# TOWNSHIP OF MILLSTONE

## MONMOUTH COUNTY
## NEW JERSEY

# COMPREHENSIVE FARMLAND PRESERVATION PLAN

**As Adopted By The**
**Township Planning Board**
**On April 9, 2008**

**PREPARED BY COPPOLA & COPPOLA ASSOCIATES,**
**PAT M. BUTCH, OPEN SPACE & FARMLAND PRESERVATION COUNCIL CHAIR,**
**AND LEON S. AVAKIAN, INC.**

# TOWNSHIP OF MILLSTONE
# COMPREHENSIVE FARMLAND PRESERVATION PLAN
## As Adopted By The Township Planning Board
## On April 9, 2008

## TABLE OF CONTENTS


| | Page |
|---|---|
| **INRODUCTION & VISION STATEMENT** | 1 |
| **SECTION I:** | |
| **AGRICULTURAL LAND BASE OF MILLSTONE TOWNSHIP** | 2 |
| **A. Location & Size Of Agricultural Land Base** | 2 |
| **B. Soil Types & Their Agricultural Capability** | 4 |
| **C. Number Of Irrigated Acres & Available Water Resources** | 8 |
| **D. Farmland Assessment Statistics & Trends** | 9 |
| **SECTION II:** | |
| **AGRICULTURAL INDUSTRY OVERVIEW** | 11 |
| **A. Trends In Market Value Of Agricultural Products Sold** | 11 |
| **B. Crop Production Trends Over Past 20 Years** | 13 |
| **C. Support Services Within Agricultural Market Region** | 15 |
| **D. Other Agricultural Related Industries** | 16 |
| **SECTION III:** | |
| **LAND USE PLANNING CONTEXT** | 16 |
| **A. Relationship To State Plan** | 17 |
| **B. Special Resource Areas** | 17 |
| **C. Township Master Plan & Development Regulations** | 18 |
| **D. Current Land Use Pattern & Trends** | 20 |
| **E. Public Water & Sewer Service Areas** | 20 |
| **F. Township Zoning Policies & Provisions** | 21 |

**Page**

**SECTION IV:**
**FARMLAND PRESERVATION PROGRAM OVERVIEW** . . . 23

A. **County Agricultural Development Areas** . . . . . 24
B. **Farmland Preserved To Date By Program**. . . . . 24
C. **Consistency With SADC Strategic Targeting Project** . . . 29
D. **Eight-Year Programs** . . . . . 29
E. **Coordination With Open Space Preservation Initiatives** . . 29
F. **Farmland Preservation Program Funding To Date** . . . 31
G. **Monitoring Of Preserved Farmland** . . . . . 31
H. **Coordination With TDR Programs** . . . . . 33

**SECTION V:**
**FUTURE FARMLAND PRESERVATION PROGRAM**. . . . 33

A. **Preservation Goals (1, 5 & 10 years)** . . . . . 33
B. **Project Area Summaries** . . . . . 33
C. **Minimum Eligibility Criteria Coordination** . . . . 38
D. **Ranking Criteria Used To Prioritize Farms** . . . . 39
E. **Policies Related To Farmland Preservation Programs** . . . 40
F. **Funding Plan** . . . . . 41
G. **Farmland Preservation Program & Administrative Resources** . . 43
H. **Factors Limiting Farmland Preservation Implementation** . . 46

**SECTION VI:**
**ECONOMIC DEVELOPMENT** . . . . . 47

A. **Consistency With NJDA Economic Development Strategies** . . 47
B. **Agricultural Retention, Expansion & Recruitment Strategies** . . 49

**SECTION VII:**
**NATURAL RESOURCE CONSERVATION** . . . . . 51

A. **Natural Resource Protection Agencies** . . . . . 51
B. **Natural Resource Protection Programs** . . . . . 53
C. **Water Resources** . . . . . 54
D. **Waste Management Planning** . . . . . 56
E. **Energy Conservation Planning** . . . . . 57
F. **Outreach & Incentives** . . . . . 58

**Page**

**SECTION VIII:**
**AGRICULTURAL INDUSTRY**
**SUSTAINABILITY, RETENTION & PROMOTION** . . . . 58

**A. Existing Agricultural Industry Support** . . . . . 58
**B. Other Strategies To Sustain, Retain & Promote Agriculture** . . 60

**APPENDIX I: LOCAL AND REGIONAL SERVICE PROVIDERS**

**APPENDIX II: EXISTING PRESERVED FARMLAND AND OPEN SPACE**

# TOWNSHIP OF MILLSTONE
# COMPREHENSIVE FARMLAND PRESERVATION PLAN
## As Adopted By The Township Planning Board
## On April 9, 2008

## LIST OF PLATES


| | Page |
|---|---|
| CRITICAL AREAS MAP | 3 |
| NJDEP 2002 LAND USE/LAND COVER MAP | 5 |
| SOIL AGRICULTURAL CAPABILITY MAP | 7 |
| FARMLAND ASSESSED PROPERTIES MAP | 10 |
| EXISTING ZONING MAP | 19 |
| POTENTIAL FARMLAND PRESERVATION PROPERTIES MAP | 25 |
| AGRICULTURE DEVELOPMENT AREA (ADA) MAP | 26 |
| PRESERVED LANDS MAP | 27 |
| AGRICULTURAL LAND MAP WITH OPEN SPACE AND TRAIL EASEMENTS OVERLAY MAP | 32 |
| POTENTIAL PRESERVATION PROPERTIES WITH CRITICAL AREA MAP | 35 |
| PLANNING INCENTIVE GRANT PROGRAM TARGETED FARMS FOR PRESERVATION MAP | 36 |

# COMPREHENSIVE FARMLAND PRESERVATION PLAN
# TOWNSHIP OF MILLSTONE
## As Adopted By The Township Planning Board
## On April 9, 2008

## INTRODUCTION & VISION STATEMENT

The main objective of this 2007 Millstone Township "Comprehensive Farmland Preservation Plan" is to guide Millstone Township's continuing efforts to preserve its remaining farmland and maintain a viable agricultural industry. Farming is a significant component of the Township's economy, and farmland is an irreplaceable natural resource. The plan identifies project areas to target for preservation and sets preservation goals in 1, 5 and 10-year increments.

The Millstone Township Master Plan was last adopted during 2002 and includes a section on farmland preservation. The Township now is updating the 2002 plan to reflect the current state of farmland within the Township and to meet the State Agriculture Development Committee's (SADC) requirements for the municipal Planning Incentive Grant (PIG) program in order to improve coordination between Monmouth County and the Township's farmland and open space preservation efforts.

The following vision statement is based on the Statement of Principle for open space and farmland preservation that was adopted as part of the 2002 Master Plan, with new additional language to emphasize the importance of maintaining the economic viability of agriculture.

> Open space and farmland are essential to maintaining a healthy environment, controlling urban sprawl, and preserving the rural character of Millstone Township and its natural and cultural resources. Farmland contributes to the economic base of Millstone Township and it is essential to the open rural landscape that characterizes much of the community. The Township is uniquely located and serves as the origins for one quarter of New Jersey's twenty major watershed areas. A Township network of permanently preserved open spaces and farmland is needed to provide public recreation, to maintain biodiversity, to protect water quality, to control flooding and to conserve the significant scenic, cultural and natural features. Efforts should be made to maintain the economic viability of the agricultural industry.

## SECTION I:
## AGRICULTURAL LAND BASE OF MILLSTONE TOWNSHIP

Millstone Township is a rural community with a rich agricultural heritage. Preservation of farmland is a priority for the Township because maintaining a highly dense land area within the Township that is dedicated to agriculture will support the sustainability of farming within the community.

Agricultural lands are found throughout Millstone Township, with larger farms consisting of Asian vegetable production, equine farms, and nursery operations. Millstone Township ranked in the top 5% of municipalities in the State of New Jersey for the highest concentrations of agricultural land as reported by the State Agriculture Development Committee in 2006.

