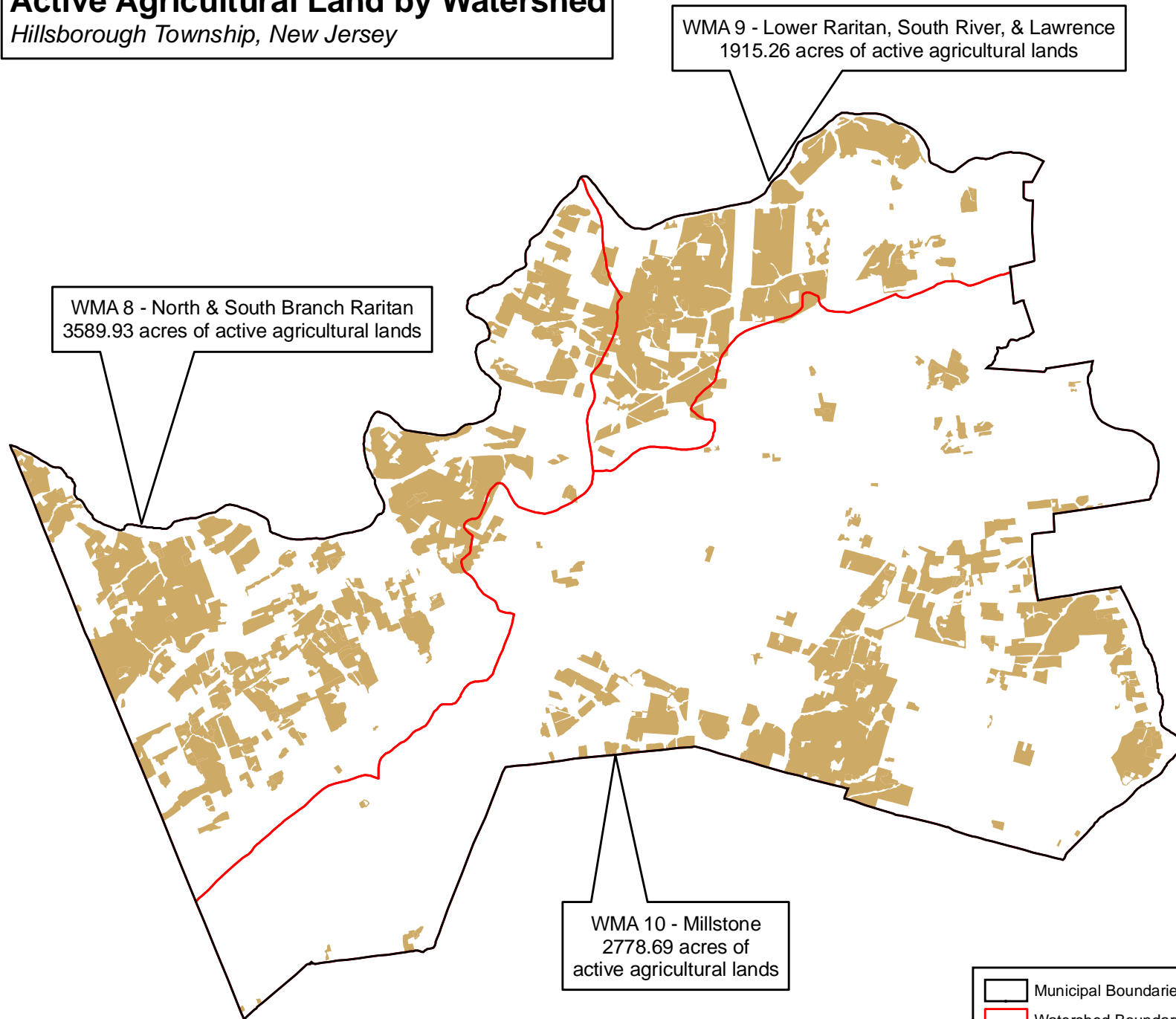


Data Sources: NJDEP 2002 LULC

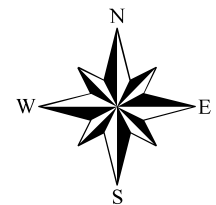
Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.

# Active Agricultural Land by Watershed

Hillsborough Township, New Jersey



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Boonton, NJ 07005



0 0.5 1 2 Miles

Data Sources: NJDEP LU LC 2002

Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.

# Farmland Assessed Properties

Hillsborough Township, New Jersey

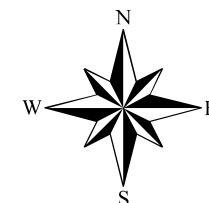
D&R GREENWAY  
LAND TRUST

D&R Greenway Land Trust  
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Map Created October 3, 2007



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OF NEW JERSEY

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Boonton, NJ 07005

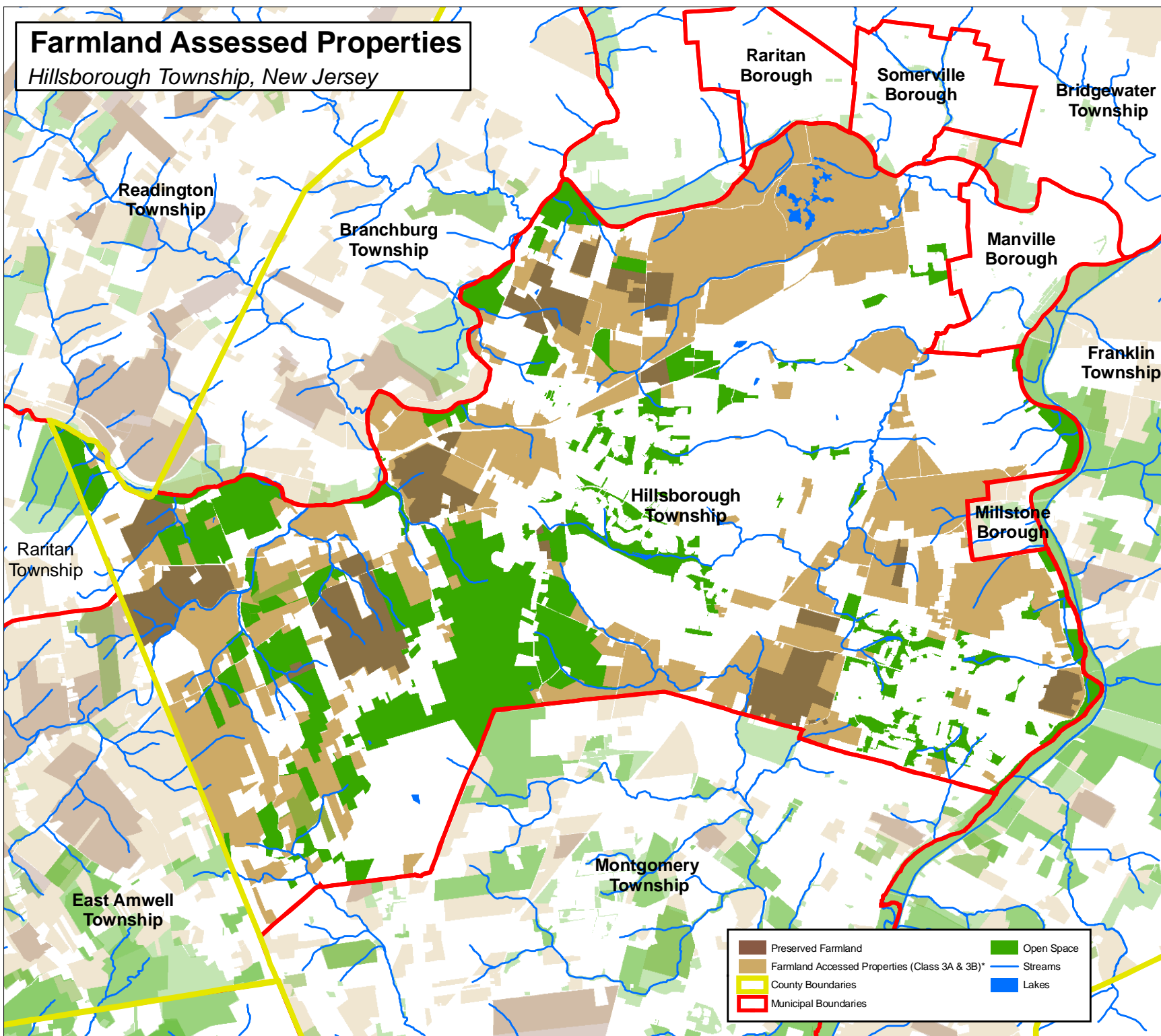


0 0.5 1 2  
Miles

\* Note that some farm assessed lots have dual tax classes. For example, a lot might be assessed as part farm, part vacant or part farm, part tax exempt. Although all lots are shown as being fully farm assessed, some may have only partial acreage under farm assessment.

Data Sources: NJDEP, Somerset County GIS, Division of GIS - Information Technology Mangement, County of Hunterdon

Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.



- |   |            |
|---|------------|
| Preserved Farmland                            | Open Space |
| Farmland Accessed Properties (Class 3A & 3B)* | Streams    |
| County Boundaries                             | Lakes      |
| Municipal Boundaries                          |            |



# Farmland Size

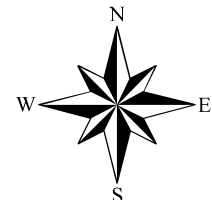
Hillsborough Township, New Jersey

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LAND TRUST

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1 Preservation Pl  
Princeton, NJ 08540  
Map Created October 3, 2007



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Aresty Mapping Center  
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Boonton, NJ 07005

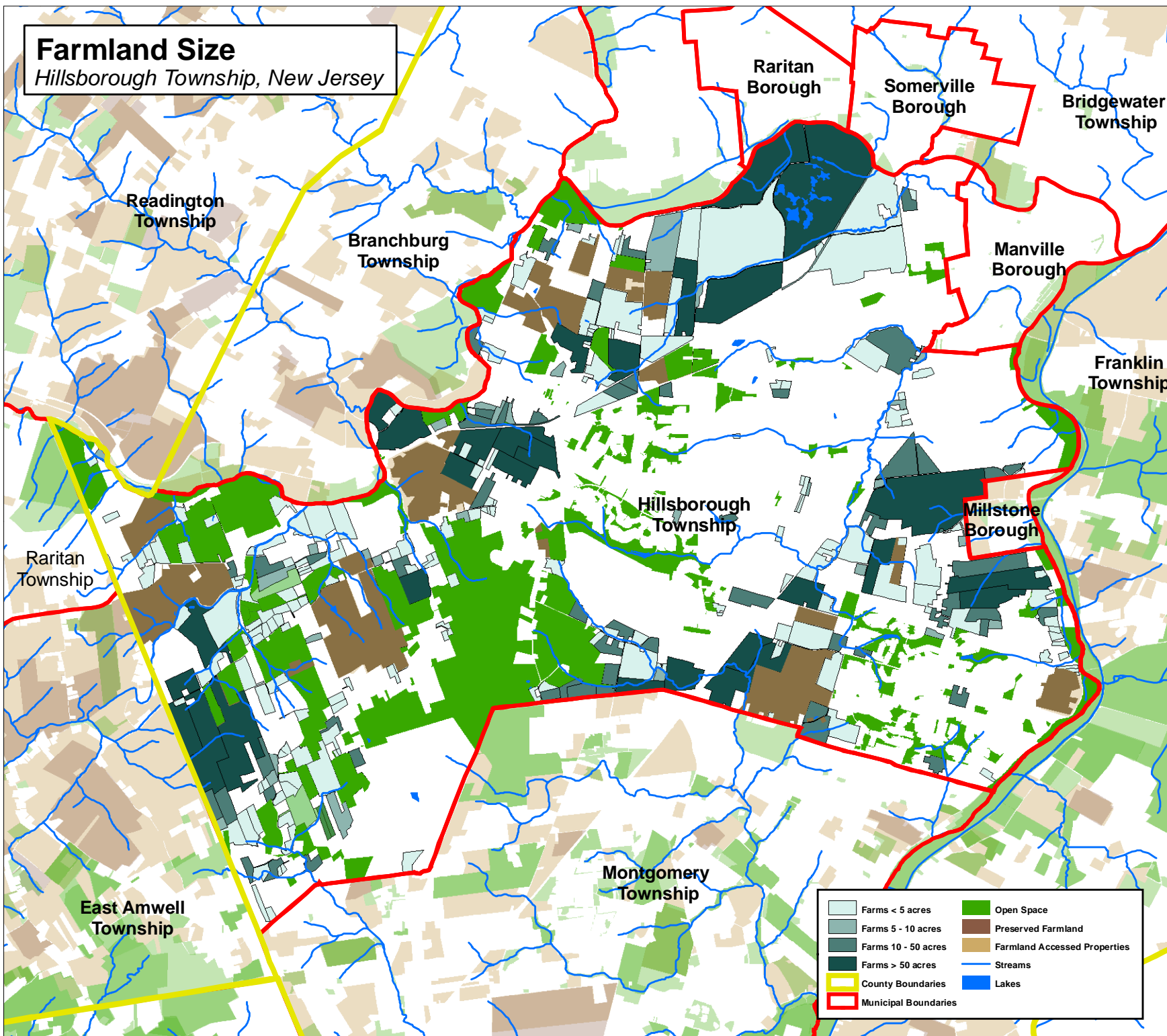


0 0.5 1 2 Miles

\* Note that some farm assessed lots have dual tax classes. For example, a lot might be assessed as part farm, part vacant or part farm, part tax exempt. Although all lots are shown as being fully farm assessed, some may have only partial acreage under farm assessment.

Data Sources: NJDEP, Somerset County GIS, Division of GIS - Information Technology Mangement, County of Hunterdon

Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.



# Soil Classification on Active Agricultural Land

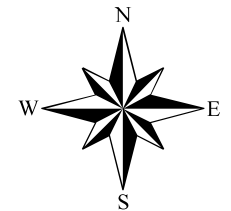
Hillsborough Township, New Jersey



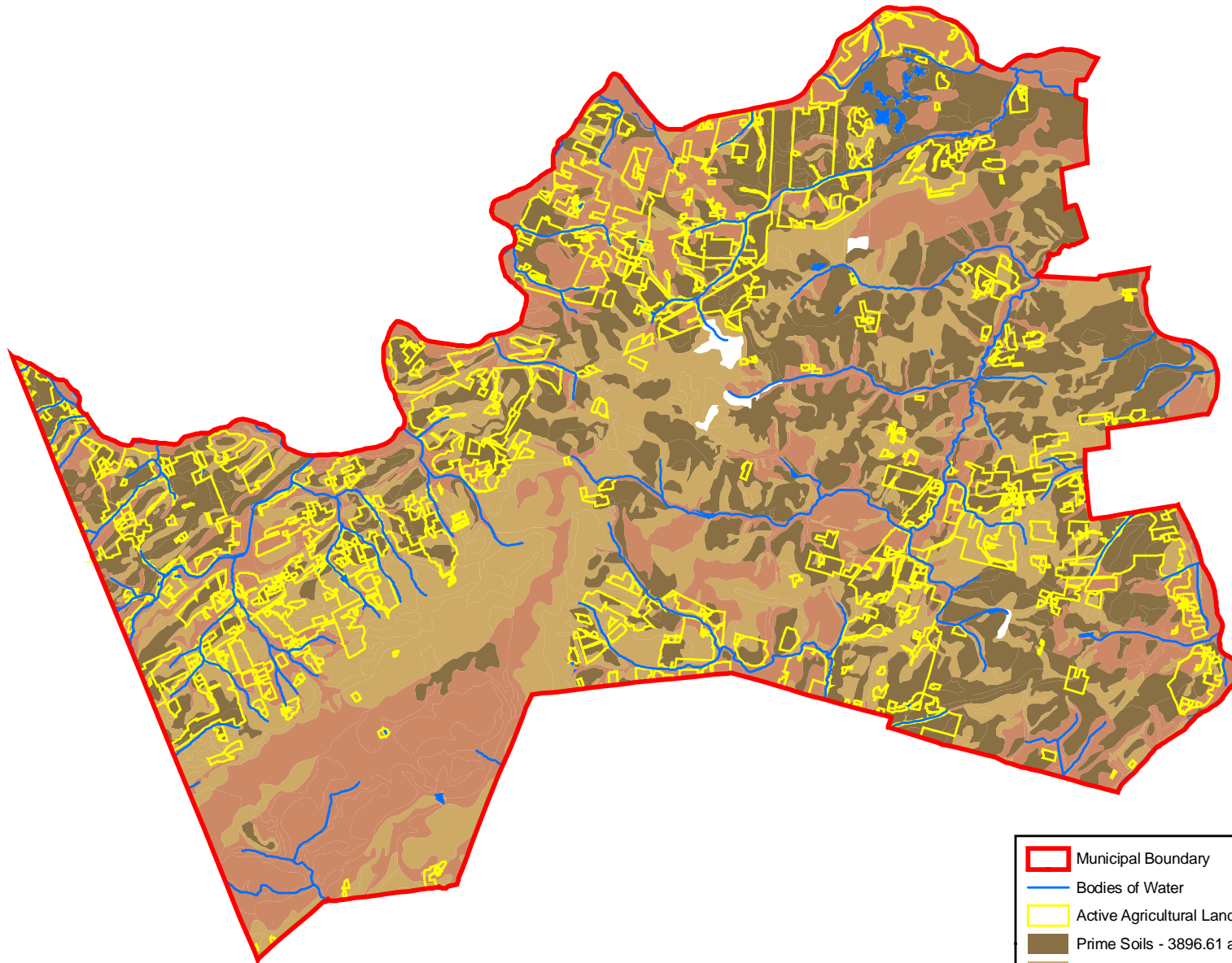
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1 Preservation Pl  
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0 0.5 1 2  
Miles



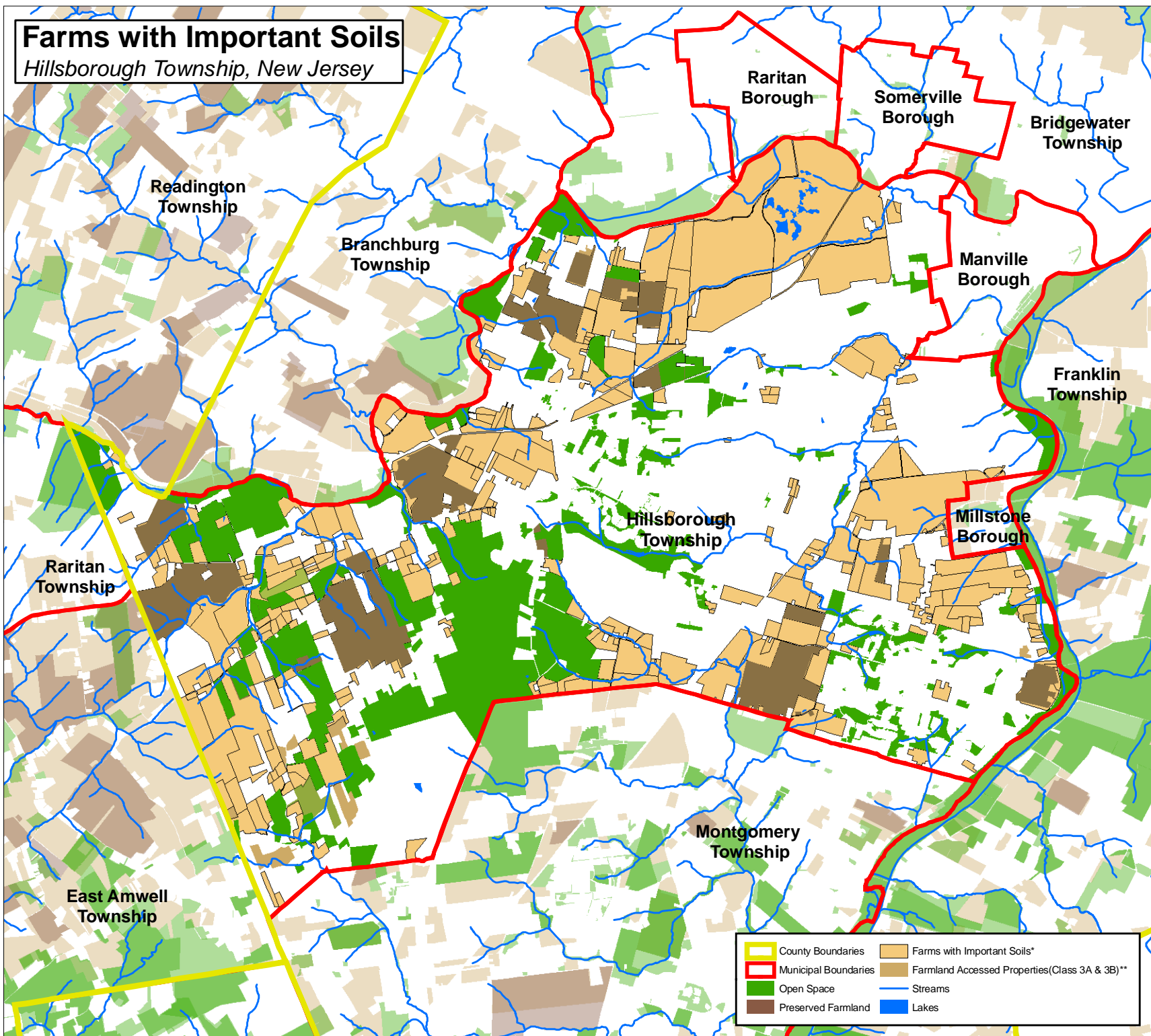
	Municipal Boundary
	Bodies of Water
	Active Agricultural Lands
	Prime Soils - 3896.61 acres
	Statewide Soils - 2341.2 acres
	Other 2045.66 acres
	Unique Soils - 0 acres

Data Sources: NJDEP, NRCS

Data acquired from the New Jersey Department of Environmental Protection and the Natural Resources Conservation Service but this secondary map product has not been verified or authorized by those agencies.

# Farms with Important Soils

Hillsborough Township, New Jersey

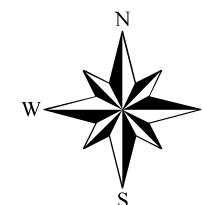


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Boonton, NJ 07005



0 0.5 1 2  
Miles

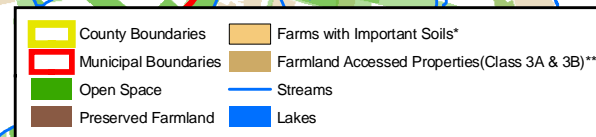
**Caveat for Map (and Plan):**  
Information on this Map and Plan regarding farms with tillable land is a representation of the GIS data and analysis and is subject to individual site review. Farm applications may be submitted that meet the SADC minimum eligibility criteria that are not shown on this map. Any property included within the County's ADA is potentially eligible for preservation.

\* Soil acreage determined using the Soils Survey as prepared by the Natural Resource Conservation Service for prime soils, soils of statewide importance and soils of local importance. Farm parcels are sorted on size based upon the State Agricultural Development Committee (SADC) minimum eligibility for soils.

\*\* Note that some farm assessed lots have dual tax classes. For example, a lot might be assessed as part farm, part vacant or part farm, part tax exempt. Although all lots are shown as being fully farm assessed, some may have only partial acreage under farm assessment.

Data Sources: NJDEP, Somerset County GIS, Division of GIS - Information Technology Management, County of Hunterdon

Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.





# Tillable Farmland

Hillsborough Township, New Jersey

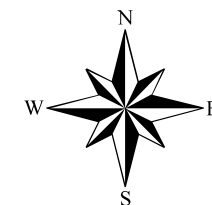
D&R GREENWAY  
LAND TRUST

D&R Greenway Land Trust  
1 Preservation Pl  
Princeton, NJ 08540  
Map Created October 3, 2007



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OF NEW JERSEY

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Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005



0 0.5 1 2  
Miles

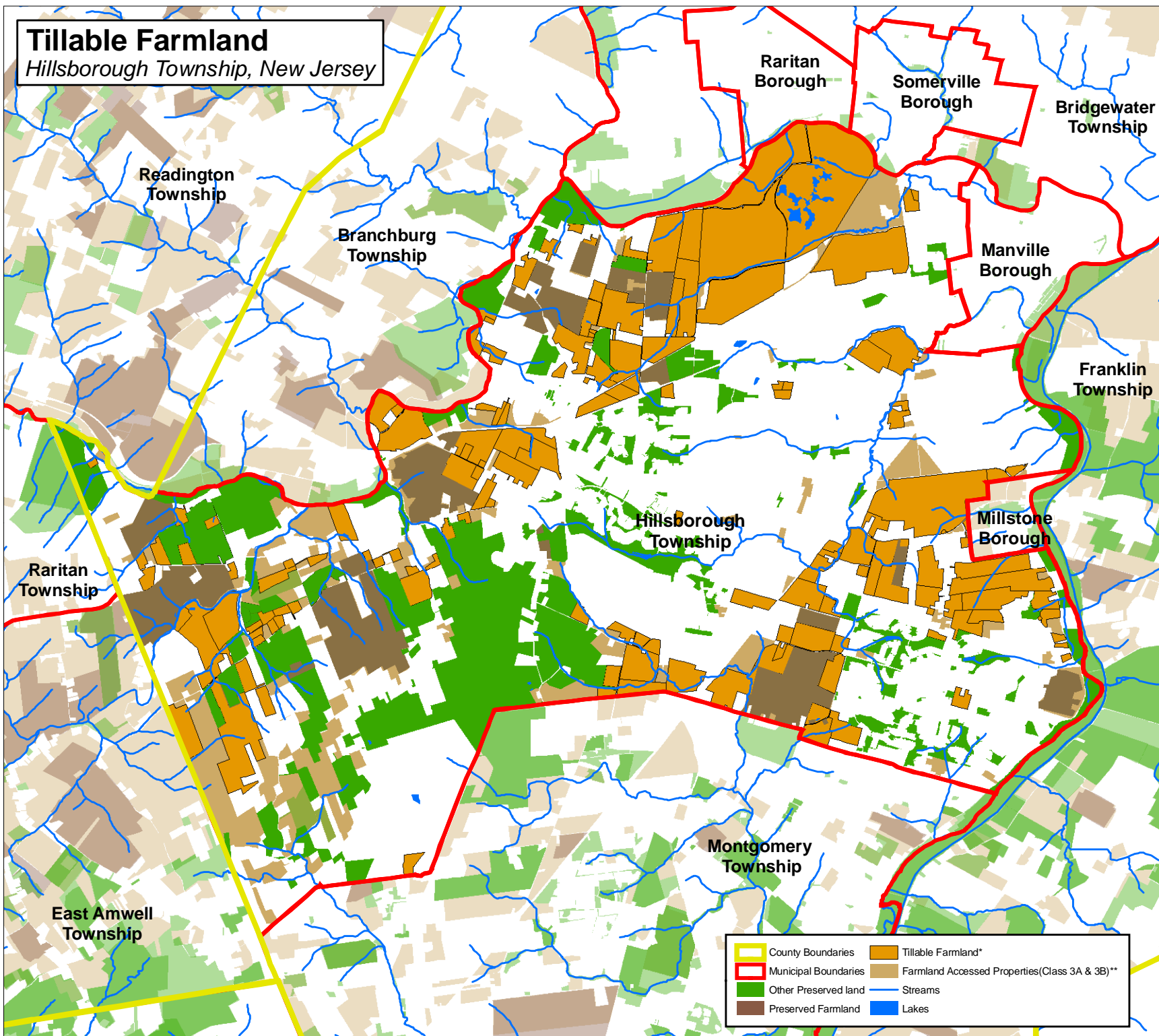
Caveat for Map (and Plan):  
Information on this Map and Plan  
regarding farms with tillable land is a  
representation of the GIS data and analysis  
and is subject to individual site review.  
Farm applications may be submitted that  
meet the SADC minimum eligibility criteria  
that are not shown on this map. Any  
property included within the County's ADA is  
potentially eligible for preservation.

\*Tillable Acreage determined using the NJ  
Department of Environmental Protection  
2002 Land Use/Land Cover mapping for  
agricultural lands. Farm parcels are sorted  
on size based upon the State Agricultural  
Development committee (SADC) minimum  
Eligibility criteria for tillable land

\*\* Note that some farm assessed lots have  
dual tax classes. For example, a lot might  
be assessed as part farm, part vacant or  
part farm, part tax exempt. Although all  
lots are shown as being fully farm  
assessed, some may have only partial  
acreage under farm assessment.

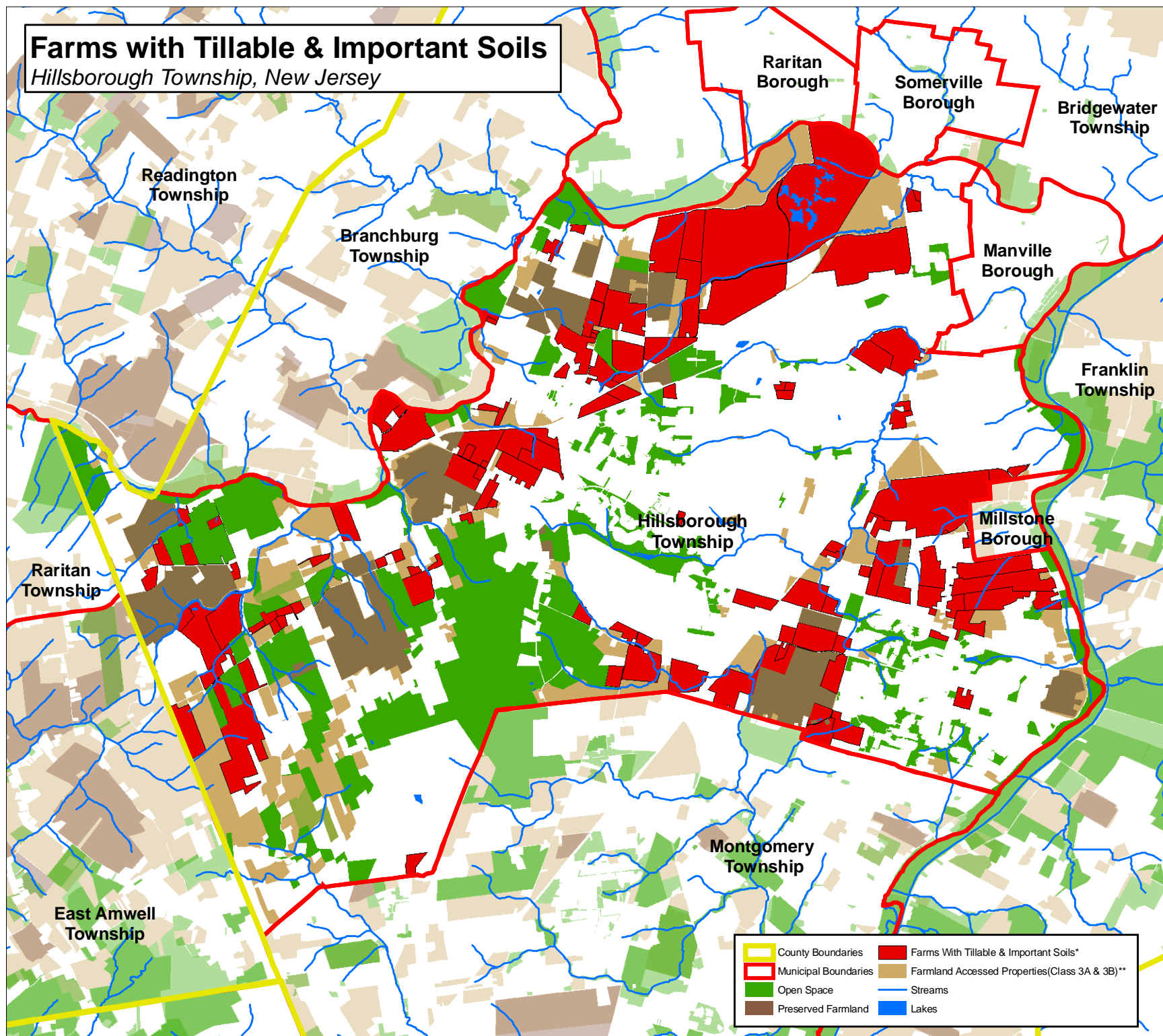
Data Sources: NJDEP, Somerset County  
GIS, Division of GIS - Information  
Technology Mangement, County of  
Hunterdon

Data acquired from the New Jersey  
Department of Environmental Protection  
but this secondary map product has not  
been verified or authorized by that agency.