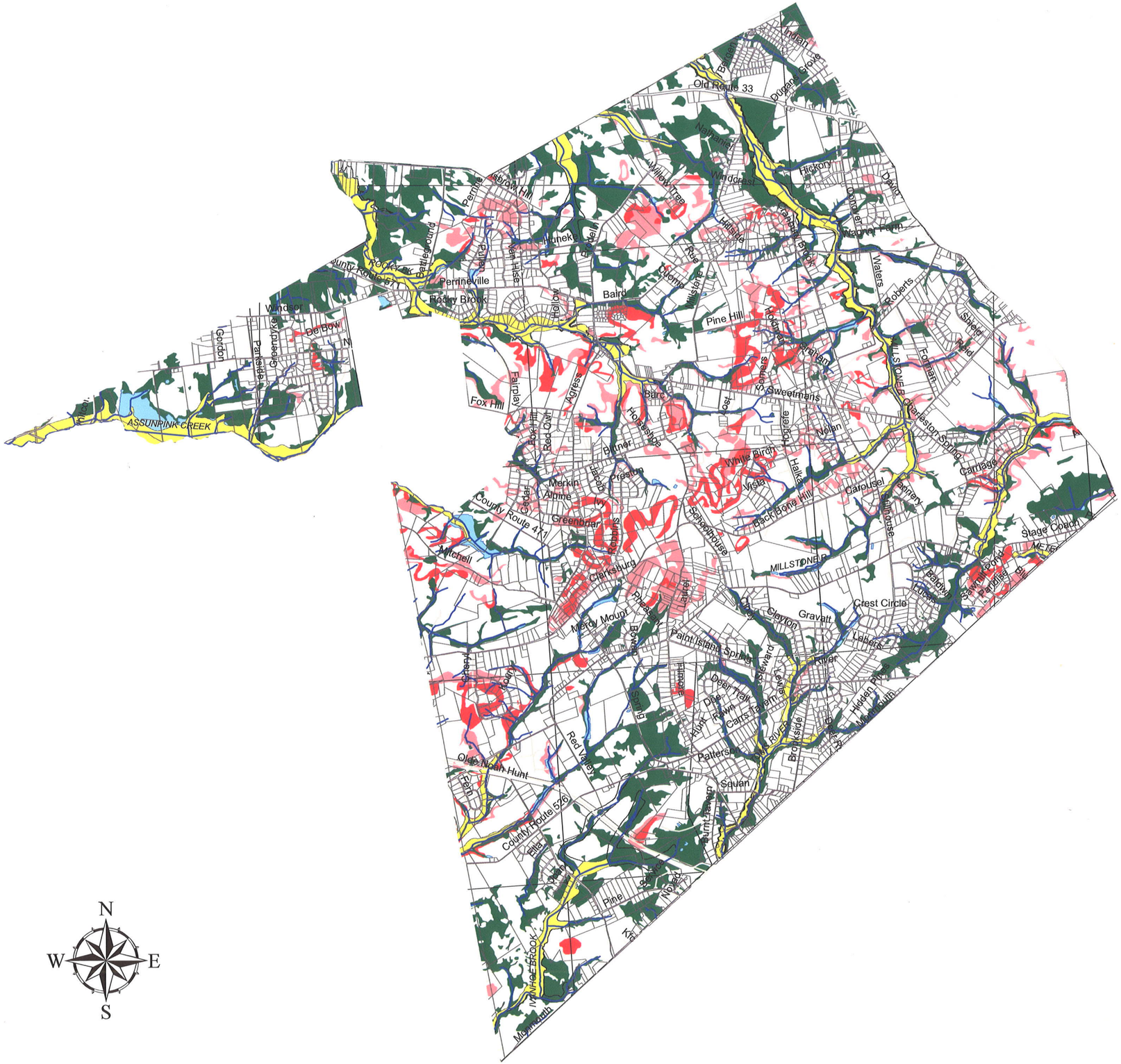
Millstone Township is geographically situated within the heart of central New Jersey and in the western portion of Monmouth County. The Township contains approximately 37.4 square miles, or 23,936 acres, of land area. Despite tremendous growth pressure from the suburban expansion of both the Philadelphia and New York metropolitan areas, Millstone has retained its rural character. Regional growth and Millstone's attractive natural surroundings and bucolic environment continue to attract new residents. Pressure to develop residential dwellings remains high and threatens the loss of existing agricultural land, as does the often associated friction between residential development and farmland. Since 2003, a total of 753 acres of former farmland received preliminary and/or final approval for the development of 174 single family dwelling units.

A significant portion of the Township is environmentally constrained, as shown on the "Critical Areas Map" (see page 3), and efforts have been put into place to protect these resources. Preserving the steep slopes is particularly important in Millstone, since several regional streams have their headwaters in the central, hilly portion of the Township.

### A. Location & Size Of Agricultural Land Base

Farmland contributes to the economic base of Millstone Township, is essential to the open rural landscape that characterizes much of the community, and is important to maintain the community as a rural environmentally sensitive planning area. A significant area of Millstone Township, roughly 11,000 acres or 46% of the Township, continues to be farmed according to the 2002 Master Plan. The number of farms and the amount of farmland in Millstone, however, has declined. According to 2006 farmland assessment data, agricultural lands account for approximately 9,242 acres or 38.6%, representing a nearly 10% decline in farmland since 2002. To maintain its rural environment and landscape, the Township needs to preserve as much farmland as possible.

# Millstone Township Critical Areas Map




## Critical Areas

- Flood Hazard Area
- Wetlands
- Slopes > 15%
- Slopes 10-15%

Sources: NJDEP GIS
Monmouth County GIS

1:60,000

Prepared By:
Leon S. Avakian, Inc.
September, 2007

N
W E
S

Agricultural lands are found throughout the Township as shown on the map entitled "NJDEP 2002 Land Use/Land Cover Map" (see page 5). The NJDEP's 2002 Land Use/Land Cover GIS layer indicates a total of 6,473 acres of agricultural land (including modified agricultural wetlands). The NJDEP considers woodland to be a separate land use category from agricultural land, accounting for some of the differences in the calculation of total farmland acreage.

Along the perimeters of the Township, ponds, streams, forests and woodlands are the primary natural features. Millstone contains a small section of the Pine Barrens in the southeastern portion of the Township. The Assunpink Watershed, a drainage area, is situated in the northwestern corner and south-central portion of Millstone. Assunpink Lake, located in the northwestern corner of Millstone, is the Township's largest lake. There are several additional smaller lakes scattered throughout the Township.

Land use is directly affected and limited by the steep slope conditions which occur in portions of the Township. Millstone is situated on a major divide which separates the major bodies of water that flow into the drainage basins.

There are three primary drainage basins in Millstone Township: the Raritan River Drainage Basin located to the north, the Delaware River Drainage Basin located to the west, and the Atlantic Coastal Drainage Basin located to the east. Within these three major drainage basins, there are seven sub-drainage basins which account for approximately 45% of the total land area in Millstone.

**B. Soil Types & Their Agricultural Capability**

Millstone Township is noted for its topographic features, with some of the highest hills in the central New Jersey area. The highest point in the Township is Pine Hill, which is situated in the east central portion of Millstone, west of Stillhouse Road. Pine Hill is 372 feet above sea level. The lowest points in Millstone are along the streams along the perimeter of the Township, with the lowest being found in the Assunpink Creek at an elevation of 98 feet. The remaining land in Millstone has gently rolling hills and a relatively level landscape.

In the central portion of Millstone, there are a series of steep slopes, or "cuestas", which dominate the overall landscape of the Township. A cuesta is a ridge or hill with a steep slope on one side and a gentle slope on the other side. The steep land in Millstone generally is located in the area of Pine Hill Road, surrounding Perrineville Lake, and near the intersection of Sweetman's Lane and Backbone Hill Road, near Roosevelt Borough and Upper Freehold Township.

Slope of the land is a critical factor in agricultural productivity. Steep slopes are prone to erosion while little to no slope has poor drainage. Generally, farm equipment can operate on slopes up to 5%, while steeper slopes can accommodate pasture land, nurseries, or field crops that are cultivated by hand.

# Millstone Township NJDEP Land Use/ Land Cover Map

**Legend**

**Land Use/Land Cover**

- AGRICULTURAL WETLANDS (MODIFIED)
- ALTERED LANDS
- ARTIFICIAL LAKES
- ATHLETIC FIELDS (SCHOOLS)
- CEMETERY
- COMMERCIAL/SERVICES
- CONFINED FEEDING OPERATIONS
- CONIFEROUS BRUSH/SHRUBLAND
- CONIFEROUS FOREST (10-50% CROWN CLOSURE)
- CONIFEROUS FOREST (>50% CROWN CLOSURE)
- CONIFEROUS SCRUB/SHRUB WETLANDS
- CONIFEROUS WOODED WETLANDS
- CROPLAND AND PASTURELAND
- DECIDUOUS BRUSH/SHRUBLAND
- DECIDUOUS FOREST (10-50% CROWN CLOSURE)
- DECIDUOUS FOREST (>50% CROWN CLOSURE)
- DECIDUOUS SCRUB/SHRUB WETLANDS
- DECIDUOUS WOODED WETLANDS
- DISTURBED WETLANDS (MODIFIED)
- EXTRACTIVE MINING
- FORMER AGRICULTURAL WETLAND (BECOMING SHRUBBY, NOT BUILT-UP)
- HERBACEOUS WETLANDS
- INDUSTRIAL
- MAJOR ROADWAY
- MANAGED WETLAND IN BUILT-UP MAINTAINED REC AREA
- MANAGED WETLAND IN MAINTAINED LAWN GREENSPACE
- MIXED DECIDUOUS/CONIFEROUS BRUSH/SHRUBLAND
- MIXED FOREST (>50% CONIFEROUS WITH 10-50% CROWN CLOSURE)
- MIXED FOREST (>50% CONIFEROUS WITH >50% CROWN CLOSURE)
- MIXED FOREST (>50% DECIDUOUS WITH 10-50% CROWN CLOSURE)
- MIXED FOREST (>50% DECIDUOUS WITH >50% CROWN CLOSURE)
- MIXED SCRUB/SHRUB WETLANDS (CONIFEROUS DOM.)
- MIXED SCRUB/SHRUB WETLANDS (DECIDUOUS DOM.)
- MIXED URBAN OR BUILT-UP LAND
- MIXED WOODED WETLANDS (CONIFEROUS DOM.)
- MIXED WOODED WETLANDS (DECIDUOUS DOM.)
- NATURAL LAKES
- OLD FIELD (< 25% BRUSH COVERED)
- ORCHARDS/VINEYARDS/NURSERIES/HORTICULTURAL AREAS
- OTHER AGRICULTURE
- OTHER URBAN OR BUILT-UP LAND
- PHRAGMITES DOMINATE INTERIOR WETLANDS
- PLANTATION
- RECREATIONAL LAND
- RESIDENTIAL, HIGH DENSITY OR MULTIPLE DWELLING
- RESIDENTIAL, RURAL, SINGLE UNIT
- RESIDENTIAL, SINGLE UNIT, LOW DENSITY
- RESIDENTIAL, SINGLE UNIT, MEDIUM DENSITY
- STORMWATER BASIN
- TRANSITIONAL AREAS
- TRANSPORTATION/COMMUNICATION/UTILITIES
- UPLAND RIGHTS-OF-WAY UNDEVELOPED
- WETLAND RIGHTS-OF-WAY

N
W E
S

Source: NJDEP GIS
Monmouth County GIS

1:60,000

Prepared by: Leon S. Avakian, Inc.

The 1992 Soils Map of Millstone Township identified eighty-five specific soil types. The primary soil type in Millstone Township is sandy loam. Soils in the Township also include sand deposits with some clay, silt and gravel. The wide range of soil types can be attributed to the Township's varied topography. An important soil type in Millstone is hydric soil, which is distributed throughout most of the Township. This soil type is usually associated with the presence of freshwater wetlands. Slow drainage, frequent flooding, and a shallow water table are characteristic traits of hydric soils.

An important factor for agriculture is the productivity of the soil. The Natural Resources Conservation Service (NRCS) classifies certain soils as "Prime", of "Statewide Importance", or "Unique" based on their agricultural productivity.

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 moisture supply needed to produce sustained high yields of crops when treated and managed according to acceptable farming methods. Prime soils are not excessively erodible or saturated with water for a long period of time, and they either flood infrequently or are protected from flooding.

Farmland soils of Statewide Importance produce high yields of crops when treated and managed according to acceptable farming methods, but have yields that are not as high as prime soils.

Unique soils exhibit specific qualities that may be favorable to the production of specialized crops such as blueberries.

Prime, Statewide, and Unique farmland soils cover 62% of Millstone Township. As shown on the "Soil Agricultural Capability Map" (see page 7), these agricultural soils are found in abundance throughout the Township. These soils are less common within wetland areas and bordering the Township's principal waterways.

Millstone Township has some of the best soils in the state for agriculture. According to the NJDEP, a majority of the agricultural land, nearly 68%, within Millstone Township consists of prime farmland soils. There is only 6% of agricultural land that is not suitable for agriculture.

# Millstone Township Soil Agricultural Capability Map

## Legend

- All areas are prime farmland
- Farmland of statewide importance
- Farmland of unique importance
- Not prime farmland

N
W E
S

Sources: Monmouth County GIS
NJDEP GIS
NRCS

Prepared By: Leon S. Avakian, Inc.

1:60,000

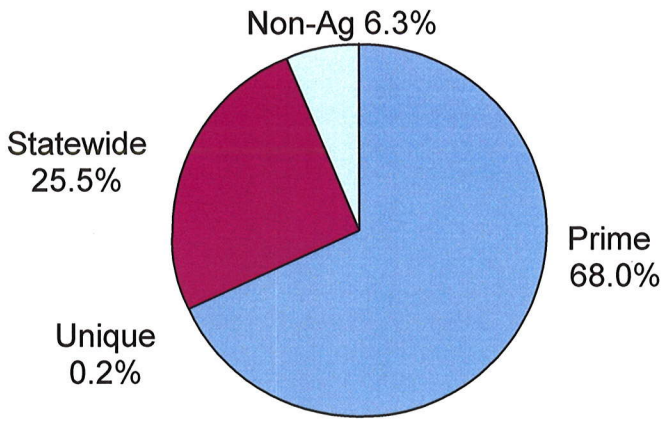
The breakdown by soil type for agricultural lands in Millstone Township is as follows:

**BREAKDOWN OF AGRICULTURE SOIL TYPES FOR AGRICULTURAL LANDS IN MILLSTONE TOWNSHIP**

| Soil Suitability | Sum Acres | % Agricultural Land |
|---|---|---|
| Prime farmland | 5,371.91 | 67.97% |
| Statewide importance | 2,012.36 | 25.46% |
| Unique Importance | 14.15 | 0.18% |
| Not prime | 505.15 | 6.39% |

**Source: 1995 Land Use/Land Cover**

**Soil Type for Agricultural Lands**




## C. Number Of Irrigated Acres & Available Water Resources

Access to water is critical to farm productivity and future viability, especially given the presence of water dependent nursery and horticulture industries. It is important to note that there appears to be a discrepancy in the numbers of irrigated acres. Within Millstone Township, according to the data on the farmland assessment forms, there are 226 acres that were reported as irrigated in 2004. The existing irrigated land can be found scattered throughout Millstone Township, and is necessary wherever vegetable and nursery stock are grown. Most Millstone Township farmers rely on precipitation to nourish crops during the growing season. Others have man-made ponds that serve to assist with irrigation.

However, according to the Rutgers Agricultural Experiment Station, which monitors water applications in Millstone Township, there were 585 irrigated acres, most in vegetables and nursery stock. Millstone Township believes that this number is still below the actual number of irrigated acres. Water resources, including supply and demand and conservation strategies are more fully discussed in Section 7 of this plan, entitled "Natural Resource Conservation".

## D. Farmland Assessment Statistics & Trends

According to the New Jersey Farmland Assessment records, agricultural lands occupied nearly 40% of Millstone Township in 2004, representing 400 farms. Properties that are currently under farmland tax assessment are shown on the "Farmland Assessed Properties" map (see page 10). Municipal farmland assessment records indicate that the average farm size is 30.6 acres and the median size is 15.6 acres.

However, the area of agricultural land in Millstone Township has declined 34% during the last twenty years. The amount of land in farms within the Township fell 11% between 2000 and 2004 alone. As shown on the following table, most of the farmland that has been lost in Millstone Township has been active crop and pasturelands.

**MILLSTONE TOWNSHIP AGRICULTURAL LAND SUMMARY OF ACREAGE AND TYPE OF AGRICULTURE THAT WAS REPORTED FOR FARMLAND QUALIFIED TAX ASSESSMENT BETWEEN 1983 AND 2004**

| | 1983 | 1990 | 2000 | 2004 | % Change from 1983-2004 |
|---|---|---|---|---|---|
| **Cropland Harvested** | 8,418 | 7,515 | 6,120 | 4,986 | *-41%* |
| **Cropland Pasture** | 560 | 984 | 268 | 268 | *-52%* |
| **Permanent Pasture** | 1,005 | 880 | 703 | 740 | *-26%* |
| **Woodland** | 3,947 | 3,337 | 3,125 | 3104 | *-24%* |
| **Equine** | -- | -- | 107 | 84 | |
| **TOTAL FOR AGRICULTURAL USES:** | **13,941** | **12,684** | **10,323** | **9,182** | ***-34%*** |