# Farms with Tillable & Important Soils

Hillsborough Township, New Jersey



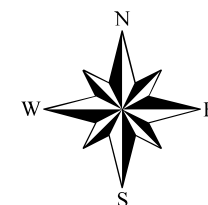
D&R GREENWAY  
LAND TRUST

D&R Greenway Land Trust  
1 Preservation Pl  
Princeton, NJ 08540  
Map Created October 3, 2007



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OF NEW JERSEY

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Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005



0 0.5 1 2  
Miles

**Caveat for Map (and Plan):**  
Information on this Map and Plan regarding farms with tillable land is a representation of the GIS data and analysis and is subject to individual site review. Farm applications may be submitted that meet the SADC minimum eligibility criteria that are not shown on this map. Any property included within the County's ADA is potentially eligible for preservation.

\* Farms with both tillable soils and high soil quality determined by selecting assessed farmland that has both intersecting as determined by the tillable soils map and the high soil quality map.

\*\* Note that some farm assessed lots have dual tax classes. For example, a lot might be assessed as part farm, part vacant or part farm, part tax exempt. Although all lots are shown as being fully farm assessed, some may have only partial acreage under farm assessment.

Data Sources: NJDEP, Somerset County GIS, Division of GIS - Information Technology Mangement, County of Hunterdon

Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.

- |                      |   |
|----------------------|---|
| County Boundaries    | Farms With Tillable & Important Soils*        |
| Municipal Boundaries | Farmland Accessed Properties(Class 3A & 3B)** |
| Open Space           | Streams                                       |
| Preserved Farmland   | Lakes   |



# Sewer Service Areas and Active Agriculture

Hillsborough Township, New Jersey

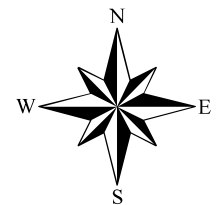


D&R Greenway Land Trust  
1 Preservation Pl  
Princeton, NJ 08540  
Map Created October 3, 2007

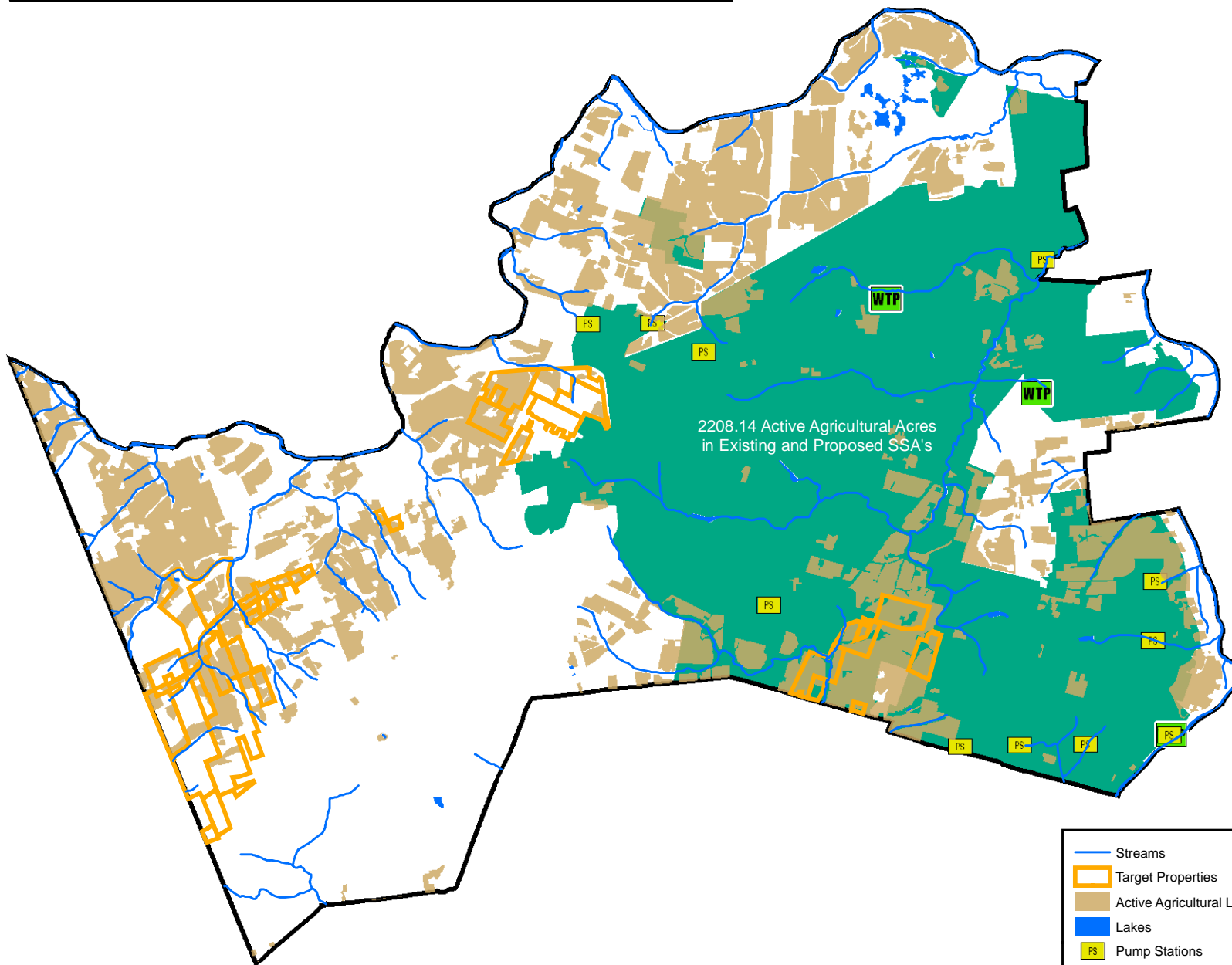


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of New Jersey

The Land Conservancy of New Jersey  
Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005



0 0.5 1 2  
Miles

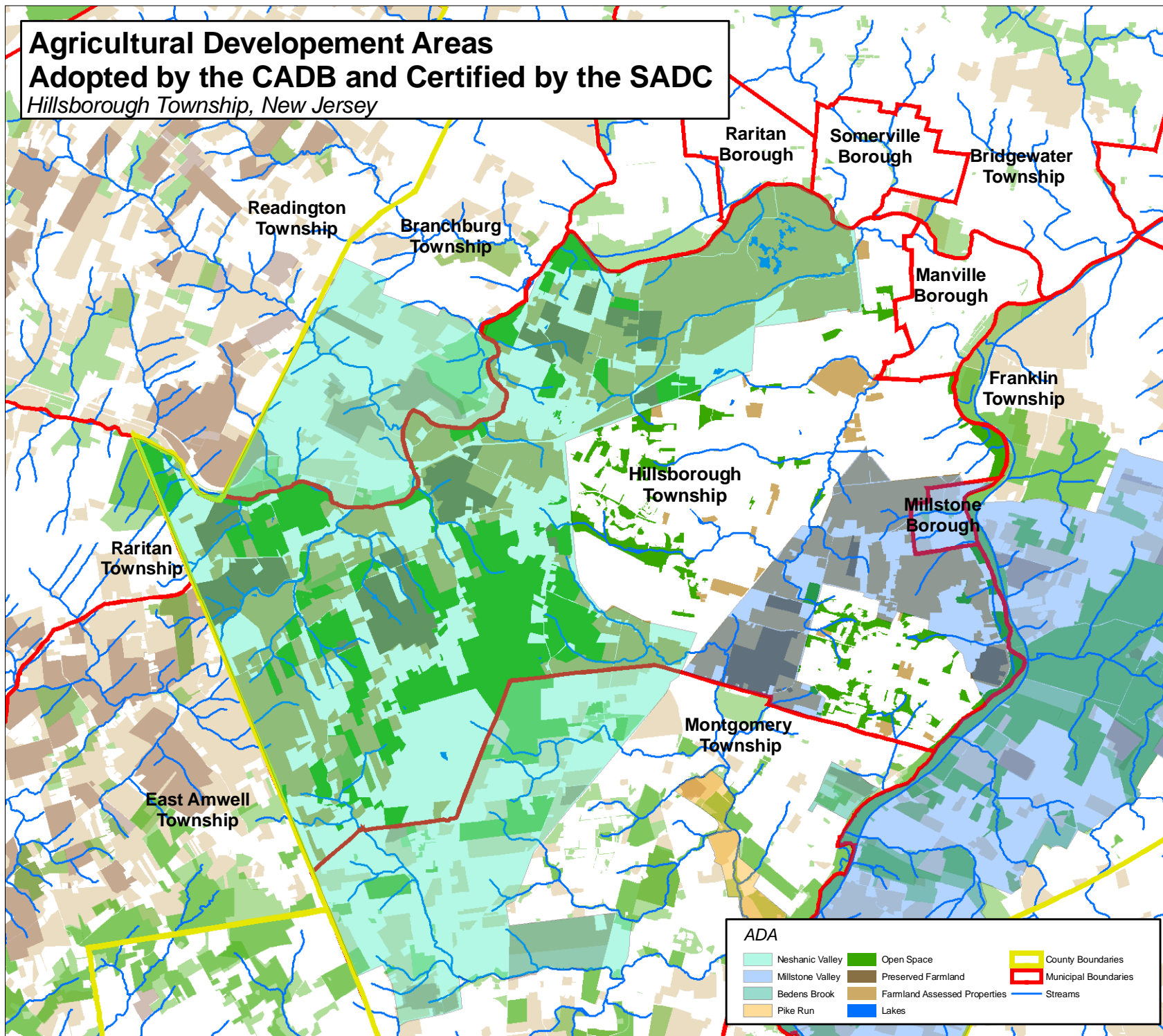


- Streams
- Target Properties
- Active Agricultural Lands
- Lakes
- PS Pump Stations
- WTP Waste Water Treatment Plants
- Municipal Boundaries
- Existing and Proposed SSA's

Data Sources: Somerset County GIS,  
NJDEP

Data acquired from the New Jersey  
Department of Environmental Protection  
but this secondary map product has not  
been verified or authorized by that agency.

# Agricultural Development Areas Adopted by the CADB and Certified by the SADC *Hillsborough Township, New Jersey*

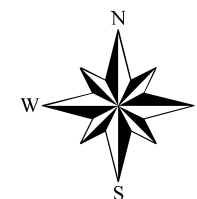


D&R GREENWAY  
LAND TRUST

D&R Greenway Land Trust  
1 Preservation Pl  
Princeton, NJ 08540  
Map Created October 3, 2007



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Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005



0 0.5 1 2  
Miles

\* Note that some farm assessed lots have dual tax classes. For example, a lot might be assessed as part farm, part vacant or part farm, part tax exempt. Although all lots are shown as being fully farm assessed, some may have only partial acreage under farm assessment.

## ADA

- |                  |                              |                      |
|------------------|------------------------------|----------------------|
| Neshanic Valley  | Open Space                   | County Boundaries    |
| Millstone Valley | Preserved Farmland           | Municipal Boundaries |
| Bedens Brook     | Farmland Assessed Properties | Streams              |
| Pike Run         | Lakes                        |                      |

Data Sources: Somerset County GIS, NJDEP

Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.

# Preserved Land and Active Farmland

*Hillsborough Township, New Jersey*

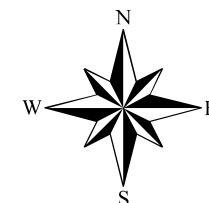
D&R GREENWAY  
LAND TRUST

D&R Greenway Land Trust  
1 Preservation PI  
Princeton, NJ 08540  
Map Created October 3, 2007

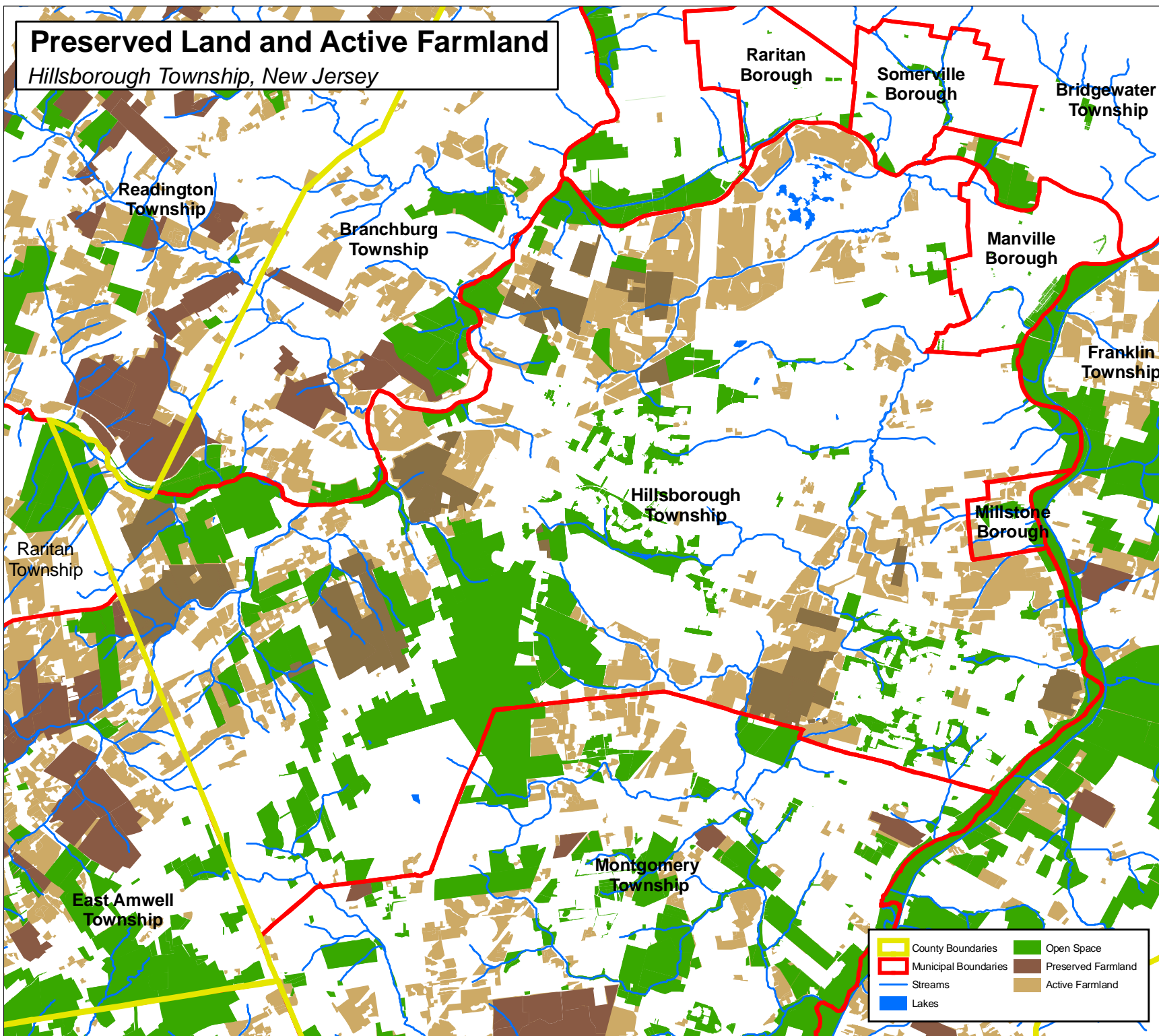


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OF NEW JERSEY

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Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005



0 0.5 1 2  
Miles



- |  |                      |  |                    |
|--|----------------------|--|--------------------|
|  | County Boundaries    |  | Open Space         |
|  | Municipal Boundaries |  | Preserved Farmland |
|  | Streams              |  | Active Farmland    |
|  | Lakes                |  |                    |

Data Sources: NJDEP (LULC 2002 Data)

Data acquired from the New Jersey  
Department of Environmental Protection  
but this secondary map product has not  
been verified or authorized by that agency.

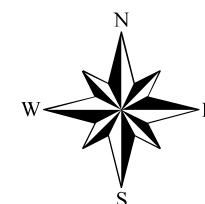


# Proposed Project Areas

Hillsborough Township, New Jersey



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Aresty Mapping Center  
19 Boonton Ave  
Boonton, NJ 07005

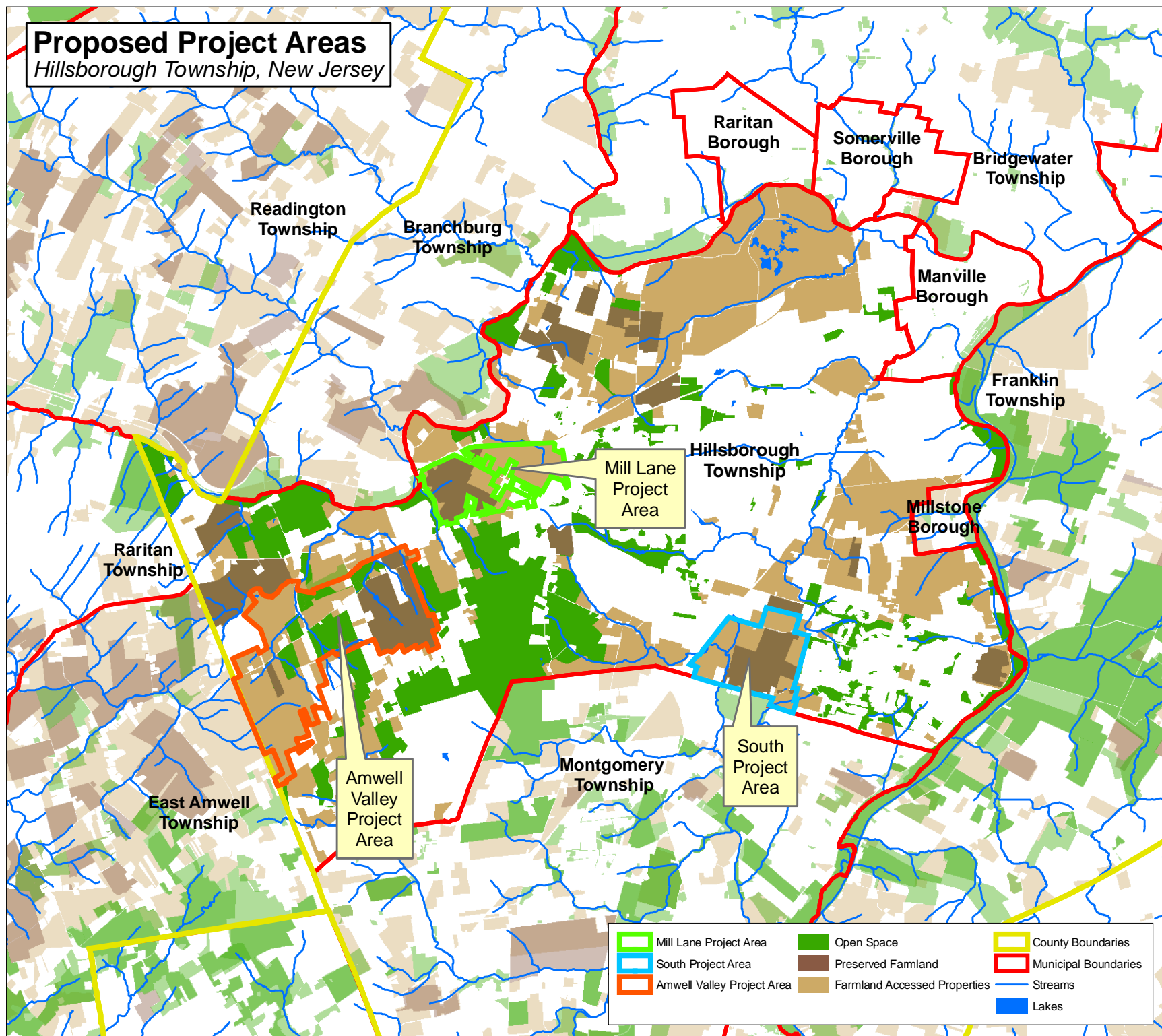


0 0.5 1 2  
Miles

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Data Sources: Somerset County GIS, NJDEP

Data acquired from the New Jersey Department of Environmental Protection but this secondary map product has not been verified or authorized by that agency.



# Targeted Properties and Active Agricultural Lands

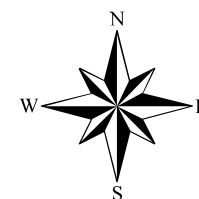
Hillsborough Township, New Jersey



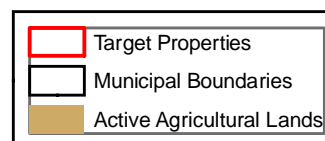
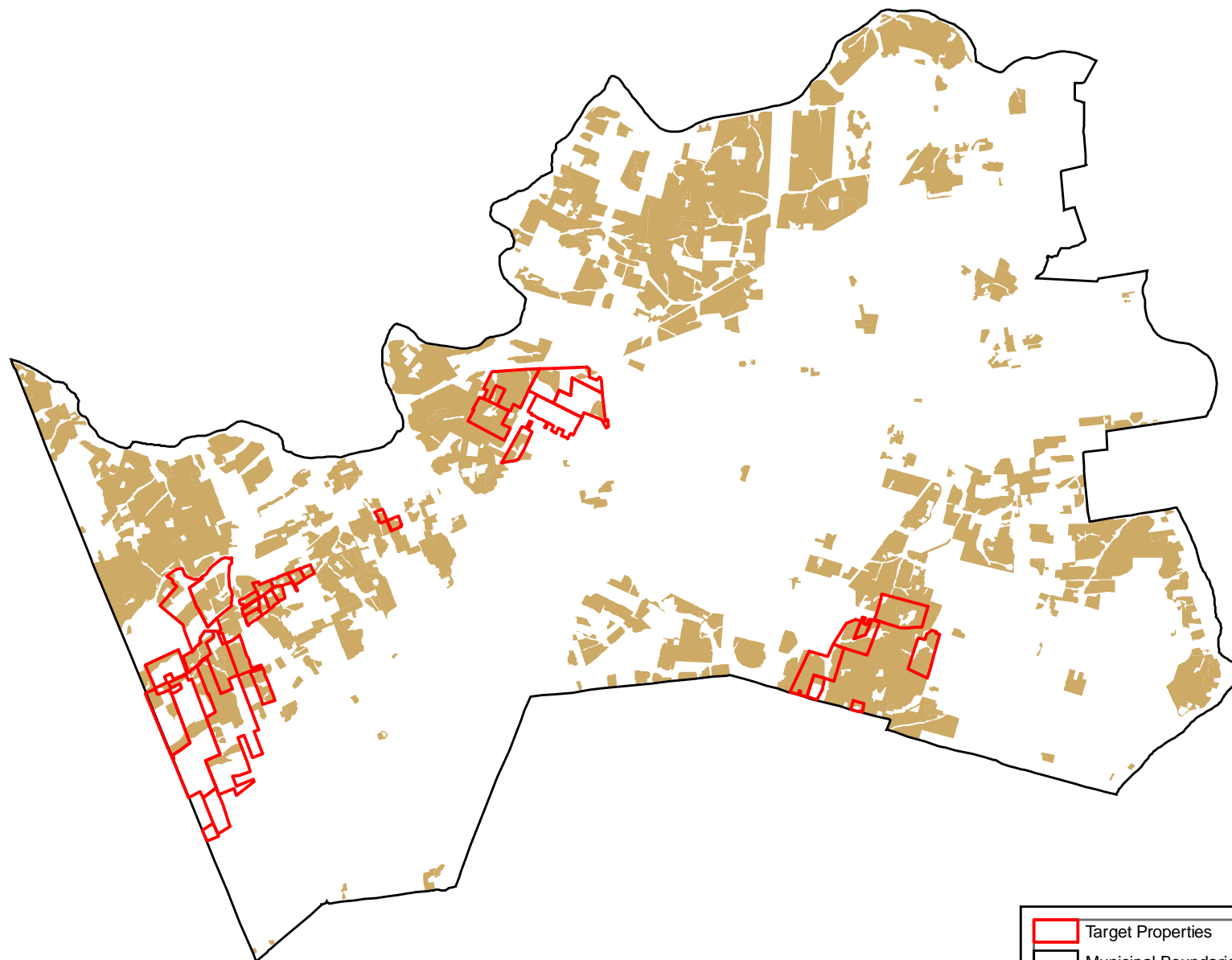
D&R Greenway Land Trust  
1 Preservation Pl  
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Map Created October 3, 2007



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Boonton, NJ 07005



0 0.5 1 2  
Miles



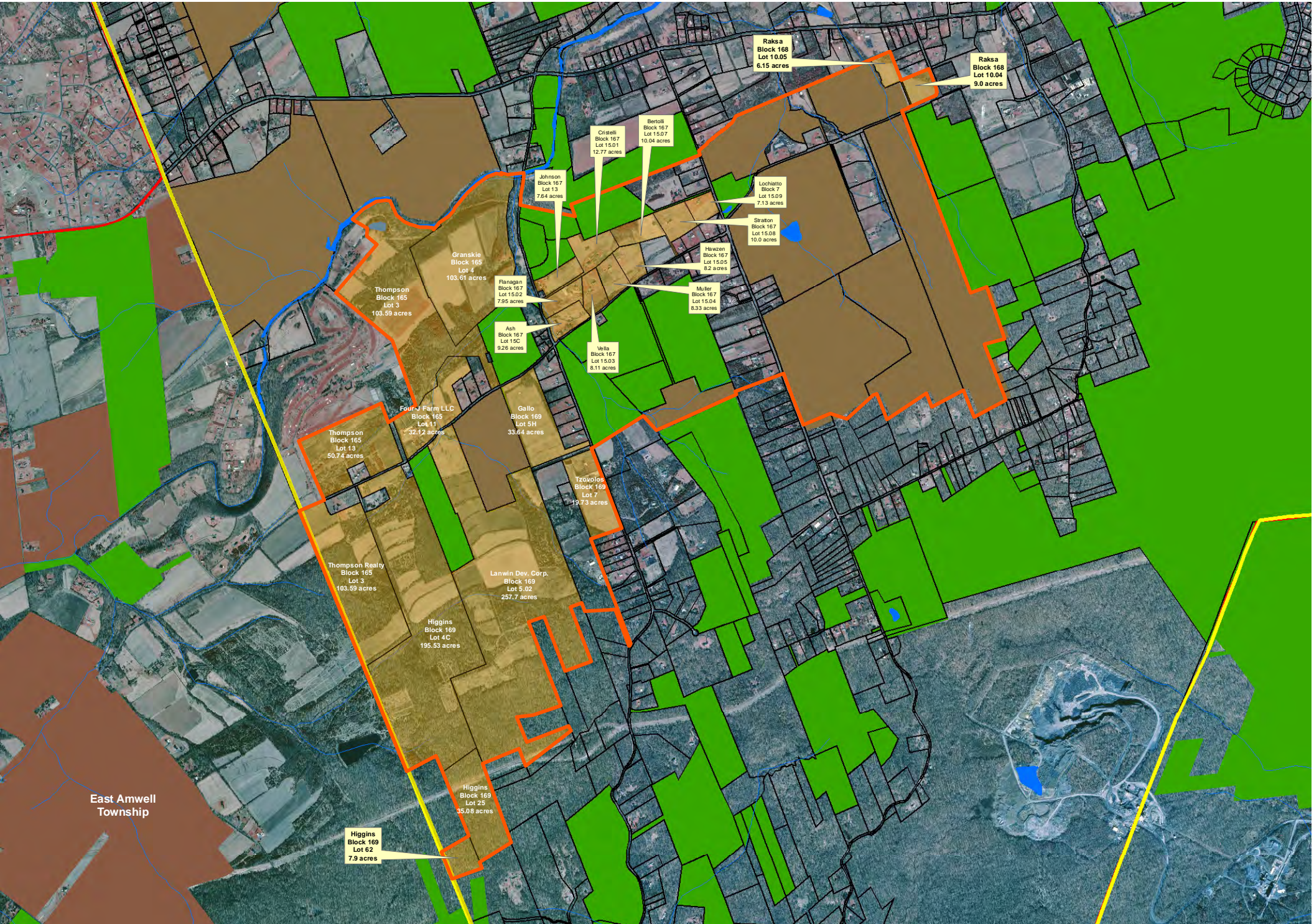
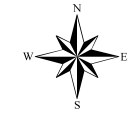
Data Sources: NJDEP LU LC 2002

Data acquired from the New Jersey  
Department of Environmental Protection  
but this secondary map product has not  
been verified or authorized by that agency.