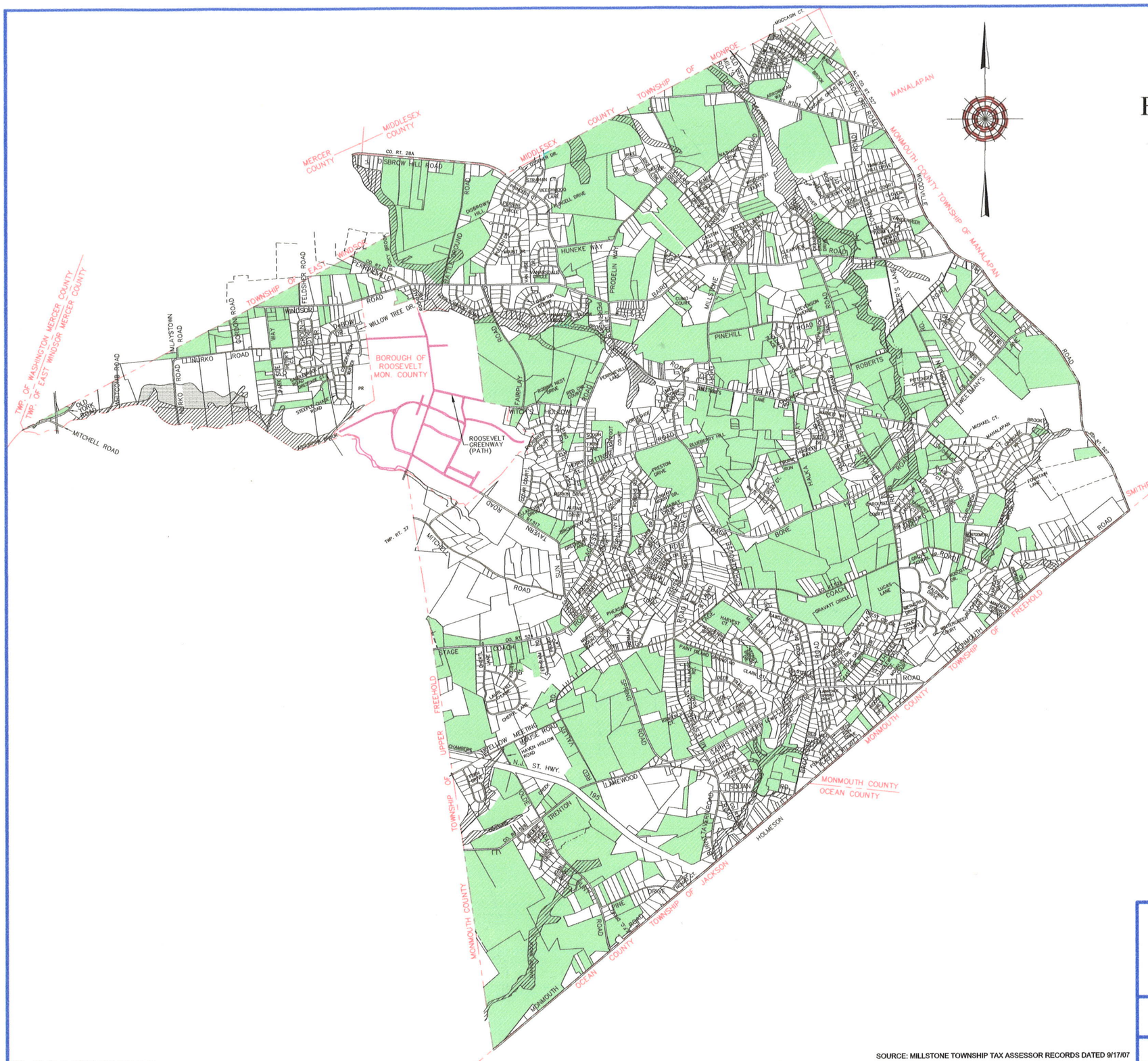
**Source: NJ Farmland Assessment**

The equine industry is thriving in Millstone Township. Several nationally ranked drivers, trainers and breeders of thoroughbred and standard bred horses reside in the Township. There are facilities for boarding, training and showing horses, as well as facilities which offer public and private lessons. A horse rescue and adoption operation is considering locating in Millstone Township. The development of a local bridle path system, together with the Horse Park of New Jersey located in Assunpink, provides miles of trails for use and enjoyment. The Horse Park also offers many national, state and local horse shows and events.

According to the New Jersey Farmland Assessment, in 2004 there were 1,092 acres devoted to equine operations including boarding, rehabilitation, training and pasture lands. While the amount of land devoted to permanent pasture declined by 26% during the last twenty years, there was a modest increase in permanent pasture acreages between 2000 and 2004 which is a direct result from the growing equine industry.

# MILLSTONE TOWNSHIP
Monmouth County, New Jersey
# FARMLAND PARCEL MAP

FARMLAND PARCEL




2000 0 2000 4000 6000 Feet

## FARMLAND ASSESSED PROPERTIES
### TOWNSHIP OF MILLSTONE
### MONMOUTH COUNTY, NEW JERSEY

FEB. 6, 2006
OCT. 3, 2007

PREPARED BY
LEON S. AVAKIAN, INC.
788 WAYSIDE ROAD, NEPTUNE, NEW JERSEY

BASE MAP PREPARED BY
T & M ASSOCIATES
MAY 21, 2003 ORD. SUPP. 6/03

SOURCE: MILLSTONE TOWNSHIP TAX ASSESSOR RECORDS DATED 9/17/07

REF. MS 05-14 FARMLAND 11x17 NEW

**BREAKDOWN OF ACREAGE DEVOTED TO EQUINE OPERATIONS BETWEEN 2000 AND 2004**

| | 2000 | 2004 |
|---|---|---|
| **Cropland Pasture** | 268 | 268 |
| **Permanent Pasture** | 703 | 740 |
| **Equine Boarding** | 47 | 43 |
| **Rehabilitating** | 15 | 12 |
| **Equine Training** | 44 | 25 |
| **Unspecified** | 1 | 4 |
| **TOTAL ACRES DEVOTED TO EQUINE** | **1078** | **1092** |

**Source: NJ Farmland Assessment**

The production of fruits and vegetables has increased. Several local farm stands, such as the Red Wagon and Van Handel's Market, are situated along Route 33 and provide direct market access to farm products, including sweet corn, tomatoes and peppers, flowers and plants. Van Handel's Market also is well known for its popping corn. Also on the rise is the production of Asian vegetables for direct market to New York City's Chinatown.

There are several existing agri-tourism opportunities, including the Earth Friendly Organic Farm and Bed & Breakfast, and several pick your own farms, including Boyce's Pick Your Own blueberries.

Nurseries are another growing segment of the agricultural industry in Millstone Township. Monmouth Nurseries serve New Jersey and the northeast, PJR Farms sells cut flowers to New York markets, and Halka Nurseries serve the entire United States. There are several local markets that serve the immediate area, including D'Amico's Nursery Plants Market on Route 33 and Penny's Petals on Stage Coach Road.

## SECTION II:
## AGRICULTURAL INDUSTRY OVERVIEW

### A. Trends In Market Value Of Agricultural Products Sold

Due to higher production costs related to land values, property taxes and labor costs, New Jersey farmers are at a disadvantage compared to farmers in other areas of the country. Since commodity prices are based upon national production costs and demands, New Jersey farmers will remain at a disadvantage and the profit margins will remain less than in other regions of the country. Yet, in spite of this, the 2006 prices for New Jersey field and forage crops were strong.

While municipal-level market value data was not made available to Millstone Township, it is important to note that local agricultural products make-up a significant portion of the markets that have rated Monmouth County as a "Top 100" county in several US Census categories. As reported in the 2007 Monmouth County Farmland Preservation Plan:

> "In 2002, the county was 5th in the United States for Chinese cabbage, 19th for acres of eggplant, 25th for sod harvested, and 34th for bell peppers. Monmouth was 47th in the country for value of nursery, greenhouse, floriculture and sod. It was 49th in the United States for horse and pony inventory, 90th for blueberries harvested for sale, and 94th for tomatoes. It was also 81st in the value of agricultural products sold directly to individuals for human consumption."

The following table summarizes the national ranking of Monmouth County's farm commodities. The agricultural products grown in Millstone Township that had a significant impact on the national ranking included Chinese cabbage, nursery, and equine. The local trends for the farm commodities are addressed in the following section of this plan.

**MONMOUTH COUNTY'S AGRICULTURAL INDUSTRY IN A NATIONAL CONTEXT**

| Commodity | Rank In Country |
|---|---|
| Chinese Cabbage (Acres Harvested) | 5 |
| Eggplant (Acres Harvested) | 19 |
| Sod Harvested for Sale | 25 |
| Bell Peppers (Acres Harvested) | 34 |
| Value of Nursery, Greenhouse, Floriculture and Sod | 47 |
| Horses and Ponies (Inventory) | 49 |
| Strawberries (Acres) | 62 |
| Value of Agricultural Products Sold Directly to Individuals for Human Consumption ($1000) | 81 |
| Tame Blueberries (Acres) | 90 |
| Tomatoes (Acres Harvested) | 94 |

## B. Crop Production Trends Over Past 20 Years

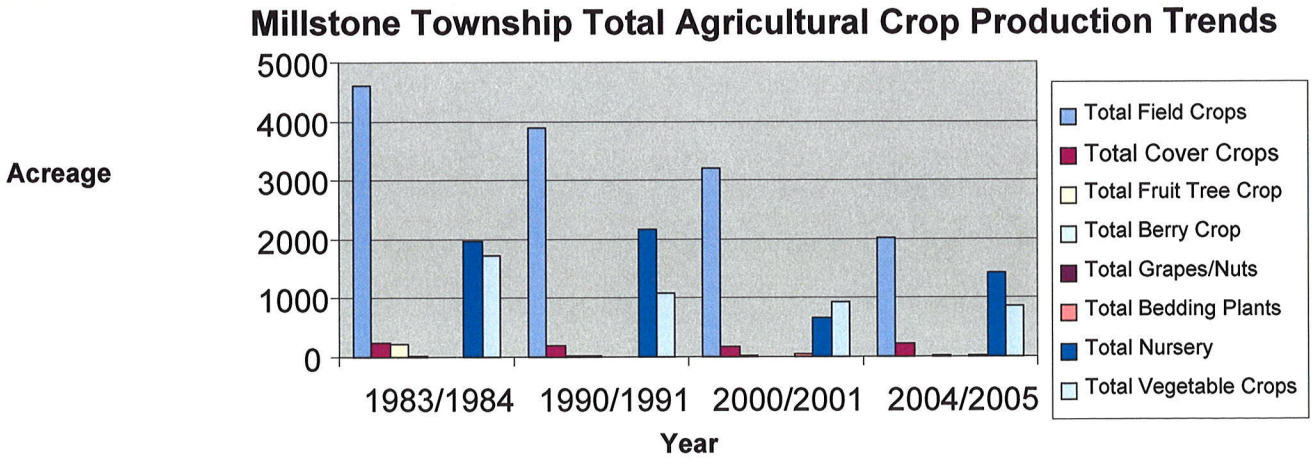
As indicated on the following table, the most commonly produced field crop in Millstone Township is soybeans. The soybean is planted on more than one-third of the Township's cropland – 667 acres in 2004.

**MILLSTONE TOWNSHIP FIELD CROPS**
**1983-2004**

| | 1983 | 1990 | 2000 | 2004 |
|---|---|---|---|---|
| Barley | 72 | 188 | 100 | 0 |
| Corn/Grain | 720 | 488 | 444 | 447 |
| Corn/Silage | 21 | 183 | 38 | 39 |
| Grass/Silage | 29 | 0 | 0 | 0 |
| Alfalfa | 278 | 445 | 123 | 91 |
| Hay/Other | 561 | 247 | 459 | 402 |
| Oats/Grain | 0 | 0 | 0 | 0 |
| Rye/Grain | 42 | 111 | 459 | 244 |
| Sorghum | 46 | 0 | 26 | 40 |
| Soybeans | 2,432 | 2,036 | 1,021 | 667 |
| Wheat | 401 | 113 | 507 | 88 |
| Other Field Crops | 8 | 7 | 23 | 5 |
| **TOTAL FIELD CROPS** | **4,610** | **3,883** | **3,200** | **2,023** |

**Source: NJ Farmland Assessment**

And while the total amount of cropland has declined by over half in the last twenty years, the acreage devoted to cover crops has increased, returning to 1983 levels.



The role of nursery operations within Millstone Township comprises a large sector of the local agricultural industry and is on the rise. According to NJ Farmland Assessment, the number of acres devoted to nursery operations doubled between 2000 and 2004. The largest segment of the nursery operations in Millstone Township is trees and shrubs, which accounted for 81% of the land area devoted to nursery.

**MILLSTONE TOWNSHIP NURSERY ACRES**
**1983-2004**

| | 1983 | 1990 | 2000 | 2004 |
|---|---|---|---|---|
| Bedding Plants | 1.5 | 9 | 56 | 27 |
| Cut Flowers | 23 | 1 | 52 | 60 |
| Trees & Shrubs | 1,641 | 1,840 | 444 | 1,161 |
| Cultivated Sod | 246 | 220 | 34 | 77 |
| Christmas Trees | 51.5 | 78 | 66 | 88 |
| Other Ornamental | 15 | 14 | 6 | 12 |
| **TOTAL NURSERY** | **1,978** | **2,162** | **658** | **1,425** |

**Source: NJ Farmland Assessment**

Another rising trend in Millstone Township is the production of Asian vegetables. According to the NJ Farmland Assessment, mixed vegetables accounted for nearly 70% of the acreage devoted to growing vegetables in Millstone Township.

The number of farm animals within Millstone Township is on the rise. There were 2,234 farm animals reported on farmland assessment farms in 2004. Of those, equine accounted for nearly half of all farm animals. According to the Millstone Township Tax Assessor, there were twenty two active equine operations with seven or more horses. The largest facility is Showplace Farms which reported 385 horses. The remaining 21 farms have an average of 18.62 horses.

The following chart shows an increase in the number of equine, sheep, goats and egg chickens. However, the number of beef cattle has declined by nearly half in the last ten years.

**MILLSTONE TOWNSHIP FARM ANIMALS: 1983-2004**

| | 1983 | 1990 | 2000 | 2004 |
|---|---|---|---|---|
| Beef Cattle | 126 | 109 | 46 | 46 |
| Dairy Cattle | 4 | 1 | 0 | 0 |
| Equine | 857 | 726 | 1,003 | 1,016 |
| Sheep | 47 | 266 | 165 | 213 |
| Swine | 1,558 | 1,013 | 13 | 3 |
| Bee Hives | 26 | 34 | 27 | 21 |
| Ducks | 95 | 49 | 54 | 61 |
| Fur Animals | 0 | 63 | 0 | 41 |
| Goats | 8 | 31 | 131 | 165 |
| Meat Chickens | 100 | 155 | 152 | 135 |
| Egg Chickens | 328 | 566 | 325 | 428 |
| Turkeys | 4 | 50 | 20 | 67 |
| Other Livestock | 105 | 43 | 100 | 38 |
| **TOTAL LIVESTOCK** | **3,258** | **3,106** | **2,036** | **2,234** |

**Source: NJ Farmland Assessment**

## C. Support Services Within Agricultural Market Region

There are several local and regional vendors and market venues that serve the agricultural community in Millstone Township. One such vendor is the Farmer's Brokerage and Supply in Upper Freehold Township which serves a large portion of New Jersey selling seed, hardware, parts for tillage equipment, chemicals and fertilizers.

Farmers in need of equipment and machinery typically use dealers in Cumberland or Salem Counties or travel to Lancaster County, Pennsylvania. Many also buy used equipment advertised in regional farm journals and on the internet. Locally, there are a number of facilities that serve the local farmers. A listing of local and regional service providers is included within Appendix I.

The equine industry has its own network of suppliers that grow and sell hay and feed, and offer veterinary and farrier services, some of which are located within Millstone Township. Several nationally ranked drivers, trainers and breeders of thoroughbred and standard bred horses reside in the Township. There are facilities for boarding, training and showing horses, as well as facilities which offer public and private lessons. In addition, the industry is tied to the county's two racetracks, Freehold Raceway and Monmouth Park, as well as the Meadowlands and race tracks outside of New Jersey. The New Jersey Horse Park figures prominently in Millstone Township and the County. Additionally, the New Jersey Equine Clinic is a nationally renowned equine hospital and rehabilitation center that has been featured in nationally televised documentaries.

### D. Other Agricultural Related Industries

Millstone Township's agricultural industry is responding to market demands and continues to evolve as its support system shifts and its economic base changes. Innovation is important for Millstone farmers. Many of the Township's farming operations already have diversified and stabilized their products in response to changing industry and market conditions. Agri-tourism facilities such as hay rides, corn mazes, Pick Your Own, direct marketing, agricultural festivals, agri-educational events, and special events are available in Millstone Township. These activities appeal to the growing residential population in the region and provide farmers with an opportunity to generate additional farm income.

Other trends that are creating financial opportunities for Millstone farmers to diversify include renewable fuels and organic products. Due to an emerging market for renewable fuel sources, there is an increasing demand for corn production for ethanol and for soybean production for bio-diesel fuel and the prices for these commodities has increased as the demand has increased. The market should continue to be strong, particularly if an ethanol or bio-fuel production facility is built.

As reported in the New Jersey Department of Agriculture 2007 Economic Development Strategies within the past several years, nationwide consumer demand has risen 16-24% annually for organically grown produce and organically and grass-fed beef, pork and poultry. Consumers are seeking a greater variety of organic products and have demonstrated a willingness to pay more for these products. Local organic farms have begun to emerge in Millstone and Roosevelt Borough, and this trend is expected to continue.

A smaller niche market that is unique to Millstone Township is the presence of a Koi Farm located on the corner of Stage Coach Road and Stillhouse Road, which contributes to the State's aquatic farming.

## SECTION III:
## LAND USE PLANNING CONTEXT

The 2002 Millstone Township Master Plan includes the adopted 2001 Open Space, Recreation, Conservation and Farmland Preservation Plan Element. In general, the Township has limited development to low density and low intensity uses. To conserve open space, farmland and rural areas, and in harmony with the State Development And Redevelopment Plan, the Township does not permit the extension of infrastructure within Millstone, particularly sewers.

The goal of Millstone Township is to maintain the rural character of the community and secure the environmental, economic and social benefits of a coordinated system of open space, outdoor recreation areas, and farmland. To achieve this goal, the Township acquires and develops land as local public parks and recreation space to meet the needs of existing and future residents. Additionally, the Township, in conjunction with the County and State, preserves as much farmland and open space as possible.

## A. Relationship To State Plan

The "New Jersey State Development and Redevelopment Plan" (SDRP) has allocated the land within New Jersey into "Planning Areas" and "Centers". The SDRP encourages growth to be accommodated in five types of "Centers": "Urban Center", "Regional Center", "Town", "Village", and "Hamlet". There are six (6) "Planning Areas" which include: "Metropolitan Planning Area" (PA1); "Suburban Planning Area" (PA2); "Fringe Planning Area" (PA3); "Rural Planning Area" (PA4); "Rural/Environmentally Sensitive Planning Area" (PA4B); and "Environmentally Sensitive Planning Area" (PA5). The designation of "Planning Areas" should accurately correspond to the existing and planned development pattern within a municipality.

Municipal Plan Endorsement is a voluntary review process designed to assess the quality and coordination of state and municipal planning efforts and, if necessary, to assist with an update of the local master plan and planning implementation strategies that achieve the goals, policies and strategies of the State Plan.

The State Development and Redevelopment Plan includes all of Millstone Township within the environs of Planning Area 4B, the Rural/Environmentally Sensitive planning area. Millstone Township accounts for 42.5% of Planning Area 4B in Monmouth County.

According to the State Plan, the intent of Planning Area 4B is to:

- Maintain the environs of centers as large contiguous areas of farmland and other land.
- Revitalize cities and towns.
- Accommodate growth in centers (the closest State Plan centers to Millstone are Freehold, Hightstown, Allentown and Englishtown).
- Promote a viable agricultural industry.
- Protect the character of existing, stable communities.
- Confine sewer and water services to centers.

The Millstone Township Master Plan is compatible with, and supports the intent of, the State Development and Redevelopment Plan for the Rural/Environmentally Sensitive Planning Area.

## B. Special Resource Areas

The Township is not located within a Special Resource Area such as the "Highlands" or "Pinelands".