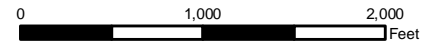
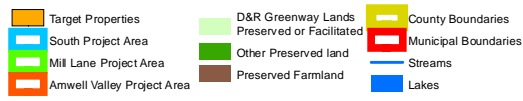
# Amwell Valley PIG Project Area Target Properties

- Target Properties
- Amwell Valley Project Area
- Mill Lane Project Area
- South Project Area
- County Boundaries
- Municipal Boundaries
- Streams
- Lakes
- Other Preserved land
- Preserved Farmland





# Mill Lane PIG Project Area Target Properties



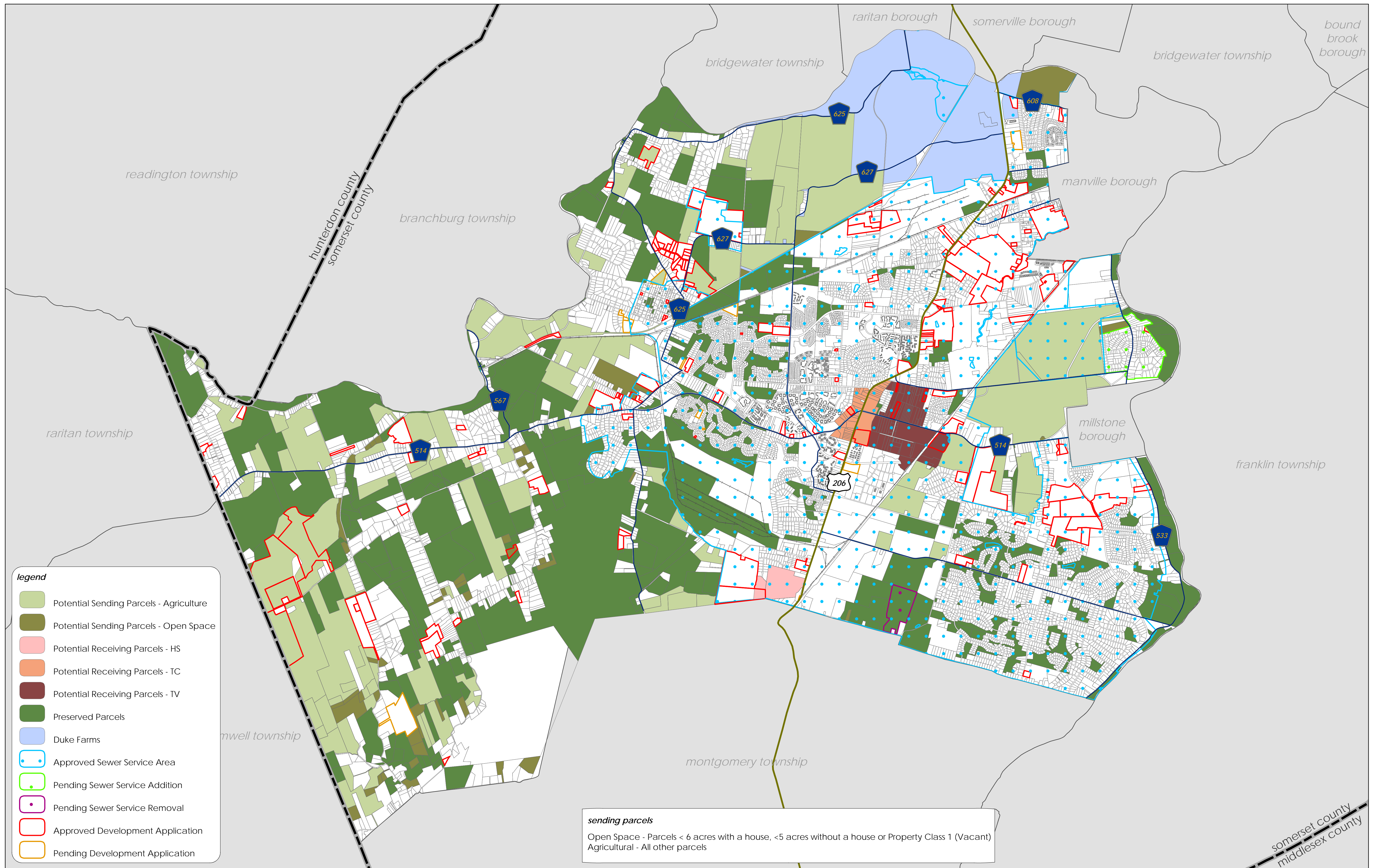


South  
Pig Project Area  
Target Properties

- Target Properties
- South Project Area
- Mill Lane Project Area
- Amwell Valley Project Area
- D&R Greenway Lands Preserved or Facilitated
- Other Preserved land
- Preserved Farmland
- County Boundaries
- Municipal Boundaries
- Streams
- Lakes





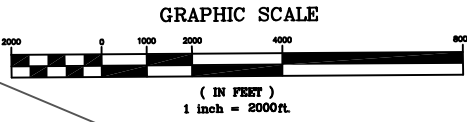


hillsborough township  
 somerset county, new jersey

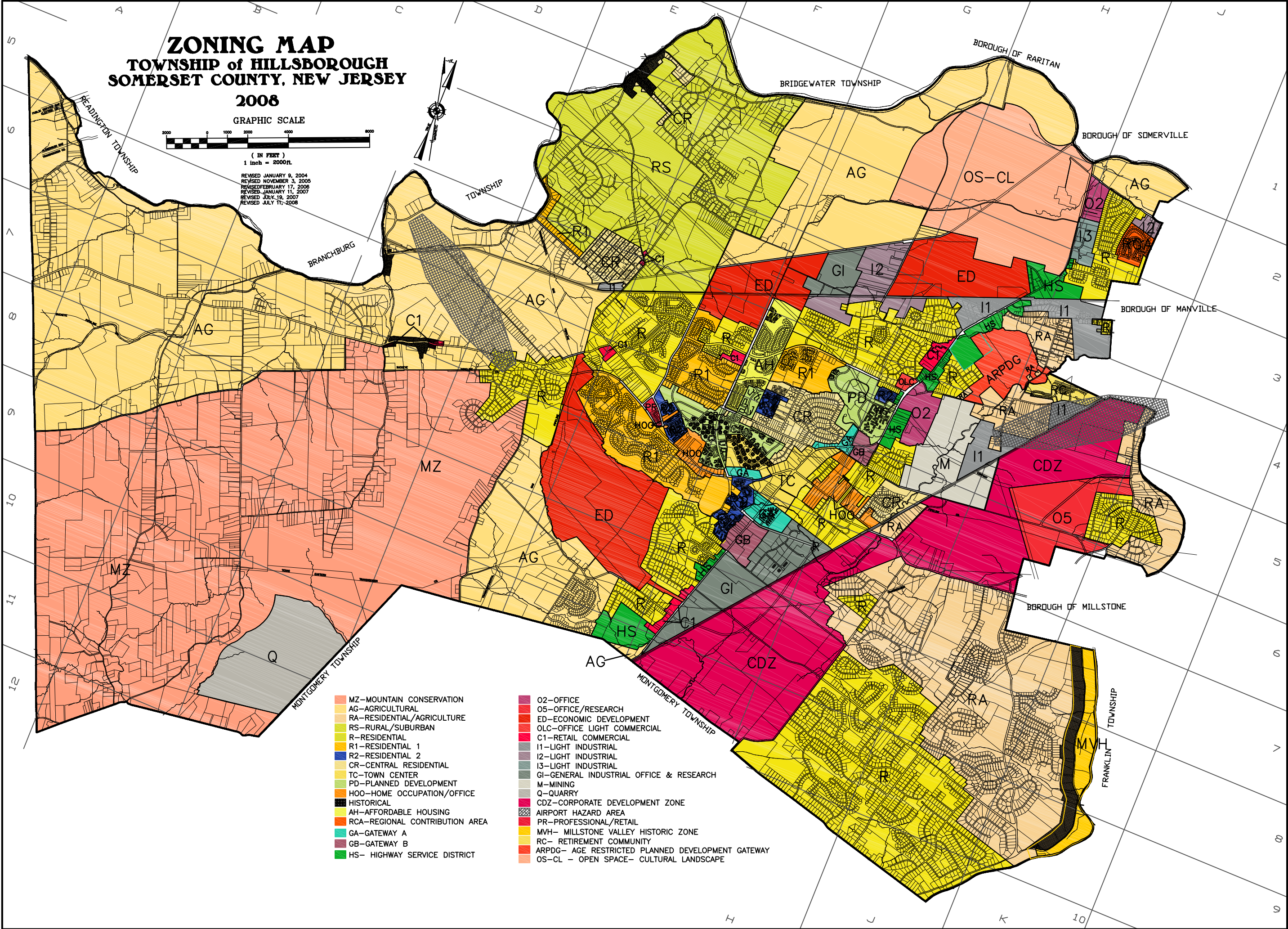
# tdr analysis



**ZONING MAP**  
**TOWNSHIP of HILLSBOROUGH**  
**SOMERSET COUNTY, NEW JERSEY**  
**2008**



REVISED JANUARY 9, 2004  
REVISED NOVEMBER 3, 2005  
REVISED FEBRUARY 17, 2006  
REVISED JANUARY 11, 2007  
REVISED JULY 19, 2007  
REVISED JULY 11, 2008



- |                                |  |
|--------------------------------|--|
| MZ—MOUNTAIN CONSERVATION       | O2—OFFICE  |
| AG—AGRICULTURAL                | O5—OFFICE/RESEARCH                               |
| RA—RESIDENTIAL/AGRICULTURE     | ED—ECONOMIC DEVELOPMENT                          |
| RS—RURAL/SUBURBAN              | OLC—OFFICE LIGHT COMMERCIAL                      |
| R—RESIDENTIAL                  | C1—RETAIL COMMERCIAL                             |
| R1—RESIDENTIAL 1               | I1—LIGHT INDUSTRIAL                              |
| R2—RESIDENTIAL 2               | I2—LIGHT INDUSTRIAL                              |
| CR—CENTRAL RESIDENTIAL         | I3—LIGHT INDUSTRIAL                              |
| TC—TOWN CENTER                 | GI—GENERAL INDUSTRIAL OFFICE & RESEARCH          |
| PD—PLANNED DEVELOPMENT         | M—MINING   |
| HOO—HOME OCCUPATION/OFFICE     | Q—QUARRY   |
| HISTORICAL                     | CDZ—CORPORATE DEVELOPMENT ZONE                   |
| AH—AFFORDABLE HOUSING          | AIRPORT HAZARD AREA                              |
| RCA—REGIONAL CONTRIBUTION AREA | PR—PROFESSIONAL/RETAIL                           |
| GA—GATEWAY A                   | MVH—MILLSTONE VALLEY HISTORIC ZONE               |
| GB—GATEWAY B                   | RC—RETIREMENT COMMUNITY                          |
| HS—HIGHWAY SERVICE DISTRICT    | ARPDG—AGE RESTRICTED PLANNED DEVELOPMENT GATEWAY |
|                                | OS-CL—OPEN SPACE—CULTURAL LANDSCAPE              |



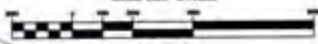
# ZONING MAP

## TOWNSHIP of HILLSBOROUGH

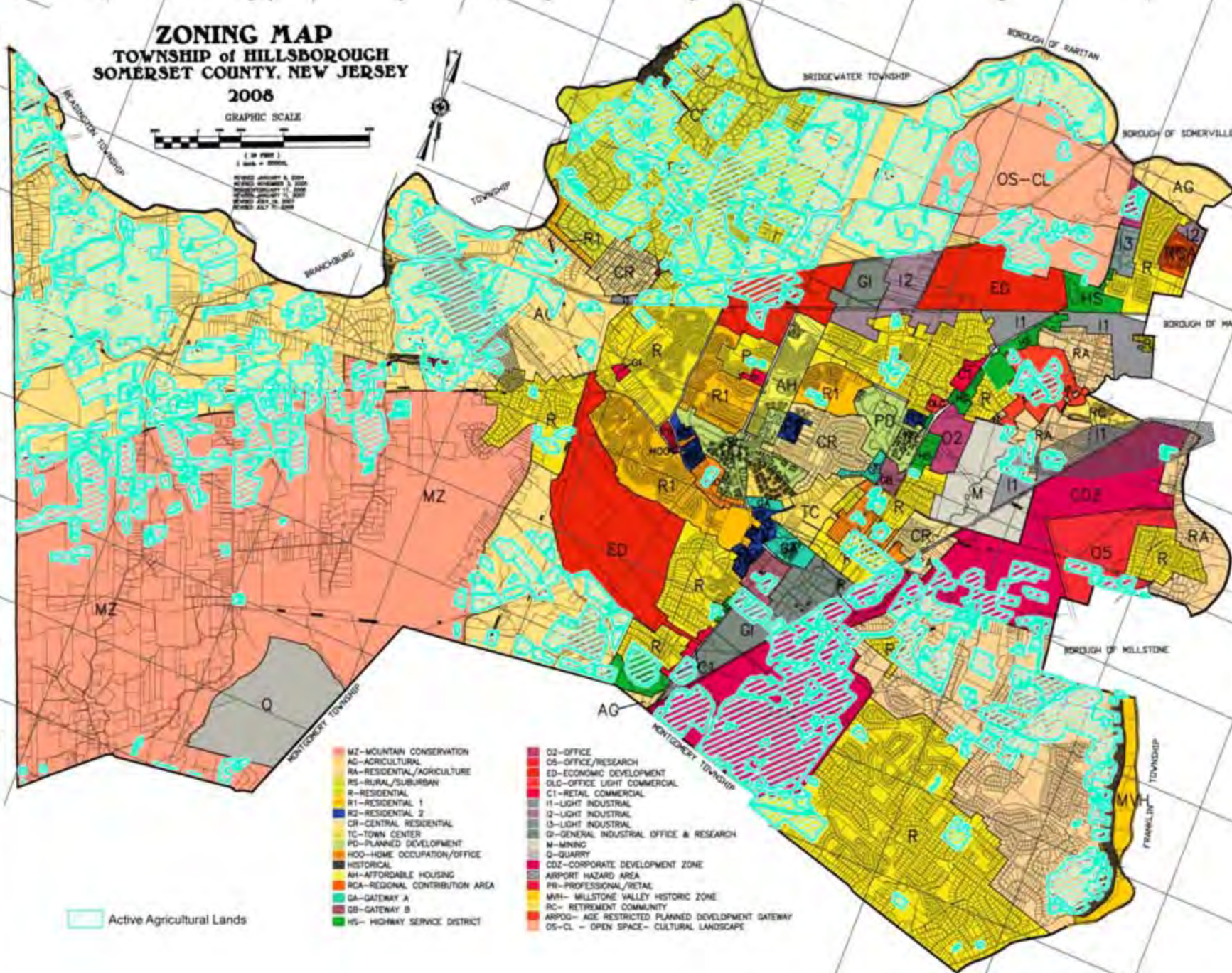
### SOMERSET COUNTY, NEW JERSEY

2008

GRAPHIC SCALE



REVISIONS  
REVISION 1: 2008  
REVISION 2: 2008  
REVISION 3: 2008  
REVISION 4: 2008  
REVISION 5: 2008



- MZ-MOUNTAIN CONSERVATION
- AG-AGRICULTURAL
- RA-RESIDENTIAL/AGRICULTURE
- RS-RURAL/SUBURBAN
- R-RESIDENTIAL
- R1-RESIDENTIAL 1
- R2-RESIDENTIAL 2
- CR-CENTRAL RESIDENTIAL
- TC-TOWN CENTER
- PD-PLANNED DEVELOPMENT
- HO-HOME OCCUPATION/OFFICE
- HISTORICAL
- AH-AFFORDABLE HOUSING
- CA-GATEWAY A
- CB-GATEWAY B
- HS-HIGHWAY SERVICE DISTRICT

- O2-OFFICE
- O5-OFFICE/RESEARCH
- ED-ECONOMIC DEVELOPMENT
- OLC-OFFICE LIGHT COMMERCIAL
- C1-RETAIL COMMERCIAL
- I1-LIGHT INDUSTRIAL
- I2-LIGHT INDUSTRIAL
- I3-LIGHT INDUSTRIAL
- GI-GENERAL INDUSTRIAL OFFICE & RESEARCH
- M-MINING
- Q-QUARRY
- CDZ-CORPORATE DEVELOPMENT ZONE
- APHA-AIRPORT HAZARD AREA
- PR-PROFESSIONAL/RETAIL
- MVH-MILLSTONE VALLEY HISTORIC ZONE
- RC-RETIREMENT COMMUNITY
- ARPOG-AGE RESTRICTED PLANNED DEVELOPMENT GATEWAY
- OS-CL-OPEN SPACE-CULTURAL LANDSCAPE

Active Agricultural Lands

**STATE AGRICULTURE DEVELOPMENT COMMITTEE**

**POLICY**

**TRANSITION FROM EXISTING FARMLAND PRESERVATION PROGRAM  
RULES TO NEW AND AMENDED RULES GOVERNING FARMLAND  
PRESERVATION PROGRAM PROCEDURES**

**I. PURPOSE**

To identify how the State Agriculture Development Committee (SADC) intends to transition program operations from existing regulatory provisions to new and amended regulations, particularly in relation to changes proposed within the County and Municipal Planning Incentive Grant programs.

**II. AUTHORITY**

Proposed Amendments: N.J.A.C. 2:76-6.3, 6.5, 6.6, 6.7, 6.8, 6.11, 8.1, 8.2, 8.5, 8.10, 11.2, 11.5, 11.7, 11.10 and 12.3

Proposed New Rules: N.J.A.C. 2:76-6.20, 6.21, 6.22, 6.23, 8.6, 8.8, 8.9, 8.11, 11.9 and 17A

Proposed Repeal and New Rules: N.J.A.C. 2:76-11.6 and 17

**III. POLICY**

In anticipation of adoption of new and amended SADC program rules in early June 2007, the State Agriculture Development Committee (SADC) is instituting the following policies/procedures to provide guidance to effected counties and municipalities on:

- How provisions of the new and amended rules become effective programmatically; and
- What impact the new and amended rules will have on existing, versus future, PIG appropriations.

**A. Implementation of New and Amended Rules:**

1. For all programs, the application for sale of a development easement may proceed under the existing rules if both of the following conditions apply:
  - the two appraisals were authorized to commence prior to the effective date of the proposed new and amended rules (as

- evidenced by a resolution of the governing body and a fully executed contract); and
  - the current valuation date of both appraisals is prior to the effective date of the proposed new and amended rules.
2. If both of these conditions are not met, the application shall proceed under the provisions of the new and amended rules as adopted.
  3. With respect to County Easement Purchase applications, the existing rules shall not pertain to any application submitted to the SADC subsequent to the 2008 County Easement Purchase Round.

**B. Minimum Eligibility Criteria:**

Minimum eligibility criteria are effective to all programs upon rule adoption, *subject to “A” above.*

**C. Eligibility of Use of 1998 Zoning Provisions under the Planning Incentive Grant Program**

Pursuant to the Garden State Preservation Trust Act (NJSA 13:8C-1 et seq), numerous farms are still eligible to be appraised using 1998 zoning under the Planning Incentive Grant (PIG) program by virtue of the fact that the “lists of farms” included in the PIG applications had received Garden State Preservation Trust prior to June 30, 2004. All other farms in the state are eligible to be appraised using January 2004 zoning pursuant to amendments to the Garden State Trust Act enacted pursuant to the Highlands Water Protection and Planning Act (NJSA 13:20-1 et seq).

Because the proposed County and Municipal Planning Incentive Grant program rules (NJAC 2:76-17 and 2:76-17A, respectively) will require a submission of a new Planning Incentive Grant application for all counties and municipalities wishing to participate in the PIG program, these applications are recognized as being separate and apart from those approved in the past.

**As such, it shall be the Policy of the SADC that all Planning Incentive Grant applications approved by the SADC under the proposed new and amended rules, and all funds that may be appropriated to them commencing in FY09, shall not be eligible to utilize 1998 zoning and appraisal provisions.**

Pre-existing Planning Incentive Grant applications that currently are eligible to use the 1998 zoning provisions may continue to do so until all

appropriations made through FY08 are exhausted or reallocated by the SADC, subject to “A” above.

**D. Expenditure Timeline for Planning Incentive Grant Program Appropriations**

Pursuant to existing Planning Incentive Grant regulations, the SADC annually conducts a review of each applicant’s total appropriations to date in light of expenditures, contracts and overall program activity. The results of this review are integral to the formation of staff recommendations related to approving new appropriations, or in reallocating funds to other projects.

Because of the “dual” nature of the Planning Incentive Grant program during the transition from the existing regulations to the new proposed regulations, particularly in light of the 1998 zoning provisions discussed in point “C” above, it is important to bring to a close all projects associated with Planning Incentive Grant appropriations granted through FY08. Achieving a “close-out” of such appropriations in a timely manner will allow the SADC to have clarity in moving forward under the new Planning Incentive Grant Program rules, and minimize confusion associated with some farms being eligible for 1998 zoning provisions.

**As such, it shall be the policy of the SADC to strongly encourage that closing on all easement purchase applications associated with existing Planning Incentive Grant Program appropriations granted through FY08 be accomplished by the June 30, 2008. Further, the SADC will continue to conduct its annual review of PIG appropriations each April (2007 and 2008) and make recommendations for re-appropriation as needed. Any funds still available within a PIG appropriation in April of 2008 that are not associated with a transaction as evidenced by a contract of sale or SADC final approval, should be considered at risk of loss through the re-appropriation process.**



### Inventory of Hillsborough Township Farms

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
AG	1	9.A	3B	Three Bridges Road	Schaefer, Edward & P	5
AG	1	9.A	3A	400 Three Bridges Road	Schaefer, Edward & P	1.31
AG	2	8	3B	Three Bridges Road	Schaefer, Edward & P	8.74
AG	4	9	3B	Blackwell Road	Rosenblum, Charles & Jane E	5
AG	4	9	3A	10 Blackwell Road	Rosenblum, Charles & Jane E	0.926
AG	5	4	3B	Hockenbury Road	Kinigopoulo, George & Nadia	6.29
AG	5	4	3A	217 Hockenbury Road	Kinigopoulo, George & Nadia	2
AG	5	7.01	3B	189 Hockenbury Road	Digiorgio, Robert V & Jean	20.592
AG	5	7.01	3A	189 Hockenbury Road	Digiorgio, Robert V & Jean M	1
AG	5	7.02	3B	390 Three Bridges Road	Digiorgio, Richard Dominick	19.548
AG	5	7.02	3A	390 Three Bridges Road	Digiorgio, Richard Dominick	1.204
AG	5	33	3B	Woodfern Road	Kanach, Charles S & Kanach, Susan L	159.206
AG	5	37.02	3B	Amwell Road	Revesz, Wm & Orsini-Revesz, S	22.009
AG	5	37.02	3A	839 Amwell Road	Revesz, Wm & Orsini-Revesz, S	1
AG	5	38	3B	Amwell Road	Mc Pherson, P A & Kopels B S	22
AG	5	38	3A	849 Amwell Road	Mc Pherson, P A & Kopels B S	2.87
AG	5	39	3B	Amwell Road	Rafes, Roy	11.64
AG	5	39	3A	853 Amwell Road	Rafes, Roy	1
AG	5	41	3B	Amwell Road	Laine, James C & Carol A	9.84
AG	5	41	3A	865 Amwell Road	Laine, James C & Carol A	0.5
AG	5	33.A	3B	Three Bridges Road	Jenkinson, Henry Jr & Margaret	19.24
AG	5	33.A	3A	324 Three Bridges Road	Jenkinson, Henry Jr & Margaret	0.64
AG	5	45.A	3B	Hockenbury Road	Spitzlei, Steve & Klein, Laue	7.2
AG	5	45.A	3A	259 Hockenbury Road	Spitzlie, Steve & Klein, Laurie	1.2
AG	6	7	3B	Blackpoint Road	Wisner, Enoch	19.67
AG	6	7	3A	510 Blackpoint Road	Wisner, Enoch	2
AG	7	8	3B	Blackpoint Road	Madvoy, David & Michelle	3.33
AG	8	16.01	3B	Amwell Road	Hidden River Farm Inc C/O Cole, J	47.67
AG	8	16.01	3A	745 Amwell Road	Hidden River Farm Inc. C/O Cole, J	3.33
AG	8	18	3B	Amwell Road	Schregenberger, Lotte	65.48
AG	8	18	3A	751 Amwell Road	Schregenberger, Lotte	1
AG	8	19.02	3B	6 Poplar Road	Romano, Salvatore J & Bernice A	23.9305
AG	8	19.02	3A	6 Poplar Road	Romano, Salvatore J & Bernice A	1
AG	8	19.03	3B	3 Sycamore Lane	Romano, Salvatore J & Bernice A	2
AG	8	31	3B	Amwell Road	Madvoy, David & Michelle M	24.7
AG	8	31	3A	789 Amwell Road	Madvoy, David & Michelle M	0.5
AG	9	1	3B	River Road	Kanach, Charles S & Kanach, Susan L	60.64
AG	9	1.A	3B	River Road	Carlson, David G & Johnson, Judith A	7.01
AG	10	4.03	3B	767 Riverside Drive	Bell, Lynn F	18.7215
AG	10	4.05	3B	773 Riverside Drive	Suarez, Lorraine	24.96
AG	10	4.05	3A	773 Riverside Drive	Suarez, Lorraine	2
AG	10	5	3B	River Road	Kanach, Charles S & Kanach, Susan L	115.602
AG	11	15	3B	Amwell Road	Cunningham, William F	61.86
AG	11	15	3A	711 Amwell Road	Cunningham, William F	1
AG	11	27	3B	Amwell Road	Pittstown Properties, LLC	77.9572
AG	11	27	3A	685 Amwell Road	Pittstown Properties, LLC	1
AG	11	28	3B	Mill Lane	Doyle, Richard L Executor	60.3264
AG	11	28.01	3B	Mill Lane	Doyle, David & Cathleen L	6.718
AG	11	28.01	3A	770 Mill Lane	Doyle, David & Cathleen L	2
AG	11	34	3B	Amwell Road	Dorell, Frank P III & Joyce D	29.04

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
AG	11	35	3B	Amwell Road	Fenwick, Marian H	5.14
AG	11	35.A	3B	Amwell Road	Fenwick, Marian H	1.17
AG	12	3.21	3B	770 Riverside Drive	Powers, John R	34.5475
AG	12	3.24	3B	780 Riverside Drive	Tecumseh Associates li	10.0072
AG	12	5	3B	771 Clawson Avenue	Powers, Robert P	12.612
AG	12	26.01	3B	East Mountain Road	Pid Associates C/O A.Dix Skillman	73.7525
AG	12	33	3B	Mill Lane	Pid Associates C/O A.Dix Skillman	60
AG	12	44	3B	Mill Lane	Doyle, Richard L	82.4852
AG	12	44.02	3B	Mill Lane	Doyle, Winona R	8.287
AG	12	44.02	3A	771 Mill Lane	Doyle, Winona R	2
AG	12	44.03	3B	Mill Lane	Doyle, Winona R	3.4255
AG	12	47	3B	South Branch Road	Pid Associates C/O A Dix Skillman	85.902
RS	13.01	1	3B	148 South Branch Road	Sully LLC C/O Richard Norz	30.0285
RS	13.01	2	3B	148 South Branch Road	Norz, Richard	43.12
RS	13.01	2	3A	148 South Branch Road	Norz, Richard	2
RS	13.01	5	3B	River Road	Norz, James & Norma	21.596
RS	13.01	5	3A	938 River Road	Norz, James & Norma	1
RS	13.01	8	3B	South Branch Road	Cilenti, Armando & Angelina	10.5
AG	14	12	3B	River Road	Sullivan, Sylvester	23.3671
AG	14	12.01	3B	River Road	Dietz, Walter & Kathleen	9.17
AG	14	12.01	3A	945 River Road	Dietz, Walter & Kathleen	1.2
RS	14	12.02	3B	River Road	Dietz, Walter J & Kathleen A	3.9731
AG	48	1	3B	River Road	Duke Farms Foundation	259.7
AG	48	11.05	3B	River Road	Holland Development Corp	8.6081
AG	48.01	1	3B	River Road	Duke Farms Foundation	2.96
AG	49	1	3B	Dukes Parkway	Duke Farms Foundation	647.48
AG	49	1	3A	Dukes Parkway	Duke Farms Foundation	3
AG	49	2	3B	Dukes Parkway	Duke Farms Foundation	8.08
AG	49	3	3B	Route 206	Duke Farms Foundation	207.373
AG	49	3	3A	80 Route 206	Duke Farms Foundation	2
2	51	2	3B	Dukes Parkway East	Duke Farms Foundation	23.49
RA	141	7.01	3B	Route 206	Pec Builders Inc	31.434
R	141	30	3B	Route 206	Pec Builders Inc	32.742
R	141	30	3A	Route 206	Pec Builders Inc	17.26
AG	142	1	3B	Dukes Parkway	Tine, Clifford C & Madeline C	2
AG	142	2	3B	Dukes Parkway	Tine, Clifford C & Madeline	4.88
AG	142	7	3B	Roycefield Road	Duke Farms Foundation	6.61
AG	142	9	3B	Dukes Parkway	Duke Farms Foundation	292.28
AG	142	9	3A	100 Dukes Parkway West	Duke Farms Foundation	5
AG	143	1	3B	New Centre Road	Duke Farms Foundation	248.66
AG	144	2	3B	Roycefield Road	Duke Farms Foundation	469.64
AG	144	2	3A	Roycefield Road	Duke Farms Foundation	2
AG	144	13	3B	New Centre Road	Duke Farms Foundation	113.35
AG	144	14	3B	New Centre Road	Duke Farms Foundation	50.65
AG	144	14	3A	New Centre Road	Duke Farms Foundation	1
RS	144	17	3A	71 Beekman Lane	Everett, Dorothy S	1
RS	144	17	3B	Beekman Lane	Everett, Dorothy S Trustee	91.373
AG	144	18	3B	Beekman Lane	Duke Farms Foundation	128.4
AG	144	18	3A	100 Beekman Lane	Duke Farms Foundation	5.5
AG	144	19	3B	River Road	Duke Farms Foundation	80
AG	144	19	3A	River Road	Duke Farms Foundation	1.91