## C. Township Master Plan & Development Regulations

The Township's Master Plan was last updated in September 2002 and addresses traffic, historic preservation, recreation and conservation planning, and housing. The Land Development Ordinance regulates land development, including zoning provisions and development application procedures. The Township's zoning permits farming in the RU-P, RU-C, RE, R-130 and R-80 residential zoning districts (described below), as well as within the Highway Commercial zones, the Business Park District and the Recreational Camp zoning district. The location of the zoning districts appears on the "Existing Zoning Map" (see page 19).

Development regulations enacted by the Township intend to maintain agriculture as a viable industry and to preserve Millstone's rural character. The regulations include, but are not limited to, the following:

- Low density residential zoning districts including the RU-P Rural Preservation (10 acre minimum), the RU-C Rural Conservation (6 acre minimum), the RE Rural Environmental (4 acre minimum), the R-130 Rural Residential (3 acre minimum), and the R-80 Rural Residential (2 acre minimum).

- Farming is a permitted principal use in the RU-P, RU-C, RE, R-130 and R-80 zoning districts. It also is a permitted use in the Highway Commercial zones, the Business Park District and the Recreational Camp zoning district.

- Farm stands and associated farm equipment are permitted accessory uses for farms.

- Farmland/open space conservation clusters, including non-contiguous clusters, are permitted in the RU-P & RU-C zoning districts with potential bonus densities.

- Lot size averaging is permitted in the RU-P & RU-C zoning districts. Lot size averaging also is permitted under certain conditions within the R-170, R-130 and R-80 zoning districts.

- Variable density techniques are permitted in the RE zoning district.

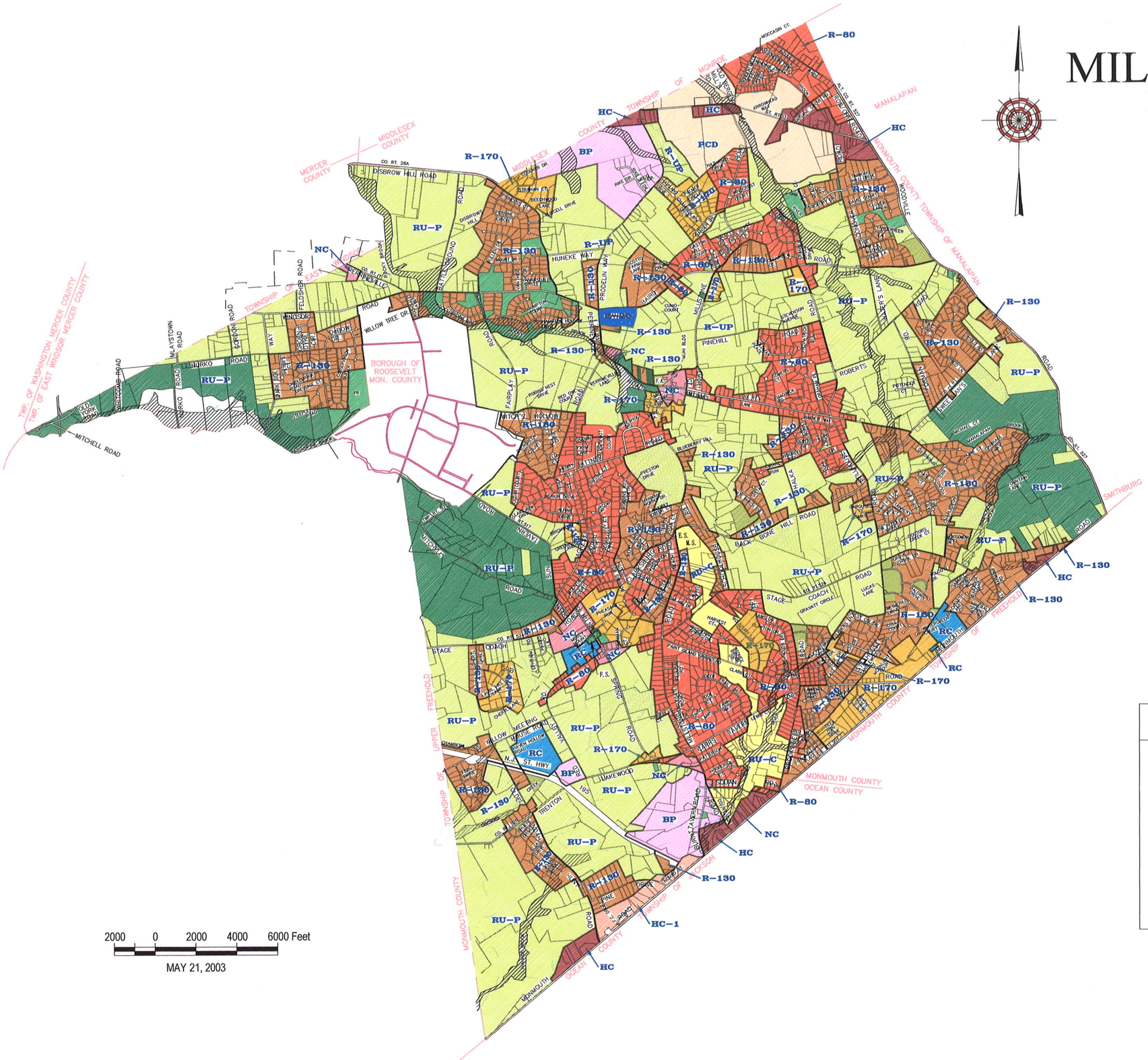
Horse farms and equestrian activities have long been an important part of the rural character of Millstone Township. In order to preserve and encourage this activity, the Township has created a Bridle Path Network Plan in which a 15 foot wide easement along property lines is provided. The purpose of the network is to connect County, State and municipal parks and facilities through a series of trails along greenways, stream corridors and private property. Trail easements are obtained through the site plan and subdivision application approval process, as well as donation and acquisition as part of the open space and farmland preservation program.

# FIGURE 1

# MILLSTONE TOWNSHIP

## Monmouth County, New Jersey

## ZONING MAP




| | |
|---|---|
| RU-P | Rural Preservation |
| RU-C | Rural Conservation |
| R-170 | Rural Environmental |
| R-130 | Rural Residential |
| R-80 | Rural Residential |
| R-20 | Residential |
| NC | Neighborhood Commercial |
| HC | Highway Commercial |
| HC-1 | Highway Commercial |
| PCD | Planned Commercial Development |
| BP | Business Park |
| RC | Recreation Camp |
| FHSC | Flood Hazard and Stream Corridor Overlay |

(Boundaries shown are generalized and based on FEMA GIS data for 100 year flood. The Actual location of the flood hazard and stream corridor overlay area for any stream shall be determined in accordance with the Land Use and Development Regulations of Millstone Township)

### For Information Purposes Only

Preserved Farmland

Streams

State or County Open Space

Township Public Lands *

(Parks, Open Space, Community Facilities, Public Property)

*Includes Homeowner Association Open Space

| | | | | | |
|---|---|---|---|---|---|
| SP | State Park | E.S. | Elementary School | F.S. | Fire Station |
| CP | County Park | M.S. | Middle School | F.A. | First Aid |
| PR | Private Open Space | | Municipal Building | | |

**ZONE MAP**
**TOWNSHIP OF MILLSTONE**
**MONMOUTH COUNTY, NEW JERSEY**
MAY 21, 2003 REV. ORD. SUPP. 6/03

PREPARED BY
LEON S. AVAKIAN, INC.
788 WAYSIDE ROAD, NEPTUNE, NEW JERSEY

BASE MAP PREPARED BY
T & M ASSOCIATES
MAY 21, 2003 ORD. SUPP. 6/03

REF. MSZONEMAPIIXI7COL

The Township has successfully completed a ten mile segment of the network in the eastern portion of the Township beginning at the Hickory Drive Open Space through Wagner Park and terminating at Charleston Springs Park. Large portions of this trail are multi-use. The Millstone Trailblazers, a local non-profit organization, received a $25,000 grant to clear, mark and improve this section of trail. The next section of the network under assemblage will link the Rocky Brook with Perrineville Park located on Baird Road and a separate section will link to Assunpink State Park. Additional grant money is being pursued to complete this project. The Township is developing a partnership with Millstone Trailblazers to address issues regarding maintenance.

## D. Current Land Use Pattern & Trends

According to the 2002 Land Use/Land Cover information, which was provided by the NJDEP and which appears in the following table, agriculture was the predominant land use, consisting of 6,473 acres, which is 27% of the Township land base. This was followed by forested areas (26.9%), developed land (24%) and wetlands (18%). Water and barren land accounted for the remainder. This represents a twelve percent decline in land area devoted to agriculture in the seven year period between 1986 and 2002.

**LAND USE/LAND COVER: 1986 – 2002**

| Land Use | 1986 (acres) | % Cover | 1995 (acres) | % Cover | 2002 (acres) | % Cover | % Change from 1986-2002 |
|---|---|---|---|---|---|---|---|
| **Agriculture** | 9,230 | 39% | 7,843 | 33% | 6,473 | 27% | - 12% |
| **Forest** | 6,860 | 29% | 6,609 | 28% | 6,437 | 27% | - 2% |
| **Urban** | 2,670 | 11% | 4,263 | 18% | 5,849 | 24% | + 13% |
| **Wetlands** | 4,480 | 19% | 4,463 | 19% | 4,373 | 18% | - 1% |
| **Water** | 383 | 2% | 384 | 2% | 397 | 1.6% | - 0.4% |
| **Barren Land** | 215 | 1% | 324 | 1% | 356 | 1.5% | - 0.5% |

## E. Public Water & Sewer Service Areas

The Township, in concert with the State Plan policies for rural planning areas, is not served by public water or sewer service. Further, the natural conditions in large areas of the Township, including freshwater wetlands, seasonal high water table, steep slopes, limited stream flows with high water quality, and the soil conditions, place severe restrictions on the use of septic systems. The development of package treatment plants is restricted by limited stream flows and costs for tertiary treatment requirements for physiographic areas like Millstone Township by the New Jersey Department of Environmental Protection.

It is the Township's policy to discourage the extension of sewer service into the Township. Public infrastructure extensions, particularly sewer service, are an inducement to growth and development that is in direct conflict with the State Plan and the Township's goal to maintain the rural character of the community and safeguard natural resources.

## F. Township Zoning Policies & Provisions

The Township has set forth a policy that development should be designed to preserve both open space and established woodlands and to protect environmentally sensitive areas. Major developments are encouraged to be designed in such a way that they will have minimal effect on the flow of traffic on the existing road system. Maintaining the rural character of the Township, preserving farmland and open space, and protection of the environment are fundamental purposes of the Township Land Use Plan Element portion of its master plan.

To better achieve these purposes, the land use plan identifies areas for rural preservation and conservation. The plan provides for both large scale and small scale farm operations. Smaller farmsteads provide more specialized products such as organic produce, exotic livestock and horticultural products. This type of diversity between large-scale crop producers and small-scale alternative farming operations can help strengthen the local agricultural economy.

### General Lot Size Categories & Distribution

As indicated in the 2002 Master Plan, the RU-P Rural Preservation Area covers 47% of the Township land area containing large tracts of existing farmland and prime agricultural soils. Areas designated RU-P have an average lot size in excess of 10 acres and contain large, contiguous tracts of viable farmland that contain 85.5% of the Township's prime agricultural soil. These areas contain some of the largest nursery, equestrian and agricultural land areas in the Township.

To develop the RU-P zone requires a minimum lot size of ten acres. To provide flexibility to preserve larger tracts as farmland and/or open space, the rural preservation areas permit lot size averaging and residential clusters. As an incentive to cluster to preserve open space and/or farmland, the rural preservation area permits residential clusters at a density of one dwelling unit per eight acres on larger tracts provided that 60% to 70% of the tract is preserved via the cluster as open space and/or farmland.

The RU-C Rural Conservation Area covers approximately 2% of the Township. The RU-C zone requires 6 acres to develop a single family detached dwelling. The RU-C has a large percentage of farmland assessed property. It also contains substantial tracts of vacant land associated with environmentally sensitive lands such as freshwater wetlands, floodplains and headwater areas. Preserving open space and limiting intensive development in the RU-C zone will help protect the surface water quality for Millstone Township and downstream communities.

### Innovative Planning Techniques

Millstone Township has a cluster ordinance that allows and encourages one of the lots in a subdivision to become a preserved farm. To date, there is one example of a cluster development that recently received preliminary approval to subdivide smaller residential lots along the road frontages, with the remaining critical mass of land area to remain as an active farm. The Township anticipates that other properties also will take advantage of this development opportunity in the future.

## Buffer Requirements

Millstone Township requires new lots within the RU-P and RU-C zoning districts and which are adjacent to farmland to provide a 25 foot buffer. This provides a sufficient buffer between residential and farmland uses. In the event that a greater distance would be more appropriate, the Township could consider increasing the size of the buffer required on new lots.

## Development Pressures & Land Values

Demand remains high for residential development. Due to environmental constraints, large lots are required to protect water quality and address drainage issues. Since 2003, a total of 753 acres of farmland received preliminary and/or final approval for the development of 174 single family dwelling units. Large homes are being constructed on large lots and have a higher value than the older homes found in the southern portion of the Township. Land values have increased dramatically over the past decade. There was a 382% increase in the average cost per acre for a development easement which rose from an average $9,034 per acre in 2001 to $34,500 per acre in 2007. The following charts compare residential construction in Millstone Township and Monmouth County during 2006 until May 2007.

**NEW PRIVATELY OWNED RESIDENTIAL HOUSING UNITS AUTHORIZED TO BE BUILT IN 2006 AND YEAR TO DATE MAY 2007 MILLSTONE TOWNSHIP VS. MONMOUTH COUNTY**

| | MILLSTONE TOWNSHIP | | MONMOUTH COUNTY | |
|---|---|---|---|---|
| | 2006 | YTD MAY 2007 | 2006 | YTD MAY 2007 |
| **Total Units** | **24** | **7** | **2,807** | **601** |
| Single Family Units | 24 | 7 | 1,524 | 462 |
| Single Family Value | $ 7,354,500 | $ 1,544,000 | $ 319,861,261 | $ 100,370,698 |
| 2-Family Units | 0 | 0 | 146 | 14 |
| 2-Family Value | 0 | 0 | $ 3,345,995 | $ 107,307 |
| 3 or 4 Units | 0 | 0 | 165 | 22 |
| 3 or 4 Value | 0 | 0 | $ 3,469,692 | $ 1,138,228 |
| 5 or More Units | 0 | 0 | 972 | 103 |
| 5 or More Value | 0 | 0 | $ 22,595,097 | Not Available |

**Source: US Bureau of Census, Manufacturing and Construction Division**

**RESIDENTIAL BUILDING PERMIT AUTHORIZED FROM 2000 – MAY 2007**
**MILLSTONE TOWNSHIP VS. MONMOUTH COUNTY**

| | TYPE | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | YTD MAY 2007 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| MILLSTONE | Total | 81 | 70 | 75 | 96 | 64 | 44 | 24 | 7 | 461 |
| | Single | 81 | 70 | 75 | 96 | 64 | 44 | 24 | 7 | 461 |
| | Multi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MONMOUTH COUNTY | Total | 2,912 | 2,194 | 2,372 | 2,756 | 2,628 | 2,584 | 2,807 | 601 | 30,838 |
| | Single | 2,268 | 1,871 | 2,213 | 2,068 | 2,179 | 1,932 | 1,524 | 462 | 24,958 |
| | Multi | 644 | 323 | 159 | 688 | 449 | 652 | 1,283 | 139 | 5,880 |

**Source: U.S. Census of Agriculture; NJ State Agriculture Development Committee**

### Transfer Of Development Rights (TDR) Opportunities

Currently, Millstone Township does not have a TDR program and, given the environmental carrying capacity constraints to development which exist throughout the Township, Millstone has no plans to implement a TDR program.

## SECTION IV:
## FARMLAND PRESERVATION PROGRAM OVERVIEW

Agriculture provides food and fiber, clean air, storm water management, groundwater recharge, wildlife habitat, and the scenic view sheds that are found throughout the Township. Millstone Township has permanently preserved 712 acres of farmland. Farmers and local officials in Millstone Township are firmly committed to farmland preservation and will continue to support these efforts.

Between 1997 and 2002, Millstone Township preserved three farms totaling 94.58 acres through the Monmouth County Easement Program. In 2001, Millstone Township was accepted into the State's Municipal Planning Incentive Grant (PIG) Program which has resulted in the preservation of eight additional farms totaling 400 acres. Between 2001 and 2003, Millstone Township pre-purchased the farmland easements, with reimbursement from the State and County beginning in 2004.

In 2005, Millstone hosted a Landowners' Rally to inform farmers about preservation. Since that time, an additional five farms totaling 100 acres have been preserved, and four more farms consisting of 140 acres are under contract with the Township and scheduled to close by mid-2008. Monmouth County continues to operate its County Easement Program, and has recently preserved two farms consisting of 191 acres, with another three farms to be preserved in 2008.

With the recent success of the local farmland preservation program, there are no additional State funds remaining in Millstone Township's 2007 Municipal PIG or the County Easement Programs at this time. However, Millstone Township has the ability to pre-acquire farmland easements and seek reimbursement from the State and County once funds become available.

The Township is in the process of preserving two of the largest remaining farms in the Township: the Hom Farm on Battleground Road, consisting of 168 acres, and the Wong Farm on Stagecoach Road, consisting of 117 acres. To date, there are 712 acres of preserved farmland in Millstone Township, and 461 additional acres under contract to close by the middle of 2008 as indicated on the "Potential Farmland Preservation Properties" map (see page 25).

Upon adoption of this plan, and with the replenishment of the Garden State Preservation Trust, the Township anticipates that the State will allocate additional funding for projects within Millstone Township.

**A. County Agricultural Development Areas**

The Monmouth County Planning Board has identified several areas for agricultural development in Millstone Township as shown on the "Agriculture Development Area (ADA)" map prepared and approved by the Monmouth County Agricultural Development Board (MCADB) and Monmouth County Planning Board (see page 26). All of the farms identified in a local project area coincide with the County's ADA. Approximately 16,257 acres, or 68%, of Millstone Township has been included in the ADA as adopted by MCADB in 2006.