*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
AG	144	10.A	3B	New Centre Road	Duke Farms Foundation	9.97
RS	145	23	3B	656 River Road	Taylor, Dolores Stafford	38.48
RS	145	23	3A	656 River Road	Taylor, Dolores Stafford	1
RS	145	24	3B	674 River Road	Haney, William H & Karen A	8
RS	145	24	3A	674 River Road	Haney, William H & Karen A	1.9
RS	145	26	3B	608 River Road	Riccio, Kenneth D	7.39
RS	145	26	3A	608 River Road	Riccio, Kenneth D	0.5
RS	145	28	3B	Beekman Lane	Wengryn, B T, S M, & W Jr	25.34
RS	145	33.01	3B	Beekman Lane	Daniel Wengryn And Mary Wengryn	9.194
RS	145	33.01	3A	76 Beekman Lane	Wengryn, Daniel & Wengryn, Mary	1
RS	145	36.01	3B	88 Beekman Lane	Quick, Barbara & Et Al	16.59
RS	145	36.01	3A	88 Beekman Lane	Quick, Barbara & Et Al	1
RS	145	39	3B	Orchard Drive	Quick, Peter J & Ingrid	18.0189
RS	147	9	3B	River Road	Quick, J D & J / Quick, Fred & M	39.12
RS	147	9	3A	926 River Road	Quick, J D & J / Quick, Fred & M	0
RS	147	21	3B	Orchard Drive	Fierst, Katie E	0.587
RS	147	21	3A	1018 Orchard Drive	Fierst, Katie E	1.5
RS	147	21.01	3B	Orchard Drive	Fierst, Katie E	2.0647
RS	147	21.02	3B	Orchard Drive	Fierst, Katie E	2.0548
RS	147	26	3B	New Centre Road	High Branch Land Inc	0.02
RS	147	27	3B	New Centre Road	High Branch Land Inc	1.641
RS	147	21.A	3B	Orchard Drive	Fierst, Katie E	38.665
RS	147	21.A	3A	1018 Orchard Drive	Fierst, Katie E	1
RS	148	18	3B	Beekman Lane	Glen Developers Inc	87.42
RS	148	19	3B	New Centre Road	Sylvester Sullivan Family LP	46.4376
RS	148	19	3A	580 New Centre Road	Sylvester Sullivan Family LP	1
RS	148	21	3B	Beekman Lane	Harvan, Inc	18.07
RS	148	22	3B	Beekman Lane	Harvan, Inc.	24.53
RS	148	39	3A	255 South Branch Road	Sullivan, S & C , Harding, L & J	4.27
RS	148	39	3B	South Branch Road	Sullivan, S & C, Harding, L & J	31.62
R	149.08	71	3B	South Branch Road	Moledzky, Harvey & Franks, Jack P	6
AG	150	1	3B	New Centre Road	Duke Farms Foundation	71.76
AG	150	1	3A	406 New Centre Road	Duke Farms Foundation	2
ED	150	5	3B	Beekman Lane	Jones, Wayne F	42.94
ED	150	9	3B	Off Beekman Lane	Galleria Construction, Inc	12.71
R1	151	12.B	3B	South Triangle Road	Piskowski, John Jr	9.82
R1	151	12.B	3A	137 South Triangle Road	Piskowski, John Jr	1
R	152	6	3B	Farm Road	Nekrasovas, Victor & Anna	5.06
R	152	6	3A	504 Farm Road	Nekrasovas, Victor & Anna	1
R	152	7	3B	Farm Road	Nekrasovas, Viktor & Anna	12
R	152	8	3B	Farm Road	Nekrasovas, Victor & Anna	5.5
R	152	8	3A	501 Farm Road	Nekrasovas, Victor & Anna	0.5
HOO	163	11	3B	Amwell Road	Amwell Assoc. C/O Riccadonna	7.21
AG	164	7	3A	900 Amwell Road	County Of Somerset	3
AG	164	8	3B	Amwell Road	Stoffels, Carl A & Joan L	21
AG	164	8	3A	864 Amwell Road	Stoffels, Carl A & Joan L	2
AG	164	11	3B	818 Amwell Road	Verkade, David & Diane	10
AG	164	11	3A	818 Amwell Road	Verkade, David & Diane	0.52
AG	164	12	3B	Montgomery Road	Savare, Charles J & Rosalie M Trst	4
AG	164	12	3A	568 Montgomery Road	Savare, Charles J & Rosalie M Trst	2.43
AG	164	12.01	3B	Montgomery Road	Savare, Charles J & Rosalie M Trust	3

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
AG	165	2	3B	Wertsville Road	Amwell Valley Country Club Inc	50
AG	165	3	3B	Wertsville Road	Thompson Realty Co Of Princeton Inc	103.59
AG	165	4	3B	Montgomery Road	Granskie, Melissa Louis	102.61
AG	165	4	3A	580 Montgomery Road	Granskie, Melissa Louis	1
AG	165	6	3A	590 Montgomery Road	Rock, David W & Sandra J	0.56
AG	165	6	3B	590 Montgomery Road	Rock, David W & Sandra J	5
AG	165	11	3B	Wertsville Road	Four-J Farm LLC,	29.12
AG	165	11	3A	124 Wertsville Road	Four-J Farm LLC,	3
AG	165	13	3B	Wertsville Road	Thompson, W Bryce IV	50.7375
AG	165	3.A	3B	Amwell Road	Benson, Brad W & Lisa C	22
AG	165	3.A	3A	840 Amwell Road	Benson, Brad W & Lisa C	1
AG	167	1	3B	Amwell Road	St Mary & St Athanaeus Coptic Ch	10
AG	167	6	3B	Long Hill Road	Tellian, Adolph	6.3
AG	167	6	3A	208 Long Hill Road	Tellian, Adolph	1
AG	167	7	3B	Long Hill Road	Windy Knoll Associates	28.1
AG	167	7	3A	212 Long Hill Road	Windy Knoll Associates	5.76
AG	167	9	3B	Montgomery Road	Azimi, Faramaz	12.12
AG	167	9	3A	569 Montgomery Road	Azimi, Faramaz	0
AG	167	10	3B	Long Hill Road	Scudder, Townsend Jr. & Mary	48.5
AG	167	10	3A	220 Long Hill Road	Scudder, Townsend Jr. & Mary	1.45
AG	167	12	3B	Long Hill Road	De Masi, Vincent J & D	10.16
AG	167	12	3A	224 Long Hill Road	De Masi, Vincent J & D	5
AG	167	12.03	3B	232 Long Hill Road	Roycefield Properties LLC	9.717
AG	167	13	3B	Montgomery Road	Johnson, Timothy K & Rhonda	5.734
AG	167	15.01	3A	581 Montgomery Road	Cristelli, Paul & Fornaro, Jennifer	1.77
AG	167	15.01	3B	Montgomery Road	Cristelli, Paul D	11
AG	167	15.02	3B	Montgomery Road	Flanagan, John D & Patricia A	7
AG	167	15.02	3A	583 Montgomery Road	Flanagan, John D & Patricia A	0.95
AG	167	15.03	3B	Montgomery Road	Vella, Maureen & Dicorcia, James	6.11
AG	167	15.03	3A	585 Montgomery Road	Vella, Maureen & Dicorcia, James	2
AG	167	15.04	3B	Wertsville Road	Muller, Henry H Jr & Betty J	7.08
AG	167	15.04	3A	86 Wertsville Road	Muller, Henry H Jr & Betty J	1.25
AG	167	15.05	3B	Wertsville Road	Hawzen, Gary A & Diane	7.2
AG	167	15.05	3A	82 Wertsville Road	Hawzen, Gary A & Diane	1
AG	167	15.07	3B	74 Wertsville Road	Bertolini, Joanne	9.04
AG	167	15.07	3A	74 Wertsville Road	Bertolini, Joanne	1
AG	167	15.08	3B	Wertsville Road	Stratton, Mark S & Jeanette F	8.5
AG	167	15.08	3A	70 Wertsville Road	Stratton, Mark S & Jeanette F	1.5
AG	167	15.09	3B	Long Hill Road	Lochiatto, Vito & Zielenski, Debra	6
AG	167	15.09	3A	236 Long Hill Road	Lochiatto, Vito & Zielenski, Debra	1.13
AG	167	15.C	3B	Wertsville Road	Ash, Ronald & Miccolis, Patricia	8.2
AG	167	15.C	3A	94 Wertsville Road	Ash, Ronald & Miccolis, Patricia	1.06
AG	168	3.03	3B	Amwell Road	Watts, Michael G	7.734
AG	168	3.08	3B	Long Hill Road	Watts, Leon R Jr	11.9656
AG	168	3.09	3B	Long Hill Road	Watts, Leon Jr & Lorri	5.4938
AG	168	3.09	3A	Long Hill Road	Watts, Leon Jr & Lorri	0.25
AG	168	4	3B	Long Hill Road	Eberhardt, Barbara	3.75
AG	168	5	3B	Amwell Road	Watts, Leon Jr	15.973
	168	5	3A	762 Amwell Road	Watts, Leon Jr	0
AG	168	6	3B	Amwell Road	Stuart, Barry & Elaine	6.8
AG	168	6	3A	752 Amwell Road	Stuart, Barry & Elaine	6.13

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
AG	168	10	3B	Wertsville Road	Martin, Theodore M Sr & Lynn Judy	40.65
AG	168	10	3A	20 Wertsville Road	Martin, Theodore M Sr & Lynn Judy	2
AG	168	10.04	3B	Wertsville Road	Raksa, Pauline	9
AG	168	10.05	3B	Wertsville Road	Raksa, Pauline	6.15
AG	168	12	3B	Long Hill Road	Zamek, Rose Trustees	46.399
AG	168	12	3A	225 Long Hill Road	Zamek, Rose Trustees	0.801
AG	168	12.02	3B	Wertsville Road	Zamek, Stephen & Linda	8
MZ	168	12.02	3A	36 Wertsville Road	Zamek, Stephen & Linda	0.746
AG	168	13	3B	Long Hill Road	Taverner, Charles E	9.5
AG	168	13	3A	231 Long Hill Road	Taverner, Charles E	1.52
AG	168	4.A	3A	221 Long Hill Road	Eberhardt, Barbara	1.5
AG	168	4.A	3B	Long Hill Road	Eberhardt, Raymond N & B J	2.25
AG	168	5.C	3B	Amwell Road	Watts, Leon Jr & Lori	15.796
AG	168	5.C	3A	770 Amwell Road	Watts, Leon Jr & Lori	1
MZ	169	3	3B	Wertsville Road	Princeton Research Lands, Inc	80.26
MZ	169	3.01	3B	145 Wertsville Road	Bryson-Mcgahren, Jennifer	8.959
MZ	169	5.01	3B	Wertsville Road	Young, Cari L	28.44
MZ	169	5.01	3A	125 Wertsville Road	Young, Cari L	1
MZ	169	5.02	3B	Wertsville Road	Lanwin Development Corp	257.7
MZ	169	6.02	3B	Montgomery Road	Thompson Realty Co. Of Princeton	9
MZ	169	6.03	3B	Montgomery Road	Thompson, W Bryce	10
MZ	169	6.04	3B	Montgomery Road	Thompson, Lisa L	8.9
MZ	169	6.04	3A	626 Montgomery Road	Thompson, Lisa L	19.6542
AGMZ	169	7	3B	Montgomery Road	Tzovolos, Demetrios & Olympia	14.731
AGMZ	169	7	3A	628 Montgomery Road	Tzovolos, Demetrios & Olympia	5
MZ	169	14	3B	Montgomery Road	Thompson, W Bryce IV	26.08
MZ	169	15	3B	Montgomery Road	Thompson, W Bryce IV	9.76
MZ	169	17	3B	Montgomery Road	Simon, Emil F	11.06
MZ	169	18	3B	Montgomery Road	Thompson, W Bryce IV	4.92
MZ	169	19	3B	Montgomery Road	Thompson, W Bryce IV	3.85
MZ	169	21	3B	Montgomery Road	Lanwin Development Corp	10.28
MZ	169	23	3B	Montgomery Road	Lanwin Development Corp	7.16
MZ	169	25	3B	E Amwell Line	Higgins, John P	35.08
MZ	169	36.03	3B	Pschorn Lane	Thompson Realty Co Of Princeton Inc	18.9395
MZ	169	36.04	3B	5 Pschorn Lane	Lanwin Development Corp	19.5
MZ	169	36.04	3A	5 Pschorn Lane	Lanwin Development Corp	0.5
MZ	169	36.05	3B	Cat Tail Brook	Thompson Realty Co Of Princeton Inc	17.0489
MZ	169	55	3B	506 Long Hill Road	Balogh, Zoltan A & Zastocki, G	55
MZ	169	55	3A	506 Long Hill Road	Balogh, Zoltan A & Zastocki, G	6.578
MZ	169	55.01	3A	508 Long Hill Road	Balogh, Zoltan & Balogh, M Trustees	1
MZ	169	55.01	3B	Long Hill Road	Balogh, Zoltan A	7
MZ	169	56	3B	510 Long Hill Road	Carolina Capital Funding Inc	12.91
MZ	169	56	3A	510 Long Hill Road	Carolina Capital Funding Inc	1
MZ	169	60	3B	Pschorn Lane	Nelson, Norman F Jr & Frieda L	39.61
MZ	169	60	3A	30 Pschorn Lane	Nelson, Norman F Jr & Frieda L	1
MZ	169	62	3B	E Amwell Twp Line	Higgins, John P	7.9
MZ	169	24.A	3B	Wertsville Road	New Liberty Rod & Gun Club, Inc	28
MZ	169	26.A	3B	Pschorn Lane	Maxwell, Elizabeth A & Roth, Kurt	30
MZ	169	26.A	3A	20 Pschorn Lane	Maxwell, Elizabeth A & Roth, Kurt	2.96
MZ	169	26.B	3B	12 Pschorn Lane	Mangee, Frank M & Sarah R	19
MZ	169	26.B	3A	12 Pschorn Lane	Mangee, Frank M & Sarah R	1

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
MZ	169	36.D	3B	Montgomery Road	Thompson Realty Co Of Princeton Inc	3.553
MZ	169	36.E	3B	Montgomery Road	Thompson Realty Co Of Princeton Inc	3.308
MZ	169	4.C	3B	Wertsville Road	Higgins, John P	195.53
MZ	169	5.E	3B	Wertsville Road	Giarrusso, Mae L	48
MZ	169	5.E	3A	115 Wertsville Road	Giarrusso, Mae L	2
MZ	169	5.H	3A	111 Wertsville Road	Gallo, John & Zilic, Franjo	0
MZ	169	5.H	3B	Wertsville Road	Gallo, John J & Zilic, Franjo	33.64
MZ	171	11	3B	318 Long Hill Road	Janisch, Glen & Sandra	9
MZ	171	11	3A	318 Long Hill Road	Janisch, Glen & Sandra	1.52
MZ	171	11.01	3A	314 Long Hill Road	Oliver, Beverly	1.26
MZ	171	11.01	3B	314 Long Hill Road	Oliver, Beverly	9.26
MZ	171	14.01	3B	Montgomery Road	Todaro, Antonio & Arleen	14
MZ	171	14.01	3A	689 Montgomery Road	Todaro, Antonio & Arleen	2.71
MZ	171	14.02	3B	Montgomery Road	Ammons, Victor M & Ann E Trustees	14.063
MZ	171	14.02	3A	685 Montgomery Road	Ammons, Victor M & Ann E Trustees	1
MZ	171	31	3B	Pirozzi Lane	Giovannucci, Fred & Johanna L	20.11
MZ	171	31	3A	30 Pirozzi Lane	Giovannucci, Fred & Johanna L	0.96
MZ	171	35	3A	33 Pirozzi Lane	Hashem, Abdalla & Mariann B	0
MZ	171	52	3B	Long Hill Road	Minnesota Mining & Mfg Co	31.5
MZ	171	57.01	3B	Pirozzi Lane	Costas, Peter & Susan	21.183
MZ	171	57.01	3A	37 Pirozzi Lane	Costas, Peter & Susan	2
MZ	171	59	3B	Pirozzi Lane	Kutchera, A & Cown, R & Basile, A	74.82
MZ	171	59	3A	45 Pirozzi Lane	Kutchera, A & Cown, R & Basile, A	1
MZ	171	61.01	3B	Montgomery Road	Peck, Trevor & Peggy Guzzie	13.2
MZ	171	61.01	3A	681 Montgomery Road	Peck, Trevor & Peggy Guzzie	1
MZ	171	62	3B	Montgomery Road	Kotz, Frank A & Marie	16
MZ	171	62	3A	595 Montgomery Road	Kotz, Frank A & Marie	3.13
MZ	171	68	3B	Montgomery Road	Horn, Arnold H & M C	4.67
MZ	171	68	3A	665 Montgomery Road	Horn, Arnold H & M C	0.5
MZ	171	69	3B	Montgomery Road	Simon, Emil F	7.45
MZ	171	69	3A	697 Montgomery Road	Simon, Emil F	1
MZ	171	70	3B	Montgomery Road	Hornickel, Suzanne & Arthur	60.82
MZ	171	73.01	3B	Long Hill Road	Markowitz, Joseph & Mary-Rose	48.0256
MZ	171	73.01	3A	424 Long Hill Road	Markowitz, Joseph & Mary-Rose	6
MZ	171	105	3B	727 Montgomery Road	Clark, Charles G & Clark, Lucinda	16.9
MZ	171	105	3A	727 Montgomery Road	Clark, Charles G & Clark, Lucinda	1
MZ	171	108	3B	Montgomery Road	Rebeck, Alice & Raymond	12.73
MZ	171	108	3A	711 Montgomery Road	Rebeck, Alice & Raymond	1
MZ	171	112.02	3B	Davids Lane	Durik, Nicholas & Marlene	25.32
MZ	171	112.02	3A	6 Davids Lane	Durik, Nicholas & Marlene	1
MZ	171	14.G	3B	Montgomery Road	Horn, Marilyn C	3.71
MZ	171	14.M	3B	Off Pirozzi Lane	Giovannucci, Fred & Johanna L	12.89
MZ	171	14.W	3B	Montgomery Road	Todaro, Antonio	0
MZ	171	6.B	3B	Wertsville Road	Eilbacher, David J & Jane Marie	23.67
MZ	171	6.B	3A	79 Wertsville Road	Eilbacher, David J & Jane Marie	0.33
MZ	171	63.D	3B	Montgomery Road	D'amore, Michael & Mary	10.39
MZ	171	63.D	3A	639 Montgomery Road	D'amore, Michael & Mary	1
MZ	173	4.02	3B	Wertsville Road	Kowalczyk, Robert & Margaret	9
MZ	173	4.02	3A	5 Wertsville Road	Kowalczyk, Robert & Margaret	1
MZ	173	5	3B	Zion Road	Lembo, Joseph & Sigismondo	62.61
MZ	173	5.03	3B	Castle Hill Lane	Achterman, Doris B	5.04

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
MZ	173	5.04	3B	Castle Hill Lane	Achterman, Doris B	7.04
MZ	173	5.05	3B	Castle Hill Lane	Achterman, Doris B	6.99
MZ	173	5.07	3B	Zion Road	Achterman, Doris B	7.99
MZ	173	5.07	3A	4 Castle Hill Lane	Achterman, Doris B	1
MZ	173	7	3B	Wertsville Road	Schenck, John Jr Trustee	40.5304
MZ	173	7	3A	15 Wertsville Road	Schenck, John Jr C/O Judith Schenck	5.4696
MZ	173	8	3B	Wertsville Road	Smith, Richard W & Charlotte V	129.29
MZ	173	8	3A	19 Wertsville Road	Smith, Richard W & Charlotte V	4
MZ	173	9.07	3B	Wertsville Road	Osterman, Alfred H	107.5
MZ	173	9.07	3A	25 Wertsville Road	Osterman, Alfred H	0.5
MZ	173	10	3B	Wertsville Road	Osterman, Kenneth & Osterman, A	139.57
MZ	173	10	3A	49 Wertsville Road	Osterman, Kenneth & Osterman, A	1
MZ	173	14	3B	Long Hill Road	Longhill Holdings LLC	116.38
MZ	173	14	3A	281 Long Hill Road	Longhill Holdings LLC	2
MZ	173	45	3B	350 Zion Road	Burshnic, Rudolph J & Laura B	8.095
MZ	173	45	3A	350 Zion Road	Burshnic, Rudolph J & Laura B	1
MZ	173	4.B	3B	Amwell Road	Babinski, Michael J Jr	18
MZ	173	4.B	3A	726 Amwell Road	Babinski, Michael J Jr	1.14
MZ	174	7.01	3B	Amwell Road	Goldberg, David A & Cynthia K	9.081
MZ	174	7.01	3A	710 Amwell Road	Goldberg, David A & Cynthia K	1
AGC1	174	14	3B	Amwell Road	Miller, Lois L	11.9819
AGC1	174	14	3A	692 Amwell Road	Miller, Lois L	3.7
AG	174	18	3B	Amwell Road	Drake, Jay G & Hanna R	8.2463
AG	174	18	3A	684 Amwell Road	Drake, Jay G & Hanna R	2
AG	174	19	3B	Amwell Road	Fenwick, Marian H	1.05
AG	174	19	3A	670 Amwell Road	Fenwick, Marian H	1
AG	174	20	3B	Amwell Road	Fenwick, Marian H	3.78
AG	174	20	3A	666 Amwell Road	Fenwick, Marian H	1
MZ	174	93.06	3B	Zion Road	Westover, Curtis K & Joyce M	7
MZ	174	93.06	3A	229 Zion Road	Westover, Curtis K & Joyce M	1
MZ	174	107	3B	Zion Road	Pisacreta, D J & Brien, B	5.56
MZ	174	107	3A	289 Zion Road	Pisacreta, D J & Brien, B	0.5
MZ	174	110	3B	Zion Road	Belnay, Dianne	4.342
Q	174	155	3B	Long Hill Road	Minnesota Mining & Mfg Co	553
AG	174	192	3B	East Mountain Road	Morgan, Robert P	7.2
MZ	174	192	3A	459 East Mountain Road	Morgan, Robert P	1
MZ	174	197	3B	Dutchtown Road	Scagliotta, Richard A	20.52
MZ	174	197	3A	348 Dutchtown Road	Scagliotta, Richard A	2.27
MZ	174	201	3B	471 Long Hill Road	Patti, Stephanie M	22.1945
MZ	174	201	3A	471 Long Hill Road	Patti, Stephanie M	3.5
MZ	174	107.C	3B	291 Zion Road	Belnay, Glen & Dianne	1.998
MZ	174	107.C	3A	291 Zion Road	Belnay, Glen & Dianne	1.007
AG	174	18.A	3B	Amwell Road	Drake, Jay G & Hannah R	9
AG	174	20.A	3B	Amwell Road	Fenwick, Marian H	1.34
MZ	174	201.A	3B	Long Hill Road	Patti, Stephanie M	0.88
AG	175	36	3B	164 East Mountain Road	Butler, Stacy R Et Al C/O D Murdock	18.49
AG	175	36	3A	164 East Mountain Road	Butler, Stacy R Et Al C/O D Murdock	1
AG	175	38	3B	Mountain View Road	Mc Lachlan, John M & Barbara H	28.176
AG	175	41	3B	Pleasant View Road	Ames, Alan W	21.85
AG	175	42	3B	Mountain View Road	Higgins, Roy K	12.492
AG	175	42	3A	231 Mountain View Road	Higgins, Roy K	1.5

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
AG	176	9	3B	Mountain View Road	Higgins, Christopher D & Rebecca	5.89
AG	176	9	3A	276 Mountain View Road	Higgins, Christopher D & Rebecca	1.33
AG	176	11	3B	Mountain View Road	Higgins, R K & C L & Higgins, C D & R A	26.7419
AG	176	11.02	3B	Mountain View Road	Higgins, R K & Higgins, C D	3.032
AG	176	14	3B	Pleasant View Road	Atlantic Co Fund li, LP	24.4162
AG	176	15	3B	Pleasant View Road	Carrier Farms Foundation	17.6
AG	176	16	3B	East Mountain Road	Carrier Foundation	9.59
AG	176	16	3A	466 East Mountain Road	Carrier Foundation	0.59
AG	176	14.A	3B	Pleasant View Road	Carrier Clinic Foundation	17.6
AG	176	15.A	3B	Off Pleasant View Road	Carrier Clinic Foundation	30.49
AG	176	16.A	3B	East Mountain Road	Carrier Foundation	14.9
AG	177	25	3B	Mountain View Road	Ames, Alan W	12.656
AG	177	25	3A	175 Mountain View Road	Ames, Alan W	1
R	179	50	3B	Tara Drive	Thompson, W Bryce IV	1.55
R	179	51	3B	Tara Drive	Thompson, W Bryce IV	3.02
AG	179	34.C	3B	Tara Drive	Thompson, W Bryce IV	8.85
RA	182	2	3B	Sunnymead Road	Zwirko, Mary & E	10
I1	182	3.02	3B	Sunnymead Road	Malenchek, Robert C	19.398
M	182	9	3B	Sunnymead Road	Glen-Gery Corporation	51.82
M	182	11	3B	Hamilton Road	Glen-Gery Corporation	26.73
M	182	46	3B	Falcon Road	Glen-Gery Corporation	33.874
RA	182	2.A	3B	Sunnymead Road	Zwirko, Mary & Edward	2.708
RA	182	2.A	3A	181 Falcon Road	Zwirko, Mary & Edward	1
I1	183	35	3B	Sunnymead Road	General Tool Specialties Inc	5
G1	183	38.B	3B	Sunnymead Road	Glen-Gery Corporation	31.46
5	183.05	35	3B	Hamilton Road	Timko Family Associates LP	11.6
5	183.06	1	3B	Millstone River Road	Timko Family Associates LP	3.3
GI	183.06	1	3A	1324 Millstone River Road	Timko Family Associates LP	1
G1	198	2	3B	Hamilton Road	Mindel, Marchese, Ridless, Menkin Trst	423
GI	198	2.01	3B	Millstone River Road	Timko Family Associates LP	19.7
GI	198	5	3B	Amwell Road	Quirico, Dorothy Et Al	26.21
GI	198	6	3B	Amwell Road	Quirico, Dorothy	3.74
GI	198	6	3A	321 Amwell Road	Quirico, Dorothy	1.5
CDZ	198.01	1	3B	Amwell Road	Mindel, Marchese, Ridless, Menkin Trst	3.4
R	199	8	3B	Hamilton Road	Lipani, Barbara J	2
R	199	8	3A	22 Hamilton Road	Lipani, Barbara J	0.9
R	199	9	3B	Hamilton Road	Lipani, Vincent P & Barbara J	6
R	199	9	3A	28 Hamilton Road	Lipani, Vincent P & Barbara J	1.3
CR	199	19	3B	Hamilton Road	Glen-Gery Corporation	10.77
GI	199	22.02	3B	Hamilton Road	Mindel, Marchese, Ridless, Menkin Trst	6.789
HOO	199	50	3B	395 Amwell Road	32 Lindstrom Drive, LLC	5.5
HOO	199	50	3A	395 Amwell Road	32 Lindstrom Drive, LLC	1.85
R	199	10.A	3B	Hamilton Road	Lipani, Vincent P & Barbara J	8.14
GI	200.02	12	3B	279 Homestead Road	Ausimont Usa, Inc	7
GI	201	1	3B	Homestead Road	Reckitt & Colman Inc C/O A Murphy	41
GI	201	3	3B	Homestead Road	Reckitt & Colman Inc C/O A Murphy	18.4
GI	201	4	3B	Homestead Road	Urban, Emily	47.51
GI	201	4	3A	180 Homestead Road	Urban, Emily	1
GI	201	7	3B	Willow Road	Anri, Inc C/O Anton Heldmann	19.26
GI	201	8	3B	Hillsborough Road	Van Nuys, L Martin Est & Ina	75.5
GI	201	8	3A	219 Hillsborough Road	Van Nuys, L Martin Est & Ina	0.95

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
GI	201	9	3B	Hillsborough Road	Henbell Associates	16.718
GI	201	9	3A	141 Hillsborough Road	Henbell Associates	2.8
GI	201	7.A	3B	Willow Road	Hillsborough Campus LLC->Valley Nat	6.43
GI	202	6	3B	Hillsborough Road	Gale & Wentworth, LLC C/O B Cayci	75.15
GI	202	7	3B	Hillsborough Road	Van Nuys, L Martin Est & Ina	51.22
GI	202	9	3B	Hillsborough Road	Warmke, John T & Diane L	98.9
G1	202	9	3A	150 Hillsborough Road	Warmke, John T & Diane L	1
GI	202	11	3B	Willow Road	Van Nuys, L Martin Est & Ina	44.62
GI	202	11	3A	410 Willow Road	Van Nuys, L Martin Est & Ina	1
GI	202	12	3B	Willow Road	Conard, Samuel G	26.25
GI	202	13	3B	Willow Road	Durling, Harriet E	27
GI	202	13	3A	240 Willow Road	Durling, Harriet E	0.92
GI	202	15	3B	Township Line Road	Conard, Samuel G & Esther	76.571
GI	202	16	3B	Township Line Road	Conard Home Farm, LLC	59
GI	202	16	3A	220 Township Line Road	Conard Home Farm, LLC	1.02
CDZ	202	17.01	3B	Township Line Road	Conard, Samuel & Esther	5.229
CDZ	202	17.01	3A	210 Township Line Road	Conard, Samuel & Esther	1
CDZ	202	17.02	3B	Township Line Road	Conard Home Farm, LLC	78.938
CDZ	202	17.02	3A	Township Line Road	Conard Home Farm, LLC	0
GI	202	19	3B	Township Line Road	Rhoda, Douglas M & Susan B	6
GI	202	20	3B	Township Line Road	Trustees Maple Lane Farm	97.389
GI	202	8.A	3B	Hillsborough Road	Hyman, Abraham & Marianne	9.58
GI	202	8.A	3A	134 Hillsborough Road	Hyman, Abraham & Marianne	0
R	203	17	3B	Willow Road	Durling, Harriet E	47.53
R	203	18	3B	Willow Road	Conard-Warmke, LLC	51.13
R	203	18	3A	281 Willow Road	Conard-Warmke, LLC	1.22
RA	204	1	3B	Willow Road	Toll Nj IV, L.P. C/O H Mezzanotte	65.38
R	204	10	3B	Hillsborough Road	Hart Development LLC	10.8
R	204	10.04	3B	Hillsborough Road	Hart Development LLC	1.0577
R	204	10.05	3B	Hillsborough Road	Hart Development LLC	1.0348
R	204	10.06	3B	Hillsborough Road	Hart Development LLC	1.0348
R	204	10.07	3B	Hillsborough Road	Hart Development LLC	1.0348
RA	204	11	3B	Amwell Road	Yablonsky, F Est C/O J Yablonsky	39
RA	204	11	3A	282 Amwell Road	Yablonsky, F Est C/O J Yablonsky	1.99
RA	204	12	3B	Amwell Road	Digiorgio Holding Corp	14
RA	204	27	3B	Amwell Road	Dolak, Mary	67.5
RA	204	27	3A	254 Amwell Road	Dolak, Mary	0.5
RA	204	39	3B	Woods Road	Lydon, Kevin & Linda	37.57
RA	204	39	3A	153 Woods Road	Lydon, Kevin J	3
RA	204	1.A	3B	Willow Road	Toll Nj IV, L.P. C/O H Mezzanotte	60
RA	204	45.A	3B	Woods Road	Brzyski, Joseph & Irene Living Trust	13.22
RA	204	47.A	3B	Woods Road	Campos, C & Campos, P & Campos, C & Campos, R	10.07
CDZ	205	1.01	3B	Amwell Road	Mindel, Marchese, Ridless, Menkin Trst	4.5
RA	205	17	3B	Millstone River Road	Van Cleef, LP ; Riverside I, LLC	29.525
RA	205	18	3B	1570 Millstone River Road	Country Classics III & IV LLC	55.314
RA	205	18.01	3B	Millstone River Road	Norfleet, Bruce G & C Van Cleef-Norf	7.32
RA	205	18.01	3A	1570 Millstone River Road	Norfleet, Bruce G & C Van Cleef-Norf	2
RA	205	18.03	3B	Millstone River Road	Riverside Ii LLC	6.854
RAMZ	205	26	3B	Millstone River Road	Country Classics III & IV LLC	33.3429
RAMZ	205	26.02	3B	Millstone River Road	Norfleet, B G & Cynthia Van Cleef	7.3201
RAMZ	205	26.02	3A	1578 Millstone River Road	Norfleet, B G & Cynthia Van Cleef	2



*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
RA	205	26.04	3B	Woods Road	Riverside I LLC	18.291
RAMZ	205	28	3B	Millstone River Road	Country Classics III & IV, LLC	28.2532
RA	205	28.01	3B	Millstone River Road	Riverside I LLC/Van Cleef Family LP	9.1972
RAMZ	205	28.02	3B	Millstone River Road	Wilke, Jennifer & Gregory	7.9026
RAMZ	205	28.03	3B	Millstone River Road	Moskal, Jill	12.29
RAMZ	205	28.03	3A	1618 Millstone River Road	Moskal, Jill	2
RA	205	28.04	3B	Millstone River Road	Moskal, Jill	5
MZRA	205	28.06	3B	Millstone River Road	Van Cleef, John H	6.534
RAMZ	205	28.06	3A	1648 Millstone River Road	Van Cleef, John H & Bonnie L	1
RA	205	28.08	3B	Millstone River Road	13+2, LLC	5
RA	205	32	3B	Millstone River Road	Country Classics III & IV, LLC	11.3101
MZRA	205	32.02	3B	Millstone River Road	Country Classics Millstone Valley I	9.0949
RA	205	33	3B	Woods Road	Country Classics III & IV, LLC	11.23
RA	205	33.01	3B	Woods Road	Country Classics III & IV, LLC	8.5301
RA	205	33.01	3A	240 Woods Road	Country Classics III & IV, LLC	2.7
RA	205	48	3B	Millstone River Road	Matjes Associates LLC	27.189
RA	205	48	3A	1600 Millstone River Road	Matjes Associates LLC	2
RA	205	48.01	3B	Millstone River Road	D'altrui, Thomas A & Cheryl K & M & J	6.6599
RA	205	48.01	3A	1626 Millstone River Road	D'altrui, Thomas A & Cheryl K & M & J	2
RAMZ	205	48.02	3B	Millstone River Road	D'altrui, Thomas A & Cheryl K	2.0748
RAMZ	205	48.02	3A	1760 Millstone River Road	D'altrui, Thomas A & Cheryl K	2
RA	205	48.04	3B	Millstone River Road	Matjes Associates LLC	37.353
RA	205	48.04	3A	Millstone River Road	Matjes Associates LLC	0
RA	205	48.05	3B	Millstone River Road	Matjes Associates LLC	50.335
RA	205	48.06	3B	Millstone River Road	D'altrui, Thomas A	0.3075
MZ	205	48.06	3A	1760 Millstone River Road	D'altrui, Thomas A	2
MZ	205	18.A	3B	Millstone River Road	Van Cleef, John H	13.95
MZ	205	18.A	3A	1548 Millstone River Road	Van Cleef, John H Jr	1
MZ	205	26.A	3B	1574 Millstone River Road	Van Cleef, Cornelius I & Barbara	28.3669
MZ	205	26.A	3A	1574 Millstone River Road	Van Cleef, Cornelius I & Barbara	3.429
MZ	205	30.C	3B	Millstone River Road	Moevs, Robert & Maria T	5
RA	205.11	44	3B	58 Milburn Drive	Traver, Timothy & Judith A	6.7075
RA	205.11	44	3A	58 Milburn Drive	Traver, Timothy & Judith A	2
RA	205.15	14.01	3B	Millstone River Road	Moskal, Jill	1.0847
RA	205.15	15.01	3B	Millstone River Road	Moskal, Jill	1.0458
R	207	1.01	3B	Hillsborough Road	Drenchko, Peter & Elizabeth K	22.52
R	207	11.A	3B	Millstone River Road	De Cicco, Frederick Et Al	6.326
R	207	11.A	3A	2348 Millstone River Road	De Cicco, Frederick Et Al	1
AG	180.A	1	3B	Mountain View Road	Alvarez, Carlos & D'alessio, Blanca	16.16
AG	180.A	3	3B	Mountain View Road	The Atlantic Co Fund II, LP	71.83
AG	180.A	4	3B	Pleasant View Road	The Atlantic Co Fund II, LP	7.98
ED	180.A	6	3B	Route 206	Thompson, W Bryce IV	79.3
GI	200.B	4	3B	Amwell Rd / Clerico Ln	Carriage Farm LLC	16.138
R	200.B	9	3B	Steinmetz Road	Vatter, Herbert B & Catherine A	6.85
GI	200.B	15.01	3B	Clerico Lane	Elfo, F & J & Elfo, J & S	10.187
GI	200.B	15.01	3A	40 Clerico Lane	Elfo, F & J / Elfo, J & S	1
GI	200.B	16	3B	Clerico Lane	Elfo, Carol A & Elfo, Jeffrey J	13.403
GI	200.B	16	3A	20 Clerico Lane	Elfo, Carol A & Elfo, Jeffrey J	1
GIRA	200.B	17	3B	Willow Road	Montrasio, Vincent A	73.04
GIRA	200.B	17	3A	660 Willow Road	Montrasio, Vincent A	1
RA	200.B	18	3B	Willow Road	Toll Nj IV, LP C/O H Mezzanotte	9.6

*Chapter 1 Appendix: Hillsborough Township Farm Inventory*

**Inventory of Hillsborough Township Farms**

(Source: New Jersey Association of County Tax Boards. Accessed November 9, 2007)

Zone	Block	Lot	Class	Property Location	Owner's Name	Acreage
GI	200.B	20	3B	Clerico Lane	Clerico, Angelo	37.29
GI	200.B	20	3A	60 Clerico Lane	Clerico, Angelo	0.5
GI	200.B	32	3B	Homestead Road	Smilowitz, H & Irving Kerzner	68.815
CDZ	200.B	33	3B	Homestead Road	Shockley, Linda	16
CDZ	200.B	33	3A	189 Homestead Road	Shockley, Linda	5
Total Acres:						11921.61



## Municipal Planning Incentive Grant **APPLICATION**

Municipality: Hillsborough  
County: Somerset

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### **STATE AGRICULTURE DEVELOPMENT COMMITTEE**

#### **Farmland Preservation Program Municipal Planning Incentive Grant Program 2009 Funding Round**

For information regarding the Planning Incentive Grant Program please reference the following statutes and regulations:

- Agriculture Retention and Development Act – N.J.S.A 4:1C-11, et seq.
- Planning Incentive Grant Statute – N.J.S.A. 4:1C-43.1
- Farmland Preservation Program Regulations – N.J.A.C. 2:76
  - Municipal Planning Incentive Grant Regulations – N.J.A.C. 2:76-17A

For additional questions please contact the SADC at (609) 984-2504.

For SADC use only

SADC ID# \_\_\_\_\_

**Date Received**

**Staff Reviewer**

## **GRANT ELIGIBILITY CHECKLIST**

All checklist items are required prerequisites for Municipal Planning Incentive Grant eligibility.  
*See N.J.A.C. 2:76-17.3*

- ☒ 1. **Establishment of an agricultural advisory committee.**
- ☒ 2. **A Municipal Comprehensive Farmland Preservation Plan developed in accordance with N.J.A.C. 2:76-17A.4 and SADC Guidelines for Developing Municipal Comprehensive Farmland Preservation Plans**
- ☒ 3. **Establishment and maintenance of a dedicated source of funding for farmland preservation, including but not limited to:**
  - ☒ A Dedicated Tax
  - ☐ Repeated Annual Appropriations
  - ☐ Repeated Issuance of Bonded Indebtedness
  - ☐ Other (*Please describe*)
- ☒ 4. **Adoption of a right-to-farm ordinance** (*attach copy*)

## **SUBMISSION REQUIREMENT CHECKLIST**

All checklist items are required for administrative completeness of this application.  
Submissions must be received by the SADC by December 15, 2007.

- ☒ 1. **Completed Municipal Planning Incentive Grant application**
- ☒ 2. **A Municipal Comprehensive Farmland Preservation Plan**, that conforms to SADC Guidelines for Developing Municipal Comprehensive Farmland Preservation Plans, submitted in both hardcopy and electronic format.
- ☒ 3. **A Municipal Planning Incentive Grant Project Area Summary Form for each identified project area**
- ☒ 4. **Digital files of the following in an ArcGIS format or best available:**
  - **Agricultural development areas**
  - **Project areas**
  - **Targeted farms**
  - **Preserved Farmland**
  - **Farms with municipal, county and/or SADC final approval**
  - **Other deed restricted farmland**
  - **Farms enrolled in an eight-year program**
  - **Other preserved open space compatible with agriculture**
  - **Municipal soils layer showing prime, statewide and unique soils.**

*ArcGIS files are to be drawn in New Jersey State Plane Coordinate System coordinates (feet), projected in the North American Datum of 1983 (NAD83) and transmitted on a Windows compatible 3.5-inch diskette or Windows compatible CD ROM.*

- ☒ 5. **Proof of notification to county.** *See N.J.A.C. 2:76-17A.6 (b)*
- ☒ 6. **Current agriculture advisory committee member list.**

### **APPLICATION INFORMATION:**

Municipal PIG Administrator (Primary Contact): Robert Ringelheim

Address: 379 South Branch Rd

City: Hillsborough

State: NJ Zip Code: 08844

Email: rringelheim@hillsborough-nj.org

Phone: 908-369-8382

Fax: 908-369-9718

Date of notification to county: 9/15/2007

*See N.J.A.C. 2:76-17A.6(b) (Attach additional sheets if necessary)*

Date of application package submittal to SADC: 12/17/07

#### **Project Areas:**

*For each project area please attach a completed Project Area Summary Form.*

*Add additional rows as needed.*

<b>Project Area Name</b>	<b>Project Area Aggregate Size (Acres)</b>	<b>Project Area Density (%)</b>	<b>Total # of Targeted Farms</b>	<b>Total Acreage of Targeted Farms</b>	<b>Targeted Farm Soil Productivity (%)</b>	<b>Total Estimated Cost For Targeted Farm Easement Purchase</b>
Amwell Valley	2269.08	87.32	23	1024.48	82.72	\$20,489,600
Mill Lane	782.1	95.62	6	399.38	95.54	\$8,027,600
South	808.93	98.26	7	262.2	92.25	\$5,244,000
<b>Project Area Totals</b>						
<b>Total Project Area Acreage</b>		<b>Total # of Targeted Farms</b>		<b>Total Acreage of Targeted Farms</b>	<b>Total Estimated Cost</b>	
3860.11		36		1686.06	\$33,761,200	

#### **Preservation Goals:**

1. One Year Target: 100 Acres; Number of farms: 1
2. Five Year Target: 500 Acres; Number of farms: 5
3. Ten Year Target: 1000 Acres; Number of farms: 10

## **MUNICIPAL POLICY INFORMATION:**

*If the answer is YES to the following, please attach a copy of the adopted policy, resolution or ordinance of the Agriculture Advisory Committee or municipal governing body pertaining to the question. If no policy, resolution or ordinance has yet been adopted please attach a description of the position the municipality has taken. A NO answer is acknowledgement that the municipality relies upon SADC policy or regulation.*

*The word "policy" is intended broadly to include formal and informal policies, guidelines and rules established by the municipality.*

### **Minimum Eligibility Criteria:**

Does the municipality have a minimum eligibility criteria or standards policy for solicitation and approval of applications for farmland preservation? *See SADC regulation N.J.A.C. 2:76-6.20*

Yes ☐ No ☒

### **Municipal Ranking Criteria:**

Does the municipality have a ranking criteria policy to prioritize farms for preservation funding?  
*See SADC regulation N.J.A.C. 2:76-6.16 & SADC Policy P-14E*

Yes ☐ No ☒

### **Agricultural Labor Housing:**

Does the municipality have a policy on agricultural labor housing for preserved farms?

Yes ☒ No ☐

Is the municipality's policy adopted by ordinance? *(If YES, please attach)*

Yes ☒ No ☐

### **House Replacement:**

Does the municipality have a policy for replacement of a residence on preserved farmland?

Yes ☐ No ☒

### **Residual Dwelling Site Opportunity Allocation:**

Does the municipality have a policy for the allocation of Residual Dwelling Site Opportunities?  
*See SADC regulation N.J.A.C. 2:76-6.17 and Policy P-28*

Yes ☐ No ☒

### **Exemptions:**

Does the county have a policy for the granting of severable and non-severable exceptions?  
*See SADC Policy P-29*

Yes ☐ No ☒

### **Other Policies:**

Does the municipality have other policies related to farmland preservation?

Yes ☐ No ☒

*If Yes, please list and describe:*



## **FUNDING INFORMATION:**

### **Municipal Funding:**

*Please check all that apply:*

☒ Municipal dedicated open space/farmland preservation tax: \$0.41 / \$100

○ Annual revenue generated from dedicated tax: \$1,477,541 (2007)

○ Annual tax revenue dedicated to farmland preservation: \$

☐ Repeated annual appropriations dedicated to farmland preservation:

*Please describe:*

☐ Repeated Issuance of Bonded Indebtedness:

*Please describe:*

☒ Other funding sources:

*Please describe: SADC and CADB*

Total annual revenue dedicated to farmland preservation by the municipality: \$300,000

### **Installment Purchase Agreements:**

*If the answer is YES to any of the following, please attach a copy of the adopted CADB policy or resolution explaining the county installment purchase program. If no policy has yet been adopted please attach a description of the program.*

Does the municipality permit the use of installment purchase agreements?

Yes ☐ No ☒

Does the municipality currently use installment purchase agreements?

Yes ☐ No ☒

Installment Purchase Agreements are: *(Please check all that apply)*

☐ Always required

☐ Required on a case by case basis

☐ Available on a voluntary basis

### **Cost Projections Associated with One, Five and Ten Year Goals:** *(see page C for established goals)*

Year	Acquisition Goal (Acres)	Total Projected Cost	Estimated Local Cost Share	Estimated County Cost Share	Estimated State Cost Share	Other Contributors
1	100	\$2,000,000	\$400,000	\$400,000	\$1,200,000	
5	500	\$10,000,000	\$2,000,000	\$2,000,000	\$6,000,000	

10	1000	\$20,000,000	\$4,000,000	\$4,000,000	\$12,000,000	
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### Estimate of Easement Purchase Cost on All Targeted Farms:

*Add additional rows as needed.*

Project Area Name	Acres	Average Easement Price per Acre	Total Estimated Project Cost	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
Amwell Valley	1024.48	\$20,000	\$20,489,600	\$4,097,920	\$4,097,920	\$12,293,760	
Mill Lane	399.38	\$20,000	\$7,987,600	\$1,597,520	\$1,597,520	\$4,792,560	
South	262.2	\$20,000	\$5,244,000	\$1,030,312	\$1,030,312	\$3,152,400	

### Targeted Farm Totals

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
1686.06	\$33,721,200	\$6,744,240	\$6,744,240	\$20,232,720	

How was the cost of purchasing development easements on the targeted farms determined?

- ☒ Existing appraisal data
- ☐ Appraisal of the entire project area
- ☐ Other

*If Other, please describe:*

S:\PLANINCENTGRANT\Applications\Applications and Exec. Summary\Forms for Website\Annual Municipal PIG Application Form.doc

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- [1] Removal of trees in areas of proposed buildings, roads, parking lots and detention basins and within 20 feet of such improvements.
- (d) A tree removal and landscaping plan shall be submitted to the Board for its review and approval.
- (e) The location and species of all trees with a diameter at breast height of six inches or greater to be removed on a surveyed drawing.
- (f) The location and species of each tree within the dripline of each tree to be removed.
- (g) The quality, quantity and limits of vegetation on the remainder of the site and within 200 feet of the property line.
- (h) The location of existing and proposed buildings, including parking areas, detention basins and other stormwater facilities.
- (i) Existing contours and proposed grading.
- (j) Proposed preservation methods of trees to remain.
- (k) The location of replacement trees, including a replacement schedule indicating species, quantities and size in accordance with Subsection J(7)(l) below.
- (l) Mitigation. The landscaping plan shall adhere to the following:
- [1] Replacement trees shall be required at rate of one per two. For every two trees removed, one shall be replaced.
- [2] Replacement species. Trees shall be replaced with the same species. In the case where the species is known to be disease-prone or is otherwise not ecologically or aesthetically appropriate, other species shall be permitted.
- [3] Planting standards. All replacement trees by nursery growth, certified and guaranteed and deciduous trees shall have a minimum caliper 2.5 inches or the industry standard equivalent for the species if ornamental. Coniferous trees shall have an average height of seven feet at the time of planting. All trees shall be balled and burlapped and planted as per Township of Hillsborough standards.

§ 188-99.3. Agricultural District. [Added 12-30-2002 by Ord. No. 2002-48; amended 9-9-2003 by Ord. No. 2003-14]

A. Purposes. The purposes of the Agricultural District are to:

- (1) Encourage land use patterns and development practices which enhance Township, county and state efforts to retain farmland and protect and preserve agricultural activity within the Township.

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- (2) Protect the substantial public investments in farmland preservation by limiting the extent of nonfarm development in the Agricultural District.
- (3) Promote the continuation of farming in the Agricultural District as a valuable component of the local economy.
- (4) Protect prime soils, soils of state-wide importance and soils of local importance for their long-term value as an essential natural resource in any agricultural or horticultural pursuit.
- (5) Permit limited nonfarm residential development in a manner and at locations that will be consistent with the continuation of farming.
- (6) Support the preservation of existing farm operations and limit conflicts between agricultural and nonagricultural uses by encouraging the separation of residential development from active farms.
- (7) Impose lot suitability requirements upon residential lots in order to accommodate individual well and septic disposal systems, which are required in the Agricultural District.
- (8) Advance the goals of the Master Plan for the Agricultural District by protecting agricultural lands and promoting agriculture as a valuable component of the local economy.

## B. Permitted principal uses:

- (1) Agricultural uses and farms, provided that:
  - (a) The keeping or raising of swine shall not be allowed except as part of a general farming operation on a property of not less than 25 acres. No more than 100 swine shall be kept on any property.
  - (b) No building, fenced run or other enclosure for the shelter of swine shall be closer to any property line or zone boundary than 200 feet.
  - (c) No building erected entirely or partially for the storage of hay or other flammable material shall be closer than 100 feet to any property line.
  - (d) No building for the shelter of fowl or farm livestock, other than swine, shall be closer to any side or rear property line or residential zone boundary than 100 feet.
- (2) Detached, single-family dwellings.
- (3) Public parks.
- (4) Farm-based businesses.

## C. Accessory uses:

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- (1) Off-street parking and loading.
- (2) Farm stands located on a farm and conforming to the following requirements:
  - (a) The sale of manufactured, processed or refined food product or products packaged off site shall not be permitted, except for:
    - [1] Live plant material which has been packaged on site or off site, in planters, pots or other means of containment for ease of transporting the products; or
    - [2] Food products where the agricultural products are grown on site or on the farm management unit.
  - (b) The sale of manufactured, processed or refined nonfood products, chemical fertilizers and sprays, equipment and similar items shall not be permitted.
  - (c) The farm stand shall not exceed 2,000 square feet in size.
  - (d) Outside sales or display areas for the display of produce, live plant material and other products grown or otherwise produced on the farm management unit shall not exceed the building coverage of the farm stand, and shall be subject to the same setback and parking requirements of the farm stand.
  - (e) Access shall be controlled, and driveways shall not exceed 30 feet in width.
  - (f) An adequate, nonpaved parking area shall be provided. Parking shall be provided at a minimum ratio of one space for every 200 square feet of gross floor area of farm stand and associated permitted outside sale or display area, but in no case shall there be fewer than three parking spaces for any farm stand.
  - (g) One unlighted nonseasonal sign, no larger than 15 square feet shall be permitted; a freestanding sign shall not exceed eight feet in height and shall be located at least 10 feet from the street line. Seasonal agricultural signs shall be permitted totaling 20 square feet, not exceeding two signs per lot frontage along each street.
  - (h) Minor site plan approval by the Planning Board shall be required for a permanent farm stand that exceeds 250 square feet; otherwise a zoning permit is required.
  - (i) Farm stands existing as of September 9, 2003 shall be exempt from the requirements of Subsection C(2)(a) through (h) above.
- (3) Agricultural uses and farms, provided that:
  - (a) The keeping or raising of swine shall not be allowed except as part of a general farming operation on a property of not less than 25 acres. No more than 100 swine shall be kept on any property.

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- (b) No building, fenced run or other enclosure for the shelter of swine shall be closer to any property line or zone boundary than 200 feet.
- (c) No building erected entirely or partially for the storage of hay or other flammable material shall be closer than 100 feet to any property line.
- (d) No building for the shelter of fowl or farm livestock, other than swine, shall be closer to any side or rear property line or residential zone boundary than 100 feet, except that no range shelter or other building used to house a backyard flock shall be closer to any side or rear property line than 50 feet.
- (4) Garages, storage sheds, tennis courts and swimming pools for single-family homes, and uses customarily associated with the above uses, provided that such accessory uses are subordinate to the principal use, do not change the character of the principal use and serve only the principal use.
- (5) Home occupations. (See § 188-54.)

## D. Conditional uses:

- (1) Veterinary hospitals.
- (2) Churches, nursery schools, public and private schools and child-care centers.
- (3) Utility facilities required to provide direct service of the utility to the consumers, such as transformers and pumping stations, but excluding warehouses, repair and maintenance garages, offices, storage yards and similar commercial- and industrial-oriented facilities.
- (4) Club pools and recreation areas.
- (5) Volunteer fire companies and first-aid or rescue squads.
- (6) Horse boarding stables.
- (7) Farm labor housing facilities for farm workers employed on the farm where such housing facilities are located, provided that:
  - (a) The minimum size of the farm shall be 15 acres.
  - (b) Such housing facilities shall only be occupied during the period of time when workers are engaged in agricultural activities.
  - (c) Such facilities shall comply with all existing statutes, law, rules and regulations of the federal government and State of New Jersey concerning farm labor housing.
  - (d) Such facilities shall comply with all applicable rules and regulations governing provision of water supply and sanitary waste disposal facilities.
  - (e) Such housing shall be set back at least 100 feet from any public street and at least 100 feet from any property line.

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- (f) Such facilities shall be removed upon the permanent cessation of any farm operation.

## E. Area, yard and bulk regulations.

Permitted and accessory uses	Area <sup>1</sup> (acres)	Minimum Lot		Minimum Yard			Maximum	
		Width (feet)	Depth (feet)	Front (feet)	Side (feet)	Rear (feet)	Height (feet)	Total Ratio Impervious
Agricultural use and farm	5	300	300	NA	NA	NA	60	8%
<del>Detached</del>	<del>10<sup>2</sup></del>	<del>400</del>	<del>400</del>	<del>150</del>	<del>75</del>	<del>75</del>	<del>35</del>	<del>8%</del>
Single-family dwelling	2 <sup>3</sup>	150	250	75	50	50	35	12%
Farm-based business	50	300	300	150	100	100	60	8%
Farm stand	5	300	300	25	50	50	35	8%
Conditional uses								
Vet hospital	5	300	300	100	100	100	20	8%
Firehouse, church, school, nursery school, first aid, child-care	2	200	200	100	50	100	30	12%
Farm laborhousing	15	300	300	75	50	60	35	8%
Utility facilities	2	200	200	100	50	50	20	12%
Club pools, horse boarding stable	10	400	400	150	75	75	35	8%

## Notes:

<sup>1</sup> All residential lots shall meet "lot suitability" requirements as defined in § 188-3<sup>2</sup> For conventional subdivisions<sup>3</sup> For lot-size averaging or open lands subdivisions.

## F. Buffers.

- (1) Any open lands lot created by a subdivision pursuant to § 188-99.3G(2)(b) of this chapter shall have a buffer fence located within five feet of the residential lot line adjacent to lands that are deed-restricted for agricultural purposes. Such buffer fence shall consist of a board or split-rail fence.
- (2) The buffer areas for nonresidential uses shall adhere to the requirements of §188-38, Buffers, and §188-68, Off-street parking and loading.

## G. Land development options.

- (1) Conventional zoning. Zoning permitted as a matter of right in the Agricultural District. Requirements shall be as follows:
  - (a) Minimum residential lot area: 10 acres.
  - (b) Each lot created by conventional subdivision shall satisfy lot suitability requirements.



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- (c) Neighborhood tree conservation buffers measuring at least 100 feet in width shall be established around the perimeter of any tract proposed for conventional residential subdivision. No existing tree with a diameter at breast height (DBH) in excess of four inches shall be removed from the neighborhood tree conservation buffer. In addition to existing trees located within the neighborhood tree conservation buffer, this buffer shall be planted with a dense mix of deciduous and coniferous trees, ornamental and flowering trees and shrubs, indigenous to the area. The buffer shall be planted at a density of 25 trees/acre and 25 shrubs/acre and shall not be bermed. All plant materials shall be nursery quality, balled and burlapped, and planted in accordance with Township standards. Deciduous trees shall be at least 2 1/2 inches to three inches caliper, conifers shall be at least six feet to eight feet in height, ornamental trees shall be at least eight feet to 10 feet in height, and shrubs shall be at least 24 inches to 36 inches in height at the time of planting. Neighborhood tree conservation buffers shall be placed in a conservation easement. The conservation easement shall be subject to review and approval by the Township Engineer and Township Attorney and shall be recorded prior to the applicant recording any subdivision map or deed. Existing structures located within a neighborhood tree conservation buffer as of the date of adoption of this section may remain within the buffer; however, additions or expansions to the nonconforming structure are not permitted within the buffer.
- (2) Permitted zoning options. The following additional zoning options are permitted in the Agricultural District and are encouraged to be utilized in lieu of conventional zoning.
- (a) Lot-size averaging subdivision option. This option is provided to promote the retention of larger parcels for agricultural uses and/or conservation of woodlands or other environmentally sensitive lands, and to encourage and promote flexibility, economy and environmental soundness in subdivision layout and design. The following standards shall apply to such lot-size averaging subdivisions:
- [1] Minimum tract size shall be 40 acres.
  - [2] Minimum residential lot area shall be two acres. (See Subsection E.)
  - [3] Maximum dwelling unit density shall be 0.1 unit/acre.
  - [4] Maximum dwelling unit yield shall be based on the design of a fully conforming, variance-free conventional subdivision layout.
  - [5] At least 50% of the lots created in a lot-size averaging subdivision shall be no larger than 2.5 acres in area.
  - [6] All lots created under this subdivision option shall be deed-restricted against further subdivision.

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- [7] Notwithstanding the minimum tract requirement above, a landowner may create up to two small lots containing two to three acres each, provided that the portion of the required 10 acres per unit that is not included in the small lot(s) but is included in lands remaining, shall be deed-restricted against further residential development.
  - [8] Prior to submission of a formal subdivision application, the applicant shall submit a concept plan of the lot-size averaging plan to the Planning Board for review and comment in accordance with § 188-99.3H of this chapter.
  - [9] The overall site design of the development utilizing this option shall foster the following objectives: retention of large contiguous farmland and woodland areas; stream corridor and wetlands preservation; steep slope protection; reduction of impervious coverage; efficient traffic circulation; and sensitivity to the site's natural features, topography and relationship to open lands on neighboring parcels.
  - [10] Natural features such as trees, hilltops, meadows, natural terrain, open waters and natural drainage ridge lines shall be preserved wherever possible in designing any development containing such features. As part of the subdivision or site plan review process, development should be designed to preserve scenic vistas and views of agricultural fields, cultural/historic landmarks and unique geographic and topographic features. On hillsides, development shall be sited below the ridgeline, and the height and location of development should protect unobstructed views of the ridges from public roadways. In open fields, development shall be sited near the edges of fields, adjacent to existing treelines wherever possible.
- (b) Open lands ratio subdivisions. This option is provided to promote retention of large farm tracts and the aggregation of smaller farm parcels through the granting of density incentives to those who comply with the requirements set forth below. It is also intended to encourage and promote flexibility, economy and environmental soundness in subdivision layout and design. The following standards shall apply to such open lands subdivisions:
- [1] At least 65% of the tract shall be designated as "open lands" and shall, as a condition of approval of the development, be deed-restricted for agricultural use in accordance with the requirements of § 188-99.3J of this chapter. All lots qualifying as open lands shall be permitted a primary residence and other permitted accessory buildings and uses, as provided in this chapter.
  - [2] At least 50% of designated open lands shall be some combination of unconstrained land area, prime farmland soils, soils of statewide importance, soils of local importance and/or mature woodlands.
  - [3] Minimum residential lot area shall be two acres for the non-open lands residential lots created by the subdivision.(See Subsection E.)

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- [4] Minimum open lands lot area shall be 10 acres.
  - [5] Maximum residential dwelling unit density shall be 0.15 unit per acre for the entire tract.
  - [6] Prior to submission of a formal subdivision application, the applicant shall submit a concept plan of the open lands ratio subdivision plan to the Planning Board for review and comment in accordance with § 188-99.3H of this chapter.
  - [7] For tracts of 100 acres or less, the open lands shall be contained in one deed-restricted contiguous parcel; for tracts of larger than 100 acres, the open lands may be composed of noncontiguous parcels, provided that each open lands parcel shall contain at least 50 contiguous acres.
  - [8] All lots created under this subdivision option shall be deed-restricted against further subdivision.
  - [9] The overall site design of the development utilizing this option shall foster the following objectives: retention of large contiguous farmland and woodland areas; stream corridor and wetlands preservation; steep slope protection; reduction of impervious coverage; efficient traffic circulation; and the site's natural features, topography and relationship to open lands on neighboring parcels.
  - [10] Natural features such as trees, hilltops, meadows, natural terrain, open waters and natural drainage ridge lines shall be preserved wherever possible in designing any development containing such features. As part of the subdivision or site plan review process, development should be designed to preserve scenic vistas and views of agricultural fields, cultural/historic landmarks and unique geographic and topographic features. On hillsides, development shall be sited below the ridgeline and the height and location of development should protect unobstructed views of the ridges from public roadways. In open fields, development shall be sited near the edges of fields, adjacent to existing or proposed tree lines or hedgerows wherever possible.
- H. Concept plan review. An applicant for a lot-size averaging or open lands subdivision shall submit a concept plan of the subdivision to the Planning Board for review and comment in accordance with § 188-99.3H(1)(b) of this chapter. At the request of a developer, the Planning Board shall grant a concept review of a plan for which the developer intends to submit a formal application for development.
- (1) Procedure.
    - (a) The developer shall not be required to submit any application fees for informal concept plan review; however, no professional review(s) shall be undertaken unless the developer agrees to pay for said review(s) and files the escrow fees specified for concept plan review in § 188-28.

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- [1] The developer shall not be bound by any plan for which concept review is requested, and the approving authority shall not be bound by any such review.
  - [2] A developer desiring to have a concept plan reviewed by the approving authority shall so notify the administrative officer at least three weeks prior to a regularly scheduled meeting of the approving authority at which the concept review is requested. The administrative officer shall thereafter notify the developer of the time and place, which has been scheduled by the approving authority for concept review.
- (b) Concept plan required details. The following information shall be provided for concept plan review:
- [1] A plan at a scale of not less than one inch equals 100 feet, clearly and legibly drawn.
  - [2] A key map at a scale of not less than one inch equals 800 feet showing the entire development and its relation to surrounding areas.
  - [3] Existing structures and uses.
  - [4] Existing and proposed street and lot layout in conformance with ordinance bulk standards, showing that portion proposed for development in relation to the entire tract.
  - [5] Area of original tract.
  - [6] Zoning district and North arrow.
  - [7] Block and lot number for the tract.
  - [8] Proposed method of water supply and sewage treatment.
  - [9] Proposed access points and roadways.
  - [10] Existing topography and contours based on United States Geological Survey (USGS) data, unless more detailed data is available, illustrating areas with slopes of 15% or greater.
  - [11] Natural resources and features, such as forested areas, wetlands, major rock outcroppings, lakes, ponds, streams, drainage ditches, impoundments and watercourses.
  - [12] Soil mapping and interpretations based on the United States Department of Agriculture (USDA) Soil Survey for Somerset County.
  - [13] Location of flood hazard areas and floodways.
  - [14] Existing easements, deed restrictions and covenants.
  - [15] A written summary of how the concept plan meets the goals and objectives of § 188-99.3G(2)(a) or 188-99.3G(2)(b), as appropriate.

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## LAND USE AND DEVELOPMENT

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[16] Certification that the applicant is the owner of the land or the owner's duly authorized agent, or that the owner has given his consent under an option agreement or a contract to purchase.

I. Undersized lots.

- (1) Any lot of at least five acres located in the Agricultural Zoning District, which was lawfully created before September 9, 2003, and which is used as a farm, may contain a farm building, located in accordance with requirements of Subsection E; any farm building on such lot may be enlarged, and any farm building thereon which shall accidentally be destroyed may be replaced in the same location as it occupied on the lot immediately prior to said accidental destruction, and shall not constitute a nonconforming structure.
- (2) Any lot containing a single-family dwelling and having a lot area of less than 10 acres but containing at least three acres located in the Agricultural Zoning District, lawfully created before September 9, 2003, may continue to be used for one single-family dwelling as a principal use without such lot being deemed to have merged with any adjoining land in the same ownership. Any single-family dwelling or accessory structure on such lot may be enlarged, and any single-family dwelling or accessory structure thereon which shall accidentally be destroyed may be replaced in the same location as it occupied on the lot immediately prior to said accidental destruction, and shall not constitute a nonconforming use or structure, provided that the following shall apply:
  - (a) Where the lot has a lot area of at least three acres, the following requirements shall apply:
    - [1] Minimum lot width: 250 feet.
    - [2] Minimum lot depth: 250 feet.
    - [3] Minimum front yard: 75 feet.
    - [4] Minimum side yard: 50 feet.
    - [5] Minimum rear yard: 50 feet.
    - [6] Maximum impervious surface: 8%.
    - [7] Maximum building height: 35 feet.
  - (b) Where the lot has a lot area of less than three acres, the following requirements shall apply:
    - [1] Minimum lot width: 150 feet.
    - [2] Minimum lot depth: 200 feet.
    - [3] Minimum front yard: 50 feet.
    - [4] Minimum rear yard: 40 feet.

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- [5] Minimum side yard: 30 feet.
- [6] Maximum impervious surface: 10%.
- [7] Maximum building height: 35 feet.

J. Agricultural deed restriction. For purposes of complying with the requirements of this chapter, any requirement imposing an agricultural deed restriction or a deed restriction for agricultural purposes or uses means that the landowner shall deed restrict his/her land in accordance with the following requirements:

- (1) The deed restriction is in perpetuity and binds the landowner, and his/her heirs, personal representatives, successors, and assigns.
- (2) Only agricultural use and production is permitted on the deed-restricted lands. "Agricultural use" shall mean the use of deed-restricted lands 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) All nonagricultural uses, if any, existing on this deed-restricted land may be continued and any structure may be restored or repaired in the event of partial destruction thereof, subject to the following:
  - (a) No new structures or the expansion of preexisting structures for nonagricultural use is permitted;
  - (b) No change of the preexisting nonagricultural use is permitted;
  - (c) No expansion of the preexisting nonagricultural use is permitted; and
  - (d) In the event that the preexisting nonagricultural use is abandoned, its use is extinguished.
- (4) No sand, gravel, loam, rock or other minerals shall be deposited on or removed from the deed-restricted lands, except only those materials required for the agricultural purposes for which it is used.
- (5) No dumping or placing of trash or waste materials shall be permitted on the deed-restricted lands.
- (6) No activity shall be permitted on the deed-restricted lands 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 deed-restricted lands.
- (7) A landowner may use the deed-restricted lands 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

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## LAND USE AND DEVELOPMENT

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deed-restricted lands for agricultural production and that the activities only utilize the deed-restricted land in its existing condition.

- (8) A landowner may use, maintain and improve existing buildings on the deed-restricted lands for agricultural, residential and recreational uses subject to the following conditions:
- (a) Improvements to agricultural buildings shall be consistent with agricultural uses;
  - (b) Improvements to residential buildings shall be consistent with agricultural or single-family 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 deed-restricted lands; and
  - (c) Improvements to recreational buildings shall be consistent with agricultural or recreational uses.
- (9) A landowner may construct any new buildings for agricultural purposes. The construction of any new buildings for residential use shall be prohibited, except as follows:
- (a) To provide structures for housing of agricultural labor employed on the property, but only with the approval of the entity holding the deed restriction.
  - (b) To construct a single-family residential building anywhere on the property in order to replace any single-family residential building in existence at the time of the deed restriction, but only with the approval of the entity holding the deed restriction.
- (10) The deed restriction shall be enforceable by the Township of Hillsborough through its duly appointed zoning and planning enforcement official.
- (11) It is the intention of this chapter that the agricultural deed restriction be substantially in the form utilized in the New Jersey Agricultural Retention and Development Program. Consequently, the agricultural deed restriction shall be modified and augmented as required to follow the form utilized by such program. In any event, the deed restriction shall be in recordable form and shall be submitted to and approved by the Township Attorney as a condition of the involved development approval.
- K. Right to farm. Some lands within the Agricultural District are used for commercial agricultural production. Adjoining landowners and other users of property may be subjected to inconvenience, discomfort, and the possibility of injury to property and health arising from normal and accepted agricultural practices and operations, including but not limited to noise, odors, dust, the operation of machinery of any kind, including aircraft, the storage and disposal of manure, the application of fertilizers, herbicides, and pesticides. Owners, residents and users of property in the Agricultural District are hereby put on official notice that the New Jersey Right to Farm Act, N.J.S.A. 4:1C-1 et seq., may bar them from obtaining a legal judgment against such normal agricultural



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operations. Any commercial farm that conforms to agricultural management practices recommended by the State Agricultural Development Committee and adopted pursuant to the provisions of the "Administrative Procedure Act," P.L. 1968, c.410 (N.J.S.A. 52:14B-1 et seq.), or whose specific operation or practice has been determined by the Somerset County Agricultural Board to constitute a generally accepted agricultural operation or practice, and which complies with all relevant federal or state statutes or rules and regulations adopted pursuant thereto, and which does not pose a direct threat to public health and safety may:

- (1) Produce agricultural and horticultural crops, trees and forest products, livestock, and poultry and other commodities as described in the Standard Industrial Classification for agriculture, forestry, fishing and trapping;
- (2) Process and package the agricultural output of the commercial farm;
- (3) Provide for the operation of a farm market, including the construction of building and parking areas in conformance with municipal standards;
- (4) Replenish soil nutrients and improve soil tilth;
- (5) Control pests, predators and diseases of plants and animals;
- (6) Clear woodlands using open burning and other techniques, install and maintain vegetative and terrain alterations and other physical facilities for water and soil conservation and surface water control in wetland areas;
- (7) Conduct on-site disposal of organic agricultural wastes;
- (8) Conduct 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
- (9) 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 (N.J.S.A. 52:14B-1 et seq.).



# Township of Hillsborough

COUNTY OF SOMERSET  
MUNICIPAL BUILDING  
379 SOUTH BRANCH ROAD  
HILLSBOROUGH, NEW JERSEY 08844

[www.hillsborough-nj.org](http://www.hillsborough-nj.org)

TELEPHONE  
(908) 369-4313

September 15, 2007

Ms. Tara Kenyon  
Somerset County Planning Board  
20 Grove Street  
Somerville, NJ 08876

RE: Township of Hillsborough  
Municipal Farmland Planning Incentive Grant  
NOTICE OF INTENT to apply for 2008 SADC and CADB Funding

Dear Tara:

The Township of Hillsborough is submitting this Notice of Intent to apply for funding as part of its Municipal Farmland Planning Incentive Grant, pursuant to N.J.A.C. 2:76-17A.6 Municipal Planning Incentive Grants – Municipal application procedures. We are hereby providing the County with the required 90-day notice that the Township intends to apply for funds to the State Agriculture Development Committee (SADC) by its December 15, 2007 deadline.

The Township will work closely with the County on the development of its application, project areas, and targeted list of farms to ensure consistency and coordination between agencies. We will be following up this letter with a Draft Updated Farmland Preservation Plan and farmland target list, prior to the December 15, 2007 SADC deadline.

We thank the County Agriculture Development Board for its past partnership on our farmland preservation program and look forward to future successful farmland preservation projects in 2008.

Sincerely,

Kevin P. Davis, RMC, QPA  
Administrator/Township Clerk

cc Susan Craft, Executive Director, SADC  
Sam Conard, Chair, Hillsborough Township Agriculture Advisory Committee  
Barbara Heskins Davis, Morris Land Conservancy  
Linda Mead, D&R Greenway Land Trust



# Municipal Planning Incentive Grant PROJECT AREA SUMMARY FORM

Project Area: Amwell Valley  
Municipality: Hillsborough  
County: Somerset

## 1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17A.5(a)1)

### i. Targeted Farms

Add additional rows as needed.

Owner / Farm Name (if known)	Block	Lot	Acres
Granskie, Melissa Louis	165	4	103.61
Thompson Realty	165	3	103.59
Four-J Farm LLC	165	11	32.12
Gallo, John J & Zilic, Franjo	169	5H	33.64
Thompson, W Bryce IV	165	13	50.74
Lanwin Development Corporation	169	5.02	257.7
Tzovolos, Demetrios & Olympia	169	7	19.73
Higgins, John P	169	4C	195.53
Princeton Research Lands	169	3	80.26
Higgins, John P	169	25	35.08
Higgins, John P	169	62	7.9

Raksa, Pauline	168	10.04	9.0
Raksa, Pauline	168	10.05	6.15
Johnson, Timothy K & Rhonda	167	13	7.64
Flanagan, John D & Patricia A	167	15.02	7.95
Cristelli, Paul D	167	15.01	12.77
Vella, Maureen & Dicorcia, James	167	15.03	8.11
Bertolini, Joanne	167	15.07	10.04
Stratton, Mark S & Jeanette, F	167	15.08	10.0
Lochiatto, Vito & Zielenski, Debra	167	15.09	7.13
Ash, Ronald & Miccolis, Patricia	167	15C	9.26
Muller, Henry H Jr & Betty J	167	15.04	8.33
Hawzen, Gary A & Dianne	167	15.05	8.2

Total Acreage of Targeted Farms: 1024.48

**ii. Farms with Municipal, County and/or SADC Final Approval:**  
*Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
Hillsborough Township (Zamek)	168	12	46.4

Total Acreage of Farms with Municipal, County or SADC Final Approval: 46.4

**iii. Preserved Farmland**

*Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
Young, Carl L	169	5.01	29.44
Giarrusso, Mae L	169	5.E	50.0
Longhill Holdings LLC	173	14	118.38
Osterman, Alfred H & Kenneth C	173	9.07	108.0
Osterman, Alfred H & Kenneth C	173	10	140.57
Smith, Richard W & Charlotte V	173	8	133.29
Martin, Theodore M Sr & Lynn Judy	168	10	42.65
Elibacher, David J & Jane Marie	171	4B	24.0

Total Acreage of Preserved Farmland:

646.33

**iv. Other Deed Restricted Farmland**

*Add additional rows as needed.*

Owner / Farm Name (if known)	Block	Lot	Acres
<i>Unknown</i>			

Total Acreage of Other Deed Restricted Farmland:

Unkown

**v. Farms Enrolled in the Eight-year Farmland Preservation Program or**

**Municipally-Approved Farmland Preservation Program***Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
<i>None</i>			

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program:

none

**vi. Other Preserved Open Space Compatible with Agriculture***Add additional rows as needed using digital file.*

Owner	Block	Lot	Acres	Description of Use
Hillsborough Township (Burshnic / Shamro)	167	13.01	8.35	Township Open Space (also farmed)
Hillsborough Township (Burshnic / Shamro)	167	13.02	10.92	Township Open Space (also farmed)
Hillsborough Township (Burshnic / Shamro)	167	13.03	8.6	Township Open Space
Somerset County	165	10	30.37	County Parkland
Hillsborough Township (Otto Farm Park)	171	1	36.01	Township Open Space
Hillsborough Township (Otto Farm Park)	171	2	49.35	Township Open Space
Hillsborough Township (Otto Farm Park)	171	6C	18.37	Township Open Space
Hillsborough Township (Otto Farm Park)	171	6	55.85	Township Open Space

Total Acreage of Other Preserved Open Space Compatible with Agriculture: 264.22

**TOTAL ACREAGE OF i., ii., iii., iv., v. & vi. 1981.43**

**2. AGGREGATE SIZE OF THE PROJECT AREA:** 2269.08 Acres

(See N.J.A.C. 2:76-17A.5(a)2)

**3. DENSITY OF THE PROJECT AREA:** (See N.J.A.C. 2:76-17A.5(a)3)

Density Formula:

(Sum of ii., iii., iv., v. & vi.) / (Aggregate size of the Project Area)

$$\text{Density} = 956.95 / 2269.08 = 42.17 \%$$

**4. TARGETED FARM SOIL PRODUCTIVITY:** (See N.J.A.C. 2:76-17A.5(a)4)

Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

$$\text{Soil Productivity} = 847.47 / 1024.48 = 82.72 \%$$

*Note:*

- Important farmland soils are prime, statewide and unique soils
- Unique soils will only be considered if they are being used for special crops
- Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.

Total area of the targeted farms: 1024.48 acres

Area of prime soils on targeted farms: 247.17 acres; 24.12 % of total area

Area of statewide soils on targeted farms: 600.4 acres; 58.60 % of total area

Area of unique soils on targeted farms: 0 acres; 0 % of total area

**5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS:**

(See N.J.A.C. 2:76-17A.5(a)5)

The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)

Add additional rows as needed using digital file.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share ____%	Estimated County Cost Share ____%	Estimated State Cost Share ____%	Estimated Cost Share ____% from Other Sources
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Hillsborough	1810	103.61	\$20,000	\$2,072,200	\$414,440	\$414,440	\$1,243,320	
Hillsborough	1810	103.59	\$20,000	\$2,071,800	\$414,360	\$414,360	\$1,243,080	
Hillsborough	1810	32.12	\$20,000	\$642,400	\$124,880	\$124,880	\$374,640	
Hillsborough	1810	33.64	\$20,000	\$672,800	\$134,560	\$134,560	\$403,680	
Hillsborough	1810	50.74	\$20,000	\$1,014,800	\$202,896	\$202,896	\$608,688	
Hillsborough	1810	257.7	\$20,000	\$5,154,000	\$1,030,800	\$1,030,800	\$3,092,400	
Hillsborough	1810	19.73	\$20,000	\$394,600	\$78,920	\$78,920	\$236,760	
Hillsborough	1810	195.53	\$20,000	\$3,910,600	\$782,120	\$782,120	\$2,346,360	
Hillsborough	1810	80.26	\$20,000	\$1,605,200	\$321,040	\$321,040	\$963,120	
Hillsborough	1810	35.08	\$20,000	\$701,600	\$140,320	\$140,320	\$420,960	
Hillsborough	1810	7.9	\$20,000	\$158,000	\$31,600	\$31,600	\$94,800	
Hillsborough	1810	9.0	\$20,000	\$180,000	\$36,000	\$36,000	\$108,000	
Hillsborough	1810	6.15	\$20,000	\$123,000	\$24,600	\$24,600	\$73,800	
Hillsborough	1810	7.64	\$20,000	\$152,800	\$30,560	\$30,560	\$91,680	
Hillsborough	1810	7.95	\$20,000	\$159,000	\$31,800	\$31,800	\$95,400	
Hillsborough	1810	12.77	\$20,000	\$255,400	\$51,080	\$51,080	\$153,240	
Hillsborough	1810	8.11	\$20,000	\$162,200	\$32,440	\$32,440	\$97,320	
Hillsborough	1810	10.04	\$20,000	\$200,800	\$40,160	\$40,160	\$120,480	
Hillsborough	1810	10.0	\$20,000	\$200,000	\$40,000	\$40,000	\$120,000	
Hillsborough	1810	7.13	\$20,000	\$142,600	\$28,520	\$28,520	\$85,560	
Hillsborough	1810	9.26	\$20,000	\$185,200	\$37,040	\$37,040	\$111,120	
Hillsborough	1810	8.33	\$20,000	\$166,600	\$33,320	\$33,320	\$99,960	



Hillsborough	1810	8.2	\$20,000	\$164,000	\$32,800	\$32,800	\$98,400	
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**TOTALS**

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
1024.48	\$20,489,600	\$4,094,256	\$4,094,256	\$12,282,768	

**6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:**

*(See N.J.A.C.2:76-17A.5(a)6)*

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	100	2,000,000	400,000	400,000	1,200,000	0	2,000,000
2	100	2,000,000	400,000	400,000	1,200,000	0	2,000,000
3							
4							
5							
6							
7							
8							
9							
10							

# Appendix A

## Soils that must be drained to be considered “Soils of Statewide Importance”

### **Bayboro**

Loam (Ba)

### **Bowmansville**

Silt loam (Bt)

### **Croton**

Silt loam, 0-2% slopes (CrA)

Silt loam, 2-6% slopes (CrB)

### **Elkton**

Loam (Ek, En)

Silt loam (Ek)

Silt loam, 2-5% slopes (EkB)

Elkton - Bayboro sandy loams, 0-2% slopes (ElA)

Elkton - Bayboro silt loams, 0-2% slopes (EnA)

### **Fallsington**

Sandy loam (Fd, Fa)

Sandy loam, 0-3% slopes (FdA)

Fine sandy loam (Fa)

Fine sandy loam, clayey substratum (Fc)

Loam (Fb, Fa)

Fallsington - Othello complex, 0-2% slopes (FeA)

Fallsington - Pocomoke - Berryland complex (Fp)

### **Kresson**

Loamy sand, 0-3% slopes (KwA, KlA)

Loam, 0-3% slopes (KyA)

Fine sandy loam, 0-3% slopes (KxA, KrA)

Sandy loam, 0-3% slopes (KrA)

Loam, 0-5% slopes (KvA)

Sandy loam, 0-5% slopes (KrB)

### **Minoa**

Silt loam, 0-3% slopes (MlA)

Silt loam, 3-8% slopes (MlB)

### **Mullica**

Fine sandy loam, loamy substratum (Mr)

Sandy loam (Mu)

### **Othello**

Silt loam (Ot)

Silt loam, 0-3% slopes (OtA)

### **Pasquotank**

Fine sandy loam (Pa)

### **Plummer**

Sandy loam (Pu)

### **Pocomoke**

Sandy loam (Ps, Po)

Loam (Po)

Fine sandy loam (Pv)

Pocomoke - Berryland loamy sands (Pr)

### **Portsmouth**

Silt loam, thin surface variant (Pw)

### **Raynham**

Silt loam, 0-5% slopes (RaB)

### **Shrewsbury**

Fine sandy loam (Sn, Sw, Sh)

Fine sandy loam, clayey substratum (So)

Loam (Sp)

Sandy loam (Sn)

Sandy loam, 0-2% slopes (SrA)

### **Weeksville**

Fine sandy loam (Wd)

# Appendix B

## Municipal Codes

### Atlantic

0101 Absecon City  
 0102 Atlantic City  
 0103 Brigantine City  
 0104 Buena Boro  
 0105 Buena Vista Twp.  
 0106 Corbin City  
 0107 Egg Harbor City  
 0108 Egg Harbor Twp.  
 0109 Estell Manor City  
 0110 Folsom Boro  
 0111 Galloway Twp.  
 0112 Hamilton Twp.  
 0113 Hammonton Town  
 0114 Linwood City  
 0115 Longport Boro  
 0116 Margate City  
 0117 Mullica Twp.  
 0118 Northfield City  
 0119 Pleasantville City  
 0120 Port Republic City  
 0121 Somers Point City  
 0122 Ventnor City  
 0123 Weymouth Twp.

### Bergen

0201 Allendale Boro  
 0202 Alpine Boro  
 0203 Bergenfield Boro  
 0204 Bogota Boro  
 0205 Carlstadt Boro  
 0206 Cliffside Park Boro  
 0207 Closter Boro  
 0208 Cresskill Boro  
 0209 Demarest Boro  
 0210 Dumont Boro  
 0212 East Rutherford Boro  
 0213 Edgewater Boro  
 0211 Elmwood Park Boro  
 0214 Emerson Boro  
 0215 Englewood City  
 0216 Englewood Cliffs Boro  
 0217 Fair Lawn Boro  
 0218 Fairview Boro  
 0219 Fort Lee Boro  
 0220 Franklin Lakes Boro  
 0221 Garfield City  
 0222 Glen Rock Boro  
 0223 Hackensack City  
 0224 Harrington Park Boro  
 0225 Hasbrouck Heights Boro  
 0226 Haworth Boro  
 0227 Hillsdale Boro  
 0228 Hohokus Boro  
 0229 Leonia Boro  
 0230 Little Ferry Boro  
 0231 Lodi Boro  
 0232 Lyndhurst Twp.

0233 Mahwah Twp.  
 0234 Maywood Boro  
 0235 Midland Park Boro  
 0236 Montvale Boro  
 0237 Moonachie Boro  
 0238 New Milford Boro  
 0239 North Arlington Boro  
 0240 Northvale Boro  
 0241 Norwood Boro  
 0242 Oakland Boro  
 0243 Old Tappan Boro  
 0244 Oradell Boro  
 0245 Palisades Park Boro  
 0246 Paramus Boro  
 0247 Park Ridge Boro  
 0248 Ramsey Boro  
 0249 Ridgefield Boro  
 0250 Ridgefield Park Villiage  
 0251 Ridgewood Villiage  
 0252 River Edge Boro  
 0253 River Vale Twp.  
 0254 Rochelle Park Twp.  
 0255 Rockleigh Boro  
 0256 Rutherford Boro  
 0257 Saddle Brook Twp.  
 0258 Saddle River Boro  
 0259 South Hackensack Twp.  
 0260 Teaneck Twp.  
 0261 Tenafly Boro  
 0262 Teterboro Boro  
 0263 Upper Saddle River Boro  
 0264 Waldwick Boro  
 0265 Wallington Boro  
 0266 Washington Twp.  
 0267 Westwood Boro  
 0269 Wood-Ridge Boro  
 0268 Woodcliff Lake Boro  
 0270 Wyckoff Twp.

### Burlington

0301 Bass River Twp.  
 0302 Beverly City  
 0303 Bordentown City  
 0304 Bordentown Twp.  
 0305 Burlington City  
 0306 Burlington Twp.  
 0307 Chesterfield Twp.  
 0308 Cinnaminson Twp.  
 0309 Delanco Twp.  
 0310 Delran Twp.  
 0311 Eastampton Twp.  
 0312 Edgewater Park Twp.  
 0313 Evesham Twp.  
 0314 Fieldsboro Boro  
 0315 Florence Twp.  
 0316 Hainesport Twp.  
 0317 Lumberton Twp.  
 0318 Mansfield Twp.  
 0319 Maple Shade Twp.

0321 Medford Lakes Boro  
 0320 Medford Twp.  
 0322 Moorestown Twp.  
 0323 Mount Holly Twp.  
 0324 Mount Laurel Twp.  
 0325 New Hanover Twp.  
 0326 North Hanover Twp.  
 0327 Palmyra Boro  
 0328 Pemberton Boro  
 0329 Pemberton Twp.  
 0330 Riverside Twp.  
 0331 Riverton Boro  
 0332 Shamong Twp.  
 0333 Southampton Twp.  
 0334 Springfield Twp.  
 0335 Tabernacle Twp.  
 0336 Washington Twp.  
 0337 Westampton Twp.  
 0338 Willingboro Twp.  
 0339 Woodland Twp.  
 0340 Wrightstown Boro

### Camden

0401 Audubon Boro  
 0402 Audubon Park Boro  
 0403 Barrington Boro  
 0404 Bellmawr Boro  
 0405 Berlin Boro  
 0406 Berlin Twp.  
 0407 Brooklawn Boro  
 0408 Camden City  
 0409 Cherry Hill Twp.  
 0410 Chesilhurst Boro  
 0411 Clementon Boro  
 0412 Collingswood Boro  
 0413 Gibbsboro Boro  
 0414 Gloucester City  
 0415 Gloucester Twp.  
 0418 Haddon Heights Boro  
 0416 Haddon Twp.  
 0417 Haddonfield Boro  
 0419 Hi-Nella Boro  
 0420 Laurel Springs Boro  
 0421 Lawnside Boro  
 0422 Lindenwold Boro  
 0423 Magnolia Boro  
 0424 Merchantville Boro  
 0425 Mount Ephraim Boro  
 0426 Oaklyn Boro  
 0427 Pennsauken Twp.  
 0428 Pine Hill Boro  
 0429 Pine Valley Boro  
 0430 Runnemede Boro  
 0431 Somerdale Boro  
 0432 Stratford Boro  
 0433 Tavistock Boro  
 0434 Voorhees Twp.  
 0435 Waterford Twp.  
 0436 Winslow Twp.

0437 Woodlynne Boro

## Cape May

0501 Avalon Boro  
0502 Cape May City  
0503 Cape May Point Boro  
0504 Dennis Twp.  
0505 Lower Twp.  
0506 Middle Twp.  
0507 North Wildwood City  
0508 Ocean City  
0509 Sea Isle City  
0510 Stone Harbor Boro  
0511 Upper Twp.  
0512 West Cape May Boro  
0513 West Wildwood Boro  
0514 Wildwood City  
0515 Wildwood Crest Boro  
0516 Woodbine Boro

## Cumberland

0601 Bridgeton City  
0602 Commercial Twp.  
0603 Deerfield Twp.  
0604 Downe Twp.  
0605 Fairfield Twp.  
0606 Greenwich Twp.  
0607 Hopewell Twp.  
0608 Lawrence Twp.  
0609 Maurice River Twp.  
0610 Millville City  
0611 Shiloh Boro  
0612 Stow Creek Twp.  
0613 Upper Deerfield Twp.  
0614 Vineland City

## Essex

0701 Belleville Twp.  
0702 Bloomfield Twp.  
0703 Caldwell Boro Twp.  
0704 Cedar Grove Twp.  
0717 City Of Orange Twp.  
0705 East Orange City  
0706 Essex Fells Twp.  
0707 Fairfield Twp.  
0708 Glen Ridge Boro Twp.  
0709 Irvington Twp.  
0710 Livingston Twp.  
0711 Maplewood Twp.  
0712 Millburn Twp.  
0713 Montclair Twp.  
0714 Newark City  
0715 North Caldwell Boro  
0716 Nutley Twp.  
0718 Roseland Boro

0719 South Orange Village Twp.  
0720 Verona Twp.  
0721 West Caldwell Twp.  
0722 West Orange Twp.

## Gloucester

0801 Clayton Boro  
0802 Deptford Twp.  
0803 East Greenwich Twp.  
0804 Elk Twp.  
0805 Franklin Twp.  
0806 Glassboro Boro  
0807 Greenwich Twp.  
0808 Harrison Twp.  
0809 Logan Twp.  
0810 Mantua Twp.  
0811 Monroe Twp.  
0812 National Park Boro  
0813 Newfield Boro  
0814 Paulsboro Boro  
0815 Pitman Boro  
0816 South Harrison Twp.  
0817 Swedesboro Boro  
0818 Washington Twp.  
0819 Wenonah Boro  
0820 West Deptford Twp.  
0821 Westville Boro  
0822 Woodbury City  
0823 Woodbury Heights Boro  
0824 Woolwich Twp.

## Hudson

0901 Bayonne City  
0902 East Newark Boro  
0903 Guttenberg Town  
0904 Harrison Town  
0905 Hoboken City  
0906 Jersey City  
0907 Kearny Town  
0908 North Bergen Twp.  
0909 Secaucus Town  
0910 Union City  
0911 Weehawken Twp.  
0912 West New York Town

## Hunterdon

1001 Alexandria Twp.  
1002 Bethlehem Twp.  
1003 Bloomsbury Boro  
1004 Califon Boro  
1005 Clinton Town  
1006 Clinton Twp.  
1007 Delaware Twp.  
1008 East Amwell Twp.  
1009 Flemington Boro

1010 Franklin Twp.  
1011 Frenchtown Boro  
1012 Glen Gardner Boro  
1013 Hampton Boro  
1014 High Bridge Boro  
1015 Holland Twp.  
1016 Kingwood Twp.  
1017 Lambertville City  
1018 Lebanon Boro  
1019 Lebanon Twp.  
1020 Milford Boro  
1021 Raritan Twp.  
1022 Readington Twp.  
1023 Stockton Boro  
1024 Tewksbury Twp.  
1025 Union Twp.  
1026 West Amwell Twp.

## Mercer

1101 East Windsor Twp.  
1102 Ewing Twp.  
1103 Hamilton Twp.  
1104 Hightstown Boro  
1105 Hopewell Boro  
1106 Hopewell Twp.  
1107 Lawrence Twp.  
1108 Pennington Boro  
1109 Princeton Boro  
1110 Princeton Twp.  
1111 Trenton City  
1112 Washington Twp.  
1113 West Windsor Twp.

## Middlesex

1201 Carteret Boro  
1202 Cranbury Twp.  
1203 Dunellen Boro  
1204 East Brunswick Twp.  
1205 Edison Twp.  
1206 Helmetta Boro  
1207 Highland Park Boro  
1208 Jamesburg Boro  
1210 Metuchen Boro  
1211 Middlesex Boro  
1212 Milltown Boro  
1213 Monroe Twp.  
1214 New Brunswick City  
1215 North Brunswick Twp.  
1209 Old Bridge Twp.  
1216 Perth Amboy City  
1217 Piscataway Twp.  
1218 Plainsboro Twp.  
1219 Sayreville Boro  
1220 South Amboy City  
1221 South Brunswick Twp.  
1222 South Plainfield Boro  
1223 South River Boro

1224 Spotswood Boro  
1225 Woodbridge Twp.

## Monmouth

1330 Aberdeen Twp.  
1301 Allenhurst Boro  
1302 Allentown Boro  
1303 Asbury Park City  
1304 Atlantic Highlands Boro  
1305 Avon-By-The-Sea Boro  
1306 Belmar Boro  
1307 Bradley Beach Boro  
1308 Brielle Boro  
1309 Colts Neck Twp.  
1310 Deal Boro  
1311 Eatontown Boro  
1312 Englishtown Boro  
1313 Fair Haven Boro  
1314 Farmingdale Boro  
1315 Freehold Boro  
1316 Freehold Twp.  
1339 Hazlet Twp.  
1317 Highlands Boro  
1318 Holmdel Twp.  
1319 Howell Twp.  
1320 Interlaken Boro  
1321 Keansburg Boro  
1322 Keyport Boro  
1323 Little Silver Boro  
1324 Loch Arbour Village  
1325 Long Branch City  
1326 Manalapan Twp.  
1327 Manasquan Boro  
1328 Marlboro Twp.  
1329 Matawan Boro  
1331 Middletown Twp.  
1332 Millstone Twp.  
1333 Monmouth Beach Boro  
1335 Neptune City Boro  
1334 Neptune Twp.  
1337 Ocean Twp.  
1338 Oceanport Boro  
1340 Red Bank Boro  
1341 Roosevelt Boro  
1342 Rumson Boro  
1343 Sea Bright Boro  
1344 Sea Girt Boro  
1345 Shrewsbury Boro  
1346 Shrewsbury Twp.  
1347 South Belmar Boro  
1348 Spring Lake Boro  
1349 Spring Lake Heights Boro  
1336 Tinton Falls Boro  
1350 Union Beach Boro  
1351 Upper Freehold Twp.  
1352 Wall Twp.  
1353 West Long Branch Boro

## Morris

1401 Boonton Town  
1402 Boonton Twp.  
1403 Butler Boro  
1404 Chatham Boro  
1405 Chatham Twp.  
1406 Chester Boro  
1407 Chester Twp.  
1408 Denville Twp.  
1409 Dover Town  
1410 East Hanover Twp.  
1411 Florham Park Boro  
1412 Hanover Twp.  
1413 Harding Twp.  
1414 Jefferson Twp.  
1415 Kinnelon Boro  
1416 Lincoln Park Boro  
1430 Long Hill Twp.  
1417 Madison Boro  
1418 Mendham Boro  
1419 Mendham Twp.  
1420 Mine Hill Twp.  
1421 Montville Twp.  
1423 Morris Plains Boro  
1422 Morris Twp.  
1424 Morristown Town  
1426 Mount Arlington Boro  
1427 Mount Olive Twp.  
1425 Mountain Lakes Boro  
1428 Netcong Boro  
1429 Parsippany-Troy Hills Twp.  
1431 Pequannock Twp.  
1432 Randolph Twp.  
1433 Riverdale Boro  
1434 Rockaway Boro  
1435 Rockaway Twp.  
1436 Roxbury Twp.  
1437 Victory Gardens Boro  
1438 Washington Twp.  
1439 Wharton Boro

## Ocean

1501 Barnegat Light Boro  
1533 Barnegat Twp.  
1502 Bay Head Boro  
1503 Beach Haven Boro  
1504 Beachwood Boro  
1505 Berkeley Twp.  
1506 Brick Twp.  
1507 Dover Twp.  
1508 Eagleswood Twp.  
1509 Harvey Cedars Boro  
1510 Island Heights Boro  
1511 Jackson Twp.  
1512 Lacey Twp.  
1513 Lakehurst Boro  
1514 Lakewood Twp.  
1515 Lavallette Boro  
1516 Little Egg Harbor Twp.

1517 Long Beach Twp.  
1518 Manchester Twp.  
1519 Mantaloking Boro  
1521 Ocean Gate Boro  
1520 Ocean Twp.  
1522 Pine Beach Boro  
1523 Plumsted Twp.  
1525 Point Pleasant Beach Boro  
1524 Point Pleasant Boro  
1526 Seaside Heights Boro  
1527 Seaside Park Boro  
1528 Ship Bottom Boro  
1529 South Toms River Boro  
1530 Stafford Twp.  
1531 Surf City Boro  
1532 Tuckerton Boro

## Passaic

1601 Bloomingdale Boro  
1602 Clifton City  
1603 Haledon Boro  
1604 Hawthorne Boro  
1605 Little Falls Twp.  
1606 North Haledon Boro  
1607 Passaic City  
1608 Paterson City  
1609 Pompton Lakes Boro  
1610 Prospect Park Boro  
1611 Ringwood Boro  
1612 Totowa Boro  
1613 Wanaque Boro  
1614 Wayne Twp.  
1615 West Milford Twp.  
1616 West Paterson Boro

## Salem

1701 Alloway Twp.  
1713 Carneys Point Twp.  
1702 Elmer Boro  
1703 Elsinboro Twp.  
1704 Lower Alloways Creek Twp.  
1705 Mannington Twp.  
1706 Oldmans Twp.  
1707 Penns Grove Boro  
1708 Pennsville Twp.  
1709 Pilesgrove Twp.  
1710 Pittsgrove Twp.  
1711 Quinton Twp.  
1712 Salem City  
1714 Upper Pittsgrove Twp.  
1715 Woodstown Boro

## Somerset

1801 Bedminster Twp.  
1802 Bernards Twp.  
1803 Bernardsville Boro

1804 Bound Brook Boro  
 1805 Branchburg Twp.  
 1806 Bridgewater Twp.  
 1807 Far Hills  
 1808 Franklin Twp.  
 1809 Green Brook Twp.  
 1810 Hillsborough Twp.  
 1811 Manville Boro  
 1812 Millstone Boro  
 1813 Montgomery Twp.  
 1814 North Plainfield Boro  
 1815 Peapack Gladstone Boro  
 1816 Raritan Boro  
 1817 Rocky Hill Boro  
 1818 Somerville Boro  
 1819 South Bound Brook Boro  
 1820 Warren Twp.  
 1821 Watchung Boro

## Sussex

1901 Andover Boro  
 1902 Andover Twp.  
 1903 Branchville Boro  
 1904 Byram Twp.  
 1905 Frankford Twp.  
 1906 Franklin Boro  
 1907 Fredon Twp.  
 1908 Green Twp.  
 1909 Hamburg Boro  
 1910 Hampton Twp.  
 1911 Hardyston Twp.

1912 Hopatcong Boro  
 1913 Lafayette Twp.  
 1914 Montague Twp.  
 1915 Newton Town  
 1916 Ogdensburg Boro  
 1917 Sandyston Twp.  
 1918 Sparta Twp.  
 1919 Stanhope Boro  
 1920 Stillwater Twp.  
 1921 Sussex Boro  
 1922 Vernon Twp.  
 1923 Walpack Twp.  
 1924 Wantage Twp.

## Union

2001 Berkeley Heights Twp.  
 2002 Clark Twp.  
 2003 Cranford Twp.  
 2004 Elizabeth City  
 2005 Fanwood Boro  
 2006 Garwood Boro  
 2007 Hillside Twp.  
 2008 Kenilworth Boro  
 2009 Linden City  
 2010 Mountainside Boro  
 2011 New Providence Boro  
 2012 Plainfield City  
 2013 Rahway City  
 2014 Roselle Boro  
 2015 Roselle Park Boro  
 2016 Scotch Plains Twp.

2017 Springfield Twp.  
 2018 Summit City  
 2019 Union Twp.  
 2020 Westfield Twp.  
 2021 Winfield Twp.

## Warren

2101 Allamuchy Twp.  
 2102 Alpha Boro  
 2103 Belvidere Twp.  
 2104 Blairstown Twp.  
 2105 Franklin Twp.  
 2106 Frelinghuysen Twp.  
 2107 Greenwich Twp.  
 2108 Hackettstown Town  
 2109 Hardwick Twp.  
 2110 Harmony Twp.  
 2111 Hope Twp.  
 2112 Independence Twp.  
 2113 Knowlton Twp.  
 2114 Liberty Twp.  
 2115 Lopatcong Twp.  
 2116 Mansfield Twp.  
 2117 Oxford Twp.  
 2118 Pahaquarry Twp.  
 2119 Phillipsburg Town  
 2120 Pohatcong Twp.  
 2121 Washington Boro  
 2122 Washington Twp.  
 2123 White Twp.



# Municipal Planning Incentive Grant PROJECT AREA SUMMARY FORM

Project Area: Mill Lane  
Municipality: Hillsborough  
County: Somerset

## 1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17A.5(a)1)

### i. Targeted Farms

Add additional rows as needed.

Owner / Farm Name (if known)	Block	Lot	Acres
Doyle, Richard L	11	28	60.33
Dorell, Frank P III & Joyce D	11	34	29.04
Doyle, Richard L	12	44	82.48
PID Associates	12	47	85.9
PID Associates	12	26.01	74.75
PID Associates	12	33	66.88

Total Acreage of Targeted Farms:

399.38

### ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Block	Lot	Acres
N/A			


Total Acreage of Farms with Municipal, County or SADC Final Approval: N/A

**iii. Preserved Farmland**

*Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
Hillsborough Township	11	13	185.65
Cunningham, William F	11	15	62.86
Pittstown Properties, LLC	11	27	78.96
Hillsborough Township	12	45	20.53

Total Acreage of Preserved Farmland: 348.0

**iv. Other Deed Restricted Farmland**

*Add additional rows as needed.*

Owner / Farm Name (if known)	Block	Lot	Acres
<i>Unknown</i>			




Total Acreage of Other Deed Restricted Farmland:

Unknown

**v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program**

*Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
N/A			

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program:

N/A

**vi. Other Preserved Open Space Compatible with Agriculture**

*Add additional rows as needed using digital file.*

Owner	Block	Lot	Acres	Description of Use
N/A				

--	--	--	--	--

Total Acreage of Other Preserved Open Space Compatible with Agriculture: N/A

**TOTAL ACREAGE OF i., ii., iii., iv., v. & vi. 747.85**

**2. AGGREGATE SIZE OF THE PROJECT AREA: 782.1 Acres**

*(See N.J.A.C. 2:76-17A.5(a)2)*

**3. DENSITY OF THE PROJECT AREA: *(See N.J.A.C. 2:76-17A.5(a)3)***

Density Formula:

$(\text{Sum of ii., iii., iv., v. \& vi.}) / (\text{Aggregate size of the Project Area})$

$$\text{Density} = 348.47 / 782.1 = 44.56 \%$$

**4. TARGETED FARM SOIL PRODUCTIVITY: *(See N.J.A.C. 2:76-17A.5(a)4)***

Soil Productivity Formula:

$(\text{Total area of important farmland soils on targeted farms}) / (\text{Total area of the targeted farms})$

$$\text{Soil Productivity} = 377.58 / 399.38 = 95.54 \%$$

*Note:*

- *Important farmland soils are prime, statewide and unique soils*
- *Unique soils will only be considered if they are being used for special crops*
- *Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.*

Total area of the targeted farms: 399.38 acres

Area of prime soils on targeted farms: 176.08 acres; 44.09 % of total area

Area of statewide soils on targeted farms: 201.5 acres; 50.45 % of total area

Area of unique soils on targeted farms: 0 acres; 0 % of total area

**5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS:**

*(See N.J.A.C. 2:76-17A.5(a)5)*

*The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)*

*Add additional rows as needed using digital file.*

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share ____%	Estimated County Cost Share ____%	Estimated State Cost Share ____%	Estimated Cost Share ____% from Other Sources
Hillsborough	1810	60.33	\$20,000	\$1,206,600	\$241,320	\$241,320	\$723,960	
Hillsborough	1810	29.04	\$20,000	\$580,800	\$116,160	\$116,160	\$348,480	
Hillsborough	1810	82.48	\$20,000	\$1,649,600	\$329,920	\$329,920	\$989,760	
Hillsborough	1810	85.9	\$20,000	\$1,718,000	\$343,600	\$343,600	\$1,030,800	
Hillsborough	1810	74.75	\$20,000	\$1,495,000	\$299,000	\$299,000	\$897,000	
Hillsborough	1810	66.88	\$20,000	\$1,377,600	\$275,520	\$275,520	\$826,560	

### TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
399.38	\$8,027,600	\$1,605,520	\$1,605,520	\$4,816,560	

### 6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:

(See N.J.A.C.2:76-17A.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	100	2,000,000	400,000	400,000	1,200,000	0	2,000,000
2	100	2,000,000	400,00	400,00	1,200,00	0	2,000,000
3	100	2,000,000	400,00	400,00	1,200,00	0	2,000,000
4	100	2,000,000	400,000	400,000	1,200,000	0	2,000,000
5							
6							
7							

8							
9							
10							

# Appendix A

## Soils that must be drained to be considered “Soils of Statewide Importance”

### **Bayboro**

Loam (Ba)

### **Bowmansville**

Silt loam (Bt)

### **Croton**

Silt loam, 0-2% slopes (CrA)

Silt loam, 2-6% slopes (CrB)

### **Elkton**

Loam (Ek, En)

Silt loam (Ek)

Silt loam, 2-5% slopes (EkB)

Elkton - Bayboro sandy loams, 0-2% slopes (ElA)

Elkton - Bayboro silt loams, 0-2% slopes (EnA)

### **Fallsington**

Sandy loam (Fd, Fa)

Sandy loam, 0-3% slopes (FdA)

Fine sandy loam (Fa)

Fine sandy loam, clayey substratum (Fc)

Loam (Fb, Fa)

Fallsington - Othello complex, 0-2% slopes (FeA)

Fallsington - Pocomoke - Berryland complex (Fp)

### **Kresson**

Loamy sand, 0-3% slopes (KwA, KlA)

Loam, 0-3% slopes (KyA)

Fine sandy loam, 0-3% slopes (KxA, KrA)

Sandy loam, 0-3% slopes (KrA)

Loam, 0-5% slopes (KvA)

Sandy loam, 0-5% slopes (KrB)

### **Minoa**

Silt loam, 0-3% slopes (MlA)

Silt loam, 3-8% slopes (MlB)

### **Mullica**

Fine sandy loam, loamy substratum (Mr)

Sandy loam (Mu)

### **Othello**

Silt loam (Ot)

Silt loam, 0-3% slopes (OtA)

### **Pasquotank**

Fine sandy loam (Pa)

### **Plummer**

Sandy loam (Pu)

### **Pocomoke**

Sandy loam (Ps, Po)

Loam (Po)

Fine sandy loam (Pv)

Pocomoke - Berryland loamy sands (Pr)

### **Portsmouth**

Silt loam, thin surface variant (Pw)

### **Raynham**

Silt loam, 0-5% slopes (RaB)

### **Shrewsbury**

Fine sandy loam (Sn, Sw, Sh)

Fine sandy loam, clayey substratum (So)

Loam (Sp)

Sandy loam (Sn)

Sandy loam, 0-2% slopes (SrA)

### **Weeksville**

Fine sandy loam (Wd)

# Appendix B

## Municipal Codes

### Atlantic

0101 Absecon City  
 0102 Atlantic City  
 0103 Brigantine City  
 0104 Buena Boro  
 0105 Buena Vista Twp.  
 0106 Corbin City  
 0107 Egg Harbor City  
 0108 Egg Harbor Twp.  
 0109 Estell Manor City  
 0110 Folsom Boro  
 0111 Galloway Twp.  
 0112 Hamilton Twp.  
 0113 Hammonton Town  
 0114 Linwood City  
 0115 Longport Boro  
 0116 Margate City  
 0117 Mullica Twp.  
 0118 Northfield City  
 0119 Pleasantville City  
 0120 Port Republic City  
 0121 Somers Point City  
 0122 Ventnor City  
 0123 Weymouth Twp.

### Bergen

0201 Allendale Boro  
 0202 Alpine Boro  
 0203 Bergenfield Boro  
 0204 Bogota Boro  
 0205 Carlstadt Boro  
 0206 Cliffside Park Boro  
 0207 Closter Boro  
 0208 Cresskill Boro  
 0209 Demarest Boro  
 0210 Dumont Boro  
 0212 East Rutherford Boro  
 0213 Edgewater Boro  
 0211 Elmwood Park Boro  
 0214 Emerson Boro  
 0215 Englewood City  
 0216 Englewood Cliffs Boro  
 0217 Fair Lawn Boro  
 0218 Fairview Boro  
 0219 Fort Lee Boro  
 0220 Franklin Lakes Boro  
 0221 Garfield City  
 0222 Glen Rock Boro  
 0223 Hackensack City  
 0224 Harrington Park Boro  
 0225 Hasbrouck Heights Boro  
 0226 Haworth Boro  
 0227 Hillsdale Boro  
 0228 Hohokus Boro  
 0229 Leonia Boro  
 0230 Little Ferry Boro  
 0231 Lodi Boro  
 0232 Lyndhurst Twp.

0233 Mahwah Twp.  
 0234 Maywood Boro  
 0235 Midland Park Boro  
 0236 Montvale Boro  
 0237 Moonachie Boro  
 0238 New Milford Boro  
 0239 North Arlington Boro  
 0240 Northvale Boro  
 0241 Norwood Boro  
 0242 Oakland Boro  
 0243 Old Tappan Boro  
 0244 Oradell Boro  
 0245 Palisades Park Boro  
 0246 Paramus Boro  
 0247 Park Ridge Boro  
 0248 Ramsey Boro  
 0249 Ridgefield Boro  
 0250 Ridgefield Park Villiage  
 0251 Ridgewood Villiage  
 0252 River Edge Boro  
 0253 River Vale Twp.  
 0254 Rochelle Park Twp.  
 0255 Rockleigh Boro  
 0256 Rutherford Boro  
 0257 Saddle Brook Twp.  
 0258 Saddle River Boro  
 0259 South Hackensack Twp.  
 0260 Teaneck Twp.  
 0261 Tenafly Boro  
 0262 Teterboro Boro  
 0263 Upper Saddle River Boro  
 0264 Waldwick Boro  
 0265 Wallington Boro  
 0266 Washington Twp.  
 0267 Westwood Boro  
 0269 Wood-Ridge Boro  
 0268 Woodcliff Lake Boro  
 0270 Wyckoff Twp.

### Burlington

0301 Bass River Twp.  
 0302 Beverly City  
 0303 Bordentown City  
 0304 Bordentown Twp.  
 0305 Burlington City  
 0306 Burlington Twp.  
 0307 Chesterfield Twp.  
 0308 Cinnaminson Twp.  
 0309 Delanco Twp.  
 0310 Delran Twp.  
 0311 Eastampton Twp.  
 0312 Edgewater Park Twp.  
 0313 Evesham Twp.  
 0314 Fieldsboro Boro  
 0315 Florence Twp.  
 0316 Hainesport Twp.  
 0317 Lumberton Twp.  
 0318 Mansfield Twp.  
 0319 Maple Shade Twp.

0321 Medford Lakes Boro  
 0320 Medford Twp.  
 0322 Moorestown Twp.  
 0323 Mount Holly Twp.  
 0324 Mount Laurel Twp.  
 0325 New Hanover Twp.  
 0326 North Hanover Twp.  
 0327 Palmyra Boro  
 0328 Pemberton Boro  
 0329 Pemberton Twp.  
 0330 Riverside Twp.  
 0331 Riverton Boro  
 0332 Shamong Twp.  
 0333 Southampton Twp.  
 0334 Springfield Twp.  
 0335 Tabernacle Twp.  
 0336 Washington Twp.  
 0337 Westampton Twp.  
 0338 Willingboro Twp.  
 0339 Woodland Twp.  
 0340 Wrightstown Boro

### Camden

0401 Audubon Boro  
 0402 Audubon Park Boro  
 0403 Barrington Boro  
 0404 Bellmawr Boro  
 0405 Berlin Boro  
 0406 Berlin Twp.  
 0407 Brooklawn Boro  
 0408 Camden City  
 0409 Cherry Hill Twp.  
 0410 Chesilhurst Boro  
 0411 Clementon Boro  
 0412 Collingswood Boro  
 0413 Gibbsboro Boro  
 0414 Gloucester City  
 0415 Gloucester Twp.  
 0418 Haddon Heights Boro  
 0416 Haddon Twp.  
 0417 Haddonfield Boro  
 0419 Hi-Nella Boro  
 0420 Laurel Springs Boro  
 0421 Lawnside Boro  
 0422 Lindenwold Boro  
 0423 Magnolia Boro  
 0424 Merchantville Boro  
 0425 Mount Ephraim Boro  
 0426 Oaklyn Boro  
 0427 Pennsauken Twp.  
 0428 Pine Hill Boro  
 0429 Pine Valley Boro  
 0430 Runnemede Boro  
 0431 Somerdale Boro  
 0432 Stratford Boro  
 0433 Tavistock Boro  
 0434 Voorhees Twp.  
 0435 Waterford Twp.  
 0436 Winslow Twp.

0437 Woodlynne Boro

## Cape May

0501 Avalon Boro  
0502 Cape May City  
0503 Cape May Point Boro  
0504 Dennis Twp.  
0505 Lower Twp.  
0506 Middle Twp.  
0507 North Wildwood City  
0508 Ocean City  
0509 Sea Isle City  
0510 Stone Harbor Boro  
0511 Upper Twp.  
0512 West Cape May Boro  
0513 West Wildwood Boro  
0514 Wildwood City  
0515 Wildwood Crest Boro  
0516 Woodbine Boro

## Cumberland

0601 Bridgeton City  
0602 Commercial Twp.  
0603 Deerfield Twp.  
0604 Downe Twp.  
0605 Fairfield Twp.  
0606 Greenwich Twp.  
0607 Hopewell Twp.  
0608 Lawrence Twp.  
0609 Maurice River Twp.  
0610 Millville City  
0611 Shiloh Boro  
0612 Stow Creek Twp.  
0613 Upper Deerfield Twp.  
0614 Vineland City

## Essex

0701 Belleville Twp.  
0702 Bloomfield Twp.  
0703 Caldwell Boro Twp.  
0704 Cedar Grove Twp.  
0717 City Of Orange Twp.  
0705 East Orange City  
0706 Essex Fells Twp.  
0707 Fairfield Twp.  
0708 Glen Ridge Boro Twp.  
0709 Irvington Twp.  
0710 Livingston Twp.  
0711 Maplewood Twp.  
0712 Millburn Twp.  
0713 Montclair Twp.  
0714 Newark City  
0715 North Caldwell Boro  
0716 Nutley Twp.  
0718 Roseland Boro

0719 South Orange Village Twp.  
0720 Verona Twp.  
0721 West Caldwell Twp.  
0722 West Orange Twp.

## Gloucester

0801 Clayton Boro  
0802 Deptford Twp.  
0803 East Greenwich Twp.  
0804 Elk Twp.  
0805 Franklin Twp.  
0806 Glassboro Boro  
0807 Greenwich Twp.  
0808 Harrison Twp.  
0809 Logan Twp.  
0810 Mantua Twp.  
0811 Monroe Twp.  
0812 National Park Boro  
0813 Newfield Boro  
0814 Paulsboro Boro  
0815 Pitman Boro  
0816 South Harrison Twp.  
0817 Swedesboro Boro  
0818 Washington Twp.  
0819 Wenonah Boro  
0820 West Deptford Twp.  
0821 Westville Boro  
0822 Woodbury City  
0823 Woodbury Heights Boro  
0824 Woolwich Twp.

## Hudson

0901 Bayonne City  
0902 East Newark Boro  
0903 Guttenberg Town  
0904 Harrison Town  
0905 Hoboken City  
0906 Jersey City  
0907 Kearny Town  
0908 North Bergen Twp.  
0909 Secaucus Town  
0910 Union City  
0911 Weehawken Twp.  
0912 West New York Town

## Hunterdon

1001 Alexandria Twp.  
1002 Bethlehem Twp.  
1003 Bloomsbury Boro  
1004 Califon Boro  
1005 Clinton Town  
1006 Clinton Twp.  
1007 Delaware Twp.  
1008 East Amwell Twp.  
1009 Flemington Boro

1010 Franklin Twp.  
1011 Frenchtown Boro  
1012 Glen Gardner Boro  
1013 Hampton Boro  
1014 High Bridge Boro  
1015 Holland Twp.  
1016 Kingwood Twp.  
1017 Lambertville City  
1018 Lebanon Boro  
1019 Lebanon Twp.  
1020 Milford Boro  
1021 Raritan Twp.  
1022 Readington Twp.  
1023 Stockton Boro  
1024 Tewksbury Twp.  
1025 Union Twp.  
1026 West Amwell Twp.

## Mercer

1101 East Windsor Twp.  
1102 Ewing Twp.  
1103 Hamilton Twp.  
1104 Hightstown Boro  
1105 Hopewell Boro  
1106 Hopewell Twp.  
1107 Lawrence Twp.  
1108 Pennington Boro  
1109 Princeton Boro  
1110 Princeton Twp.  
1111 Trenton City  
1112 Washington Twp.  
1113 West Windsor Twp.

## Middlesex

1201 Carteret Boro  
1202 Cranbury Twp.  
1203 Dunellen Boro  
1204 East Brunswick Twp.  
1205 Edison Twp.  
1206 Helmetta Boro  
1207 Highland Park Boro  
1208 Jamesburg Boro  
1210 Metuchen Boro  
1211 Middlesex Boro  
1212 Milltown Boro  
1213 Monroe Twp.  
1214 New Brunswick City  
1215 North Brunswick Twp.  
1209 Old Bridge Twp.  
1216 Perth Amboy City  
1217 Piscataway Twp.  
1218 Plainsboro Twp.  
1219 Sayreville Boro  
1220 South Amboy City  
1221 South Brunswick Twp.  
1222 South Plainfield Boro  
1223 South River Boro

1224 Spotswood Boro  
1225 Woodbridge Twp.

## Monmouth

1330 Aberdeen Twp.  
1301 Allenhurst Boro  
1302 Allentown Boro  
1303 Asbury Park City  
1304 Atlantic Highlands Boro  
1305 Avon-By-The-Sea Boro  
1306 Belmar Boro  
1307 Bradley Beach Boro  
1308 Brielle Boro  
1309 Colts Neck Twp.  
1310 Deal Boro  
1311 Eatontown Boro  
1312 Englishtown Boro  
1313 Fair Haven Boro  
1314 Farmingdale Boro  
1315 Freehold Boro  
1316 Freehold Twp.  
1339 Hazlet Twp.  
1317 Highlands Boro  
1318 Holmdel Twp.  
1319 Howell Twp.  
1320 Interlaken Boro  
1321 Keansburg Boro  
1322 Keyport Boro  
1323 Little Silver Boro  
1324 Loch Arbour Village  
1325 Long Branch City  
1326 Manalapan Twp.  
1327 Manasquan Boro  
1328 Marlboro Twp.  
1329 Matawan Boro  
1331 Middletown Twp.  
1332 Millstone Twp.  
1333 Monmouth Beach Boro  
1335 Neptune City Boro  
1334 Neptune Twp.  
1337 Ocean Twp.  
1338 Oceanport Boro  
1340 Red Bank Boro  
1341 Roosevelt Boro  
1342 Rumson Boro  
1343 Sea Bright Boro  
1344 Sea Girt Boro  
1345 Shrewsbury Boro  
1346 Shrewsbury Twp.  
1347 South Belmar Boro  
1348 Spring Lake Boro  
1349 Spring Lake Heights Boro  
1336 Tinton Falls Boro  
1350 Union Beach Boro  
1351 Upper Freehold Twp.  
1352 Wall Twp.  
1353 West Long Branch Boro

## Morris

1401 Boonton Town  
1402 Boonton Twp.  
1403 Butler Boro  
1404 Chatham Boro  
1405 Chatham Twp.  
1406 Chester Boro  
1407 Chester Twp.  
1408 Denville Twp.  
1409 Dover Town  
1410 East Hanover Twp.  
1411 Florham Park Boro  
1412 Hanover Twp.  
1413 Harding Twp.  
1414 Jefferson Twp.  
1415 Kinnelon Boro  
1416 Lincoln Park Boro  
1430 Long Hill Twp.  
1417 Madison Boro  
1418 Mendham Boro  
1419 Mendham Twp.  
1420 Mine Hill Twp.  
1421 Montville Twp.  
1423 Morris Plains Boro  
1422 Morris Twp.  
1424 Morristown Town  
1426 Mount Arlington Boro  
1427 Mount Olive Twp.  
1425 Mountain Lakes Boro  
1428 Netcong Boro  
1429 Parsippany-Troy Hills Twp.  
1431 Pequannock Twp.  
1432 Randolph Twp.  
1433 Riverdale Boro  
1434 Rockaway Boro  
1435 Rockaway Twp.  
1436 Roxbury Twp.  
1437 Victory Gardens Boro  
1438 Washington Twp.  
1439 Wharton Boro

## Ocean

1501 Barnegat Light Boro  
1533 Barnegat Twp.  
1502 Bay Head Boro  
1503 Beach Haven Boro  
1504 Beachwood Boro  
1505 Berkeley Twp.  
1506 Brick Twp.  
1507 Dover Twp.  
1508 Eagleswood Twp.  
1509 Harvey Cedars Boro  
1510 Island Heights Boro  
1511 Jackson Twp.  
1512 Lacey Twp.  
1513 Lakehurst Boro  
1514 Lakewood Twp.  
1515 Lavallette Boro  
1516 Little Egg Harbor Twp.

1517 Long Beach Twp.  
1518 Manchester Twp.  
1519 Mantaloking Boro  
1521 Ocean Gate Boro  
1520 Ocean Twp.  
1522 Pine Beach Boro  
1523 Plumsted Twp.  
1525 Point Pleasant Beach Boro  
1524 Point Pleasant Boro  
1526 Seaside Heights Boro  
1527 Seaside Park Boro  
1528 Ship Bottom Boro  
1529 South Toms River Boro  
1530 Stafford Twp.  
1531 Surf City Boro  
1532 Tuckerton Boro

## Passaic

1601 Bloomingdale Boro  
1602 Clifton City  
1603 Haledon Boro  
1604 Hawthorne Boro  
1605 Little Falls Twp.  
1606 North Haledon Boro  
1607 Passaic City  
1608 Paterson City  
1609 Pompton Lakes Boro  
1610 Prospect Park Boro  
1611 Ringwood Boro  
1612 Totowa Boro  
1613 Wanaque Boro  
1614 Wayne Twp.  
1615 West Milford Twp.  
1616 West Paterson Boro

## Salem

1701 Alloway Twp.  
1713 Carneys Point Twp.  
1702 Elmer Boro  
1703 Elsinboro Twp.  
1704 Lower Alloways Creek Twp.  
1705 Mannington Twp.  
1706 Oldmans Twp.  
1707 Penns Grove Boro  
1708 Pennsville Twp.  
1709 Pilesgrove Twp.  
1710 Pittsgrove Twp.  
1711 Quinton Twp.  
1712 Salem City  
1714 Upper Pittsgrove Twp.  
1715 Woodstown Boro

## Somerset

1801 Bedminster Twp.  
1802 Bernards Twp.  
1803 Bernardsville Boro



1804 Bound Brook Boro  
 1805 Branchburg Twp.  
 1806 Bridgewater Twp.  
 1807 Far Hills  
 1808 Franklin Twp.  
 1809 Green Brook Twp.  
 1810 Hillsborough Twp.  
 1811 Manville Boro  
 1812 Millstone Boro  
 1813 Montgomery Twp.  
 1814 North Plainfield Boro  
 1815 Peapack Gladstone Boro  
 1816 Raritan Boro  
 1817 Rocky Hill Boro  
 1818 Somerville Boro  
 1819 South Bound Brook Boro  
 1820 Warren Twp.  
 1821 Watchung Boro

## Sussex

1901 Andover Boro  
 1902 Andover Twp.  
 1903 Branchville Boro  
 1904 Byram Twp.  
 1905 Frankford Twp.  
 1906 Franklin Boro  
 1907 Fredon Twp.  
 1908 Green Twp.  
 1909 Hamburg Boro  
 1910 Hampton Twp.  
 1911 Hardyston Twp.

1912 Hopatcong Boro  
 1913 Lafayette Twp.  
 1914 Montague Twp.  
 1915 Newton Town  
 1916 Ogdensburg Boro  
 1917 Sandyston Twp.  
 1918 Sparta Twp.  
 1919 Stanhope Boro  
 1920 Stillwater Twp.  
 1921 Sussex Boro  
 1922 Vernon Twp.  
 1923 Walpack Twp.  
 1924 Wantage Twp.

## Union

2001 Berkeley Heights Twp.  
 2002 Clark Twp.  
 2003 Cranford Twp.  
 2004 Elizabeth City  
 2005 Fanwood Boro  
 2006 Garwood Boro  
 2007 Hillside Twp.  
 2008 Kenilworth Boro  
 2009 Linden City  
 2010 Mountainside Boro  
 2011 New Providence Boro  
 2012 Plainfield City  
 2013 Rahway City  
 2014 Roselle Boro  
 2015 Roselle Park Boro  
 2016 Scotch Plains Twp.

2017 Springfield Twp.  
 2018 Summit City  
 2019 Union Twp.  
 2020 Westfield Twp.  
 2021 Winfield Twp.

## Warren

2101 Allamuchy Twp.  
 2102 Alpha Boro  
 2103 Belvidere Twp.  
 2104 Blairstown Twp.  
 2105 Franklin Twp.  
 2106 Frelinghuysen Twp.  
 2107 Greenwich Twp.  
 2108 Hackettstown Town  
 2109 Hardwick Twp.  
 2110 Harmony Twp.  
 2111 Hope Twp.  
 2112 Independence Twp.  
 2113 Knowlton Twp.  
 2114 Liberty Twp.  
 2115 Lopatcong Twp.  
 2116 Mansfield Twp.  
 2117 Oxford Twp.  
 2118 Pahaquarry Twp.  
 2119 Phillipsburg Town  
 2120 Pohatcong Twp.  
 2121 Washington Boro  
 2122 Washington Twp.  
 2123 White Twp.



# Municipal Planning Incentive Grant PROJECT AREA SUMMARY FORM

Project Area: South  
Municipality: Hillsborough  
County: Somerset

1. **PROJECT AREA INVENTORY:** (See N.J.A.C. 2:76-17A.5(a)1)

- i. **Targeted Farms**  
*Add additional rows as needed.*

Owner / Farm Name (if known)	Block	Lot	Acres
Trustees Maple Lane Farm	202	20	57.0
Van Nuys, L Martin Est & Linda	202	7	51.22
Van Nuys, L Martin Est & Linda	202	11	45.62
Van Nuys, L Martin Est & Linda	201	8	76.45
Hyman, Abraham & Marianne	202	8A	9.58
Rhoda, Douglas M & Susan B	202	19	16.1
Conard, Samuel & Esther	202	17.01	6.23

Total Acreage of Targeted Farms: 262.20

**ii. Farms with Municipal, County and/or SADC Final Approval:**

*Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
<i>None</i>			

Total Acreage of Farms with Municipal, County or SADC Final Approval: None

**iii. Preserved Farmland**

*Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
Warmke, John T & Diane L	202	9	99.9
Conard, Samuel & Esther	202	15	76.57
Conard, Samuel	202	12	26.25
Conard Home Farm LLC	202	17.02	78.93
Durling, Harriet E	202	13	27.92
Durling, Harriet E	203	17	47.53
Conard Home Farm LLC	202	16	60.02

Total Acreage of Preserved Farmland: 417.12

**iv. Other Deed Restricted Farmland**

*Add additional rows as needed.*

Owner / Farm Name (if known)	Block	Lot	Acres
<i>Unknown</i>			


Total Acreage of Other Deed Restricted Farmland:

Unknown

**v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program**

*Add additional rows as needed.*

Owner / Farm Name	Block	Lot	Acres
None			

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program:

None

**vi. Other Preserved Open Space Compatible with Agriculture**

*Add additional rows as needed using digital file.*

Owner	Block	Lot	Acres	Description of Use
NJDOT	202	6	75.15	DOT Property

Trustees Maple Lane Farm LLC	202	20	40.39	Part of Property Condemned

Total Acreage of Other Preserved Open Space Compatible with Agriculture: 115.54

**TOTAL ACREAGE OF i., ii., iii., iv., v. & vi. 794.86**

**2. AGGREGATE SIZE OF THE PROJECT AREA: 808.93 Acres**

(See N.J.A.C. 2:76-17A.5(a)2)

**3. DENSITY OF THE PROJECT AREA: (See N.J.A.C. 2:76-17A.5(a)3)**

Density Formula:

(Sum of ii., iii., iv., v. & vi.) / (Aggregate size of the Project Area)

$$\text{Density} = 532.66 / 808.93 = 65.85 \%$$

**4. TARGETED FARM SOIL PRODUCTIVITY: (See N.J.A.C. 2:76-17A.5(a)4)**

Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

$$\text{Soil Productivity} = 241.87 / 262.2 = 92.25 \%$$

*Note:*

- *Important farmland soils are prime, statewide and unique soils*
- *Unique soils will only be considered if they are being used for special crops*
- *Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.*

Total area of the targeted farms: 262.2 acres

Area of prime soils on targeted farms: 108.36 acres; 41.33 % of total area

Area of statewide soils on targeted farms: 133.51 acres; 50.92 % of total area

Area of unique soils on targeted farms: 0 acres; 0 % of total area

**5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS:**

(See N.J.A.C. 2:76-17A.5(a)5)

The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)

Add additional rows as needed using digital file.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share ____%	Estimated County Cost Share ____%	Estimated State Cost Share ____%	Estimated Cost Share ____% from Other Sources
Hillsborough	1810	57.0	\$20,000	\$1,140,000	\$228,000	\$228,000	\$684,000	
Hillsborough	1810	51.22	\$20,000	\$1,024,400	\$184,392	\$184,392	\$614,640	
Hillsborough	1810	45.62	\$20,000	\$912,400	\$182,480	\$182,480	\$547,440	
Hillsborough	1810	76.45	\$20,000	\$1,529,000	\$305,800	\$305,800	\$917,400	
Hillsborough	1810	9.58	\$20,000	\$191,600	\$38,320	\$38,320	\$114,960	
Hillsborough	1810	16.1	\$20,000	\$322,000	\$66,400	\$66,400	\$199,200	
Hillsborough	1810	6.23	\$20,000	\$124,600	\$24,920	\$24,920	\$74,760	

**TOTALS**

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
453.19	\$5,244,000	\$1,030,312	\$1,030,312	\$3,152,400	

**6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:**

(See N.J.A.C.2:76-17A.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	230	4,600,000	920,000	920,000	2,760,000	0	4,600,000

2							
3							
4							
5							
6							
7							
8							
9							
10							

# Appendix A

## Soils that must be drained to be considered “Soils of Statewide Importance”

### **ayboro**

Loam (Ba)

### **Bowmansville**

Silt loam (Bt)

### **Croton**

Silt loam, 0-2% slopes (CrA)

Silt loam, 2-6% slopes (CrB)

### **Elkton**

Loam (Ek, En)

Silt loam (Ek)

Silt loam, 2-5% slopes (EkB)

Elkton - Bayboro sandy loams, 0-2% slopes (ElA)

Elkton - Bayboro silt loams, 0-2% slopes (EnA)

### **Fallsington**

Sandy loam (Fd, Fa)

Sandy loam, 0-3% slopes (FdA)

Fine sandy loam (Fa)

Fine sandy loam, clayey substratum (Fc)

Loam (Fb, Fa)

Fallsington - Othello complex, 0-2% slopes (FeA)

Fallsington - Pocomoke - Berryland complex (Fp)

### **Kresson**

Loamy sand, 0-3% slopes (KwA, KlA)

Loam, 0-3% slopes (KyA)

Fine sandy loam, 0-3% slopes (KxA, KrA)

Sandy loam, 0-3% slopes (KrA)

Loam, 0-5% slopes (KvA)

Sandy loam, 0-5% slopes (KrB)

### **Minoa**

Silt loam, 0-3% slopes (MlA)

Silt loam, 3-8% slopes (MlB)

### **Mullica**

Fine sandy loam, loamy substratum (Mr)

Sandy loam (Mu)

### **Othello**

Silt loam (Ot)

Silt loam, 0-3% slopes (OtA)

### **Pasquotank**

Fine sandy loam (Pa)

### **Plummer**

Sandy loam (Pu)

### **Pocomoke**

Sandy loam (Ps, Po)

Loam (Po)

Fine sandy loam (Pv)

Pocomoke - Berryland loamy sands (Pr)

### **Portsmouth**

Silt loam, thin surface variant (Pw)

### **Raynham**

Silt loam, 0-5% slopes (RaB)

### **Shrewsbury**

Fine sandy loam (Sn, Sw, Sh)

Fine sandy loam, clayey substratum (So)

Loam (Sp)

Sandy loam (Sn)

Sandy loam, 0-2% slopes (SrA)

### **Weeksville**

Fine sandy loam (Wd)



# Appendix B

## Municipal Codes

### Atlantic

0101 Absecon City  
 0102 Atlantic City  
 0103 Brigantine City  
 0104 Buena Boro  
 0105 Buena Vista Twp.  
 0106 Corbin City  
 0107 Egg Harbor City  
 0108 Egg Harbor Twp.  
 0109 Estell Manor City  
 0110 Folsom Boro  
 0111 Galloway Twp.  
 0112 Hamilton Twp.  
 0113 Hammonton Town  
 0114 Linwood City  
 0115 Longport Boro  
 0116 Margate City  
 0117 Mullica Twp.  
 0118 Northfield City  
 0119 Pleasantville City  
 0120 Port Republic City  
 0121 Somers Point City  
 0122 Ventnor City  
 0123 Weymouth Twp.

### Bergen

0201 Allendale Boro  
 0202 Alpine Boro  
 0203 Bergenfield Boro  
 0204 Bogota Boro  
 0205 Carlstadt Boro  
 0206 Cliffside Park Boro  
 0207 Closter Boro  
 0208 Cresskill Boro  
 0209 Demarest Boro  
 0210 Dumont Boro  
 0212 East Rutherford Boro  
 0213 Edgewater Boro  
 0211 Elmwood Park Boro  
 0214 Emerson Boro  
 0215 Englewood City  
 0216 Englewood Cliffs Boro  
 0217 Fair Lawn Boro  
 0218 Fairview Boro  
 0219 Fort Lee Boro  
 0220 Franklin Lakes Boro  
 0221 Garfield City  
 0222 Glen Rock Boro  
 0223 Hackensack City  
 0224 Harrington Park Boro  
 0225 Hasbrouck Heights Boro  
 0226 Haworth Boro  
 0227 Hillsdale Boro  
 0228 Hohokus Boro  
 0229 Leonia Boro  
 0230 Little Ferry Boro  
 0231 Lodi Boro  
 0232 Lyndhurst Twp.

0233 Mahwah Twp.  
 0234 Maywood Boro  
 0235 Midland Park Boro  
 0236 Montvale Boro  
 0237 Moonachie Boro  
 0238 New Milford Boro  
 0239 North Arlington Boro  
 0240 Northvale Boro  
 0241 Norwood Boro  
 0242 Oakland Boro  
 0243 Old Tappan Boro  
 0244 Oradell Boro  
 0245 Palisades Park Boro  
 0246 Paramus Boro  
 0247 Park Ridge Boro  
 0248 Ramsey Boro  
 0249 Ridgefield Boro  
 0250 Ridgefield Park Villiage  
 0251 Ridgewood Villiage  
 0252 River Edge Boro  
 0253 River Vale Twp.  
 0254 Rochelle Park Twp.  
 0255 Rockleigh Boro  
 0256 Rutherford Boro  
 0257 Saddle Brook Twp.  
 0258 Saddle River Boro  
 0259 South Hackensack Twp.  
 0260 Teaneck Twp.  
 0261 Tenafly Boro  
 0262 Teterboro Boro  
 0263 Upper Saddle River Boro  
 0264 Waldwick Boro  
 0265 Wallington Boro  
 0266 Washington Twp.  
 0267 Westwood Boro  
 0269 Wood-Ridge Boro  
 0268 Woodcliff Lake Boro  
 0270 Wyckoff Twp.

### Burlington

0301 Bass River Twp.  
 0302 Beverly City  
 0303 Bordentown City  
 0304 Bordentown Twp.  
 0305 Burlington City  
 0306 Burlington Twp.  
 0307 Chesterfield Twp.  
 0308 Cinnaminson Twp.  
 0309 Delanco Twp.  
 0310 Delran Twp.  
 0311 Eastampton Twp.  
 0312 Edgewater Park Twp.  
 0313 Evesham Twp.  
 0314 Fieldsboro Boro  
 0315 Florence Twp.  
 0316 Hainesport Twp.  
 0317 Lumberton Twp.  
 0318 Mansfield Twp.  
 0319 Maple Shade Twp.

0321 Medford Lakes Boro  
 0320 Medford Twp.  
 0322 Moorestown Twp.  
 0323 Mount Holly Twp.  
 0324 Mount Laurel Twp.  
 0325 New Hanover Twp.  
 0326 North Hanover Twp.  
 0327 Palmyra Boro  
 0328 Pemberton Boro  
 0329 Pemberton Twp.  
 0330 Riverside Twp.  
 0331 Riverton Boro  
 0332 Shamong Twp.  
 0333 Southampton Twp.  
 0334 Springfield Twp.  
 0335 Tabernacle Twp.  
 0336 Washington Twp.  
 0337 Westampton Twp.  
 0338 Willingboro Twp.  
 0339 Woodland Twp.  
 0340 Wrightstown Boro

### Camden

0401 Audubon Boro  
 0402 Audubon Park Boro  
 0403 Barrington Boro  
 0404 Bellmawr Boro  
 0405 Berlin Boro  
 0406 Berlin Twp.  
 0407 Brooklawn Boro  
 0408 Camden City  
 0409 Cherry Hill Twp.  
 0410 Chesilhurst Boro  
 0411 Clementon Boro  
 0412 Collingswood Boro  
 0413 Gibbsboro Boro  
 0414 Gloucester City  
 0415 Gloucester Twp.  
 0418 Haddon Heights Boro  
 0416 Haddon Twp.  
 0417 Haddonfield Boro  
 0419 Hi-Nella Boro  
 0420 Laurel Springs Boro  
 0421 Lawnside Boro  
 0422 Lindenwold Boro  
 0423 Magnolia Boro  
 0424 Merchantville Boro  
 0425 Mount Ephraim Boro  
 0426 Oaklyn Boro  
 0427 Pennsauken Twp.  
 0428 Pine Hill Boro  
 0429 Pine Valley Boro  
 0430 Runnemede Boro  
 0431 Somerdale Boro  
 0432 Stratford Boro  
 0433 Tavistock Boro  
 0434 Voorhees Twp.  
 0435 Waterford Twp.  
 0436 Winslow Twp.

0437 Woodlynne Boro

## Cape May

0501 Avalon Boro  
0502 Cape May City  
0503 Cape May Point Boro  
0504 Dennis Twp.  
0505 Lower Twp.  
0506 Middle Twp.  
0507 North Wildwood City  
0508 Ocean City  
0509 Sea Isle City  
0510 Stone Harbor Boro  
0511 Upper Twp.  
0512 West Cape May Boro  
0513 West Wildwood Boro  
0514 Wildwood City  
0515 Wildwood Crest Boro  
0516 Woodbine Boro

## Cumberland

0601 Bridgeton City  
0602 Commercial Twp.  
0603 Deerfield Twp.  
0604 Downe Twp.  
0605 Fairfield Twp.  
0606 Greenwich Twp.  
0607 Hopewell Twp.  
0608 Lawrence Twp.  
0609 Maurice River Twp.  
0610 Millville City  
0611 Shiloh Boro  
0612 Stow Creek Twp.  
0613 Upper Deerfield Twp.  
0614 Vineland City

## Essex

0701 Belleville Twp.  
0702 Bloomfield Twp.  
0703 Caldwell Boro Twp.  
0704 Cedar Grove Twp.  
0717 City Of Orange Twp.  
0705 East Orange City  
0706 Essex Fells Twp.  
0707 Fairfield Twp.  
0708 Glen Ridge Boro Twp.  
0709 Irvington Twp.  
0710 Livingston Twp.  
0711 Maplewood Twp.  
0712 Millburn Twp.  
0713 Montclair Twp.  
0714 Newark City  
0715 North Caldwell Boro  
0716 Nutley Twp.  
0718 Roseland Boro

0719 South Orange Village Twp.  
0720 Verona Twp.  
0721 West Caldwell Twp.  
0722 West Orange Twp.

## Gloucester

0801 Clayton Boro  
0802 Deptford Twp.  
0803 East Greenwich Twp.  
0804 Elk Twp.  
0805 Franklin Twp.  
0806 Glassboro Boro  
0807 Greenwich Twp.  
0808 Harrison Twp.  
0809 Logan Twp.  
0810 Mantua Twp.  
0811 Monroe Twp.  
0812 National Park Boro  
0813 Newfield Boro  
0814 Paulsboro Boro  
0815 Pitman Boro  
0816 South Harrison Twp.  
0817 Swedesboro Boro  
0818 Washington Twp.  
0819 Wenonah Boro  
0820 West Deptford Twp.  
0821 Westville Boro  
0822 Woodbury City  
0823 Woodbury Heights Boro  
0824 Woolwich Twp.

## Hudson

0901 Bayonne City  
0902 East Newark Boro  
0903 Guttenberg Town  
0904 Harrison Town  
0905 Hoboken City  
0906 Jersey City  
0907 Kearny Town  
0908 North Bergen Twp.  
0909 Secaucus Town  
0910 Union City  
0911 Weehawken Twp.  
0912 West New York Town

## Hunterdon

1001 Alexandria Twp.  
1002 Bethlehem Twp.  
1003 Bloomsbury Boro  
1004 Califon Boro  
1005 Clinton Town  
1006 Clinton Twp.  
1007 Delaware Twp.  
1008 East Amwell Twp.  
1009 Flemington Boro

1010 Franklin Twp.  
1011 Frenchtown Boro  
1012 Glen Gardner Boro  
1013 Hampton Boro  
1014 High Bridge Boro  
1015 Holland Twp.  
1016 Kingwood Twp.  
1017 Lambertville City  
1018 Lebanon Boro  
1019 Lebanon Twp.  
1020 Milford Boro  
1021 Raritan Twp.  
1022 Readington Twp.  
1023 Stockton Boro  
1024 Tewksbury Twp.  
1025 Union Twp.  
1026 West Amwell Twp.

## Mercer

1101 East Windsor Twp.  
1102 Ewing Twp.  
1103 Hamilton Twp.  
1104 Hightstown Boro  
1105 Hopewell Boro  
1106 Hopewell Twp.  
1107 Lawrence Twp.  
1108 Pennington Boro  
1109 Princeton Boro  
1110 Princeton Twp.  
1111 Trenton City  
1112 Washington Twp.  
1113 West Windsor Twp.

## Middlesex

1201 Carteret Boro  
1202 Cranbury Twp.  
1203 Dunellen Boro  
1204 East Brunswick Twp.  
1205 Edison Twp.  
1206 Helmetta Boro  
1207 Highland Park Boro  
1208 Jamesburg Boro  
1210 Metuchen Boro  
1211 Middlesex Boro  
1212 Milltown Boro  
1213 Monroe Twp.  
1214 New Brunswick City  
1215 North Brunswick Twp.  
1209 Old Bridge Twp.  
1216 Perth Amboy City  
1217 Piscataway Twp.  
1218 Plainsboro Twp.  
1219 Sayreville Boro  
1220 South Amboy City  
1221 South Brunswick Twp.  
1222 South Plainfield Boro  
1223 South River Boro

1224 Spotswood Boro  
1225 Woodbridge Twp.

## Monmouth

1330 Aberdeen Twp.  
1301 Allenhurst Boro  
1302 Allentown Boro  
1303 Asbury Park City  
1304 Atlantic Highlands Boro  
1305 Avon-By-The-Sea Boro  
1306 Belmar Boro  
1307 Bradley Beach Boro  
1308 Brielle Boro  
1309 Colts Neck Twp.  
1310 Deal Boro  
1311 Eatontown Boro  
1312 Englishtown Boro  
1313 Fair Haven Boro  
1314 Farmingdale Boro  
1315 Freehold Boro  
1316 Freehold Twp.  
1339 Hazlet Twp.  
1317 Highlands Boro  
1318 Holmdel Twp.  
1319 Howell Twp.  
1320 Interlaken Boro  
1321 Keansburg Boro  
1322 Keyport Boro  
1323 Little Silver Boro  
1324 Loch Arbour Village  
1325 Long Branch City  
1326 Manalapan Twp.  
1327 Manasquan Boro  
1328 Marlboro Twp.  
1329 Matawan Boro  
1331 Middletown Twp.  
1332 Millstone Twp.  
1333 Monmouth Beach Boro  
1335 Neptune City Boro  
1334 Neptune Twp.  
1337 Ocean Twp.  
1338 Oceanport Boro  
1340 Red Bank Boro  
1341 Roosevelt Boro  
1342 Rumson Boro  
1343 Sea Bright Boro  
1344 Sea Girt Boro  
1345 Shrewsbury Boro  
1346 Shrewsbury Twp.  
1347 South Belmar Boro  
1348 Spring Lake Boro  
1349 Spring Lake Heights Boro  
1336 Tinton Falls Boro  
1350 Union Beach Boro  
1351 Upper Freehold Twp.  
1352 Wall Twp.  
1353 West Long Branch Boro

## Morris

1401 Boonton Town  
1402 Boonton Twp.  
1403 Butler Boro  
1404 Chatham Boro  
1405 Chatham Twp.  
1406 Chester Boro  
1407 Chester Twp.  
1408 Denville Twp.  
1409 Dover Town  
1410 East Hanover Twp.  
1411 Florham Park Boro  
1412 Hanover Twp.  
1413 Harding Twp.  
1414 Jefferson Twp.  
1415 Kinnelon Boro  
1416 Lincoln Park Boro  
1430 Long Hill Twp.  
1417 Madison Boro  
1418 Mendham Boro  
1419 Mendham Twp.  
1420 Mine Hill Twp.  
1421 Montville Twp.  
1423 Morris Plains Boro  
1422 Morris Twp.  
1424 Morristown Town  
1426 Mount Arlington Boro  
1427 Mount Olive Twp.  
1425 Mountain Lakes Boro  
1428 Netcong Boro  
1429 Parsippany-Troy Hills Twp.  
1431 Pequannock Twp.  
1432 Randolph Twp.  
1433 Riverdale Boro  
1434 Rockaway Boro  
1435 Rockaway Twp.  
1436 Roxbury Twp.  
1437 Victory Gardens Boro  
1438 Washington Twp.  
1439 Wharton Boro

## Ocean

1501 Barnegat Light Boro  
1533 Barnegat Twp.  
1502 Bay Head Boro  
1503 Beach Haven Boro  
1504 Beachwood Boro  
1505 Berkeley Twp.  
1506 Brick Twp.  
1507 Dover Twp.  
1508 Eagleswood Twp.  
1509 Harvey Cedars Boro  
1510 Island Heights Boro  
1511 Jackson Twp.  
1512 Lacey Twp.  
1513 Lakehurst Boro  
1514 Lakewood Twp.  
1515 Lavallette Boro  
1516 Little Egg Harbor Twp.

1517 Long Beach Twp.  
1518 Manchester Twp.  
1519 Mantaloking Boro  
1521 Ocean Gate Boro  
1520 Ocean Twp.  
1522 Pine Beach Boro  
1523 Plumsted Twp.  
1525 Point Pleasant Beach Boro  
1524 Point Pleasant Boro  
1526 Seaside Heights Boro  
1527 Seaside Park Boro  
1528 Ship Bottom Boro  
1529 South Toms River Boro  
1530 Stafford Twp.  
1531 Surf City Boro  
1532 Tuckerton Boro

## Passaic

1601 Bloomingdale Boro  
1602 Clifton City  
1603 Haledon Boro  
1604 Hawthorne Boro  
1605 Little Falls Twp.  
1606 North Haledon Boro  
1607 Passaic City  
1608 Paterson City  
1609 Pompton Lakes Boro  
1610 Prospect Park Boro  
1611 Ringwood Boro  
1612 Totowa Boro  
1613 Wanaque Boro  
1614 Wayne Twp.  
1615 West Milford Twp.  
1616 West Paterson Boro

## Salem

1701 Alloway Twp.  
1713 Carneys Point Twp.  
1702 Elmer Boro  
1703 Elsinboro Twp.  
1704 Lower Alloways Creek Twp.  
1705 Mannington Twp.  
1706 Oldmans Twp.  
1707 Penns Grove Boro  
1708 Pennsville Twp.  
1709 Pilesgrove Twp.  
1710 Pittsgrove Twp.  
1711 Quinton Twp.  
1712 Salem City  
1714 Upper Pittsgrove Twp.  
1715 Woodstown Boro

## Somerset

1801 Bedminster Twp.  
1802 Bernards Twp.  
1803 Bernardsville Boro

1804 Bound Brook Boro  
 1805 Branchburg Twp.  
 1806 Bridgewater Twp.  
 1807 Far Hills  
 1808 Franklin Twp.  
 1809 Green Brook Twp.  
 1810 Hillsborough Twp.  
 1811 Manville Boro  
 1812 Millstone Boro  
 1813 Montgomery Twp.  
 1814 North Plainfield Boro  
 1815 Peapack Gladstone Boro  
 1816 Raritan Boro  
 1817 Rocky Hill Boro  
 1818 Somerville Boro  
 1819 South Bound Brook Boro  
 1820 Warren Twp.  
 1821 Watchung Boro

## Sussex

1901 Andover Boro  
 1902 Andover Twp.  
 1903 Branchville Boro  
 1904 Byram Twp.  
 1905 Frankford Twp.  
 1906 Franklin Boro  
 1907 Fredon Twp.  
 1908 Green Twp.  
 1909 Hamburg Boro  
 1910 Hampton Twp.  
 1911 Hardyston Twp.

1912 Hopatcong Boro  
 1913 Lafayette Twp.  
 1914 Montague Twp.  
 1915 Newton Town  
 1916 Ogdensburg Boro  
 1917 Sandyston Twp.  
 1918 Sparta Twp.  
 1919 Stanhope Boro  
 1920 Stillwater Twp.  
 1921 Sussex Boro  
 1922 Vernon Twp.  
 1923 Walpack Twp.  
 1924 Wantage Twp.

## Union

2001 Berkeley Heights Twp.  
 2002 Clark Twp.  
 2003 Cranford Twp.  
 2004 Elizabeth City  
 2005 Fanwood Boro  
 2006 Garwood Boro  
 2007 Hillside Twp.  
 2008 Kenilworth Boro  
 2009 Linden City  
 2010 Mountainside Boro  
 2011 New Providence Boro  
 2012 Plainfield City  
 2013 Rahway City  
 2014 Roselle Boro  
 2015 Roselle Park Boro  
 2016 Scotch Plains Twp.

2017 Springfield Twp.  
 2018 Summit City  
 2019 Union Twp.  
 2020 Westfield Twp.  
 2021 Winfield Twp.

## Warren

2101 Allamuchy Twp.  
 2102 Alpha Boro  
 2103 Belvidere Twp.  
 2104 Blairstown Twp.  
 2105 Franklin Twp.  
 2106 Frelinghuysen Twp.  
 2107 Greenwich Twp.  
 2108 Hackettstown Town  
 2109 Hardwick Twp.  
 2110 Harmony Twp.  
 2111 Hope Twp.  
 2112 Independence Twp.  
 2113 Knowlton Twp.  
 2114 Liberty Twp.  
 2115 Lopatcong Twp.  
 2116 Mansfield Twp.  
 2117 Oxford Twp.  
 2118 Pahaquarry Twp.  
 2119 Phillipsburg Town  
 2120 Pohatcong Twp.  
 2121 Washington Boro  
 2122 Washington Twp.  
 2123 White Twp.