**B. Farmland Preserved To Date By Program**

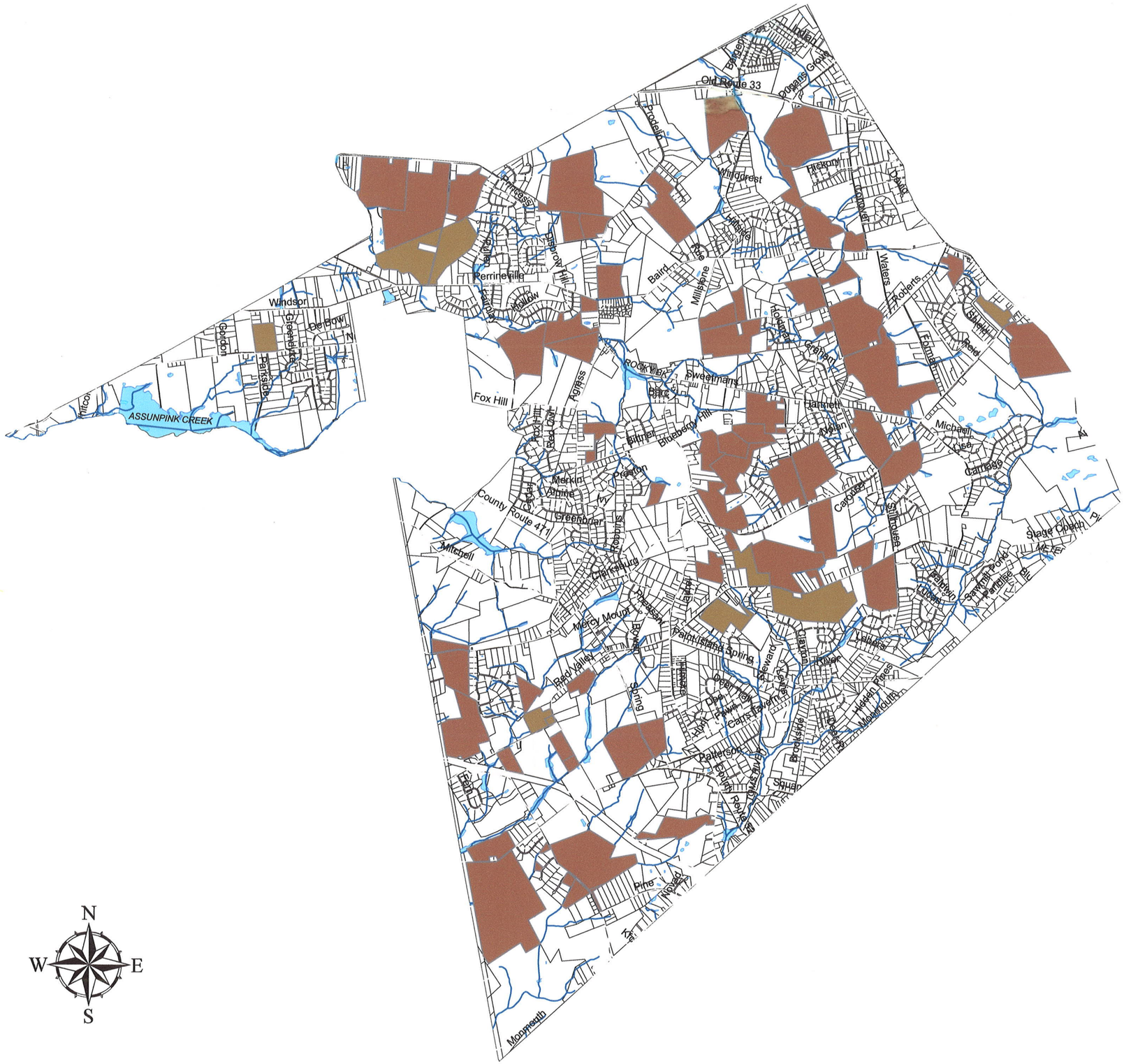
The Township has preserved 712 acres of farmland. In addition to using Township funds, a number of partnerships have been utilized to preserve farmland including: the New Jersey Farmland Preservation Program; New Jersey Department of Environmental Protection, Green Acres Division; partnerships with non-profit organizations such as the D&R Greenway Land Trust, Monmouth Conservation Foundation and the Crosswicks Creek-Doctors Creek Regional Greenway; and, most recently, the use of the SADC Planning Incentive Grant. The "Preserved Lands" map (see page 27) indicates the properties that have been preserved for farmland preservation, as well as the location of privately-owned open space lands and those owned by the Township, County and/or State.

**FARMLAND PRESERVED BY PROGRAM AS OF NOVEMBER 20, 2007**

| PROGRAM | ACRES |
|---|---|
| County Easement Purchase | 197 |
| Municipal Planning Incentive Grants | 477 |
| Other programs and partnerships | 38 |

While not specifically targeting farmland, the Crosswicks Creek-Doctors Creek Regional Greenway has a broader goal to implement a regional greenway plan which envisions a continuous preserved historic, cultural, scenic, recreational trail and navigation system stretching from the Delaware River inland and connecting with other regional greenways. The Township considers the development of this trail network complimentary to its goal for farmland preservation given that the local equine industry will benefit from the network.

# Millstone Township Potential Preservation Properties




Potential Preservation Property

Potential Preservation Property Currently Under Contract

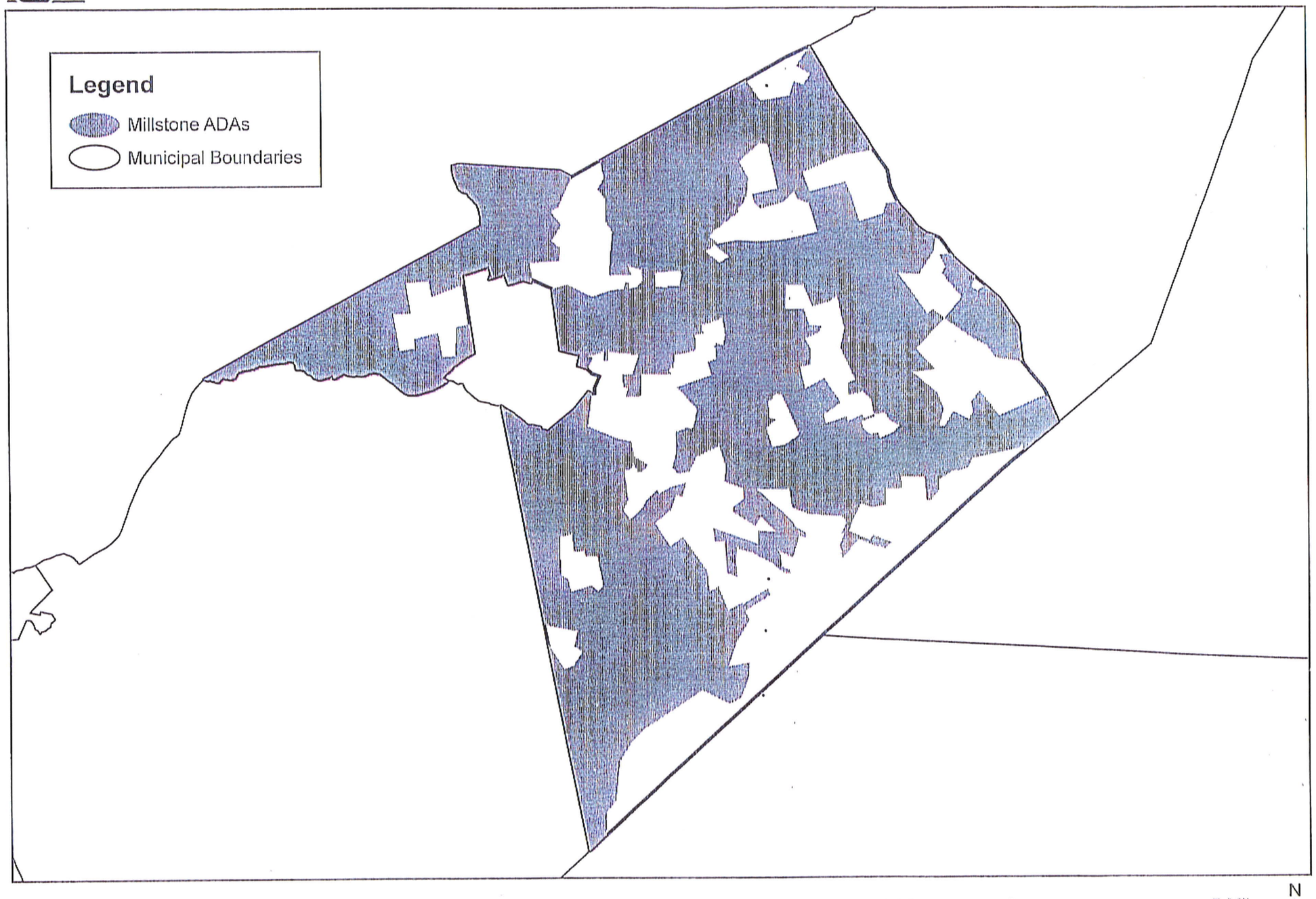
Sources: NJDEP GIS
Monmouth County GIS

1:60,000

Prepared By:
Leon S. Avakian, Inc.

# Agricultural Development Areas in Millstone Township

Monmouth County Agriculture Development Board
One East Main Street, Freehold, NJ 07728 (732) 431-7460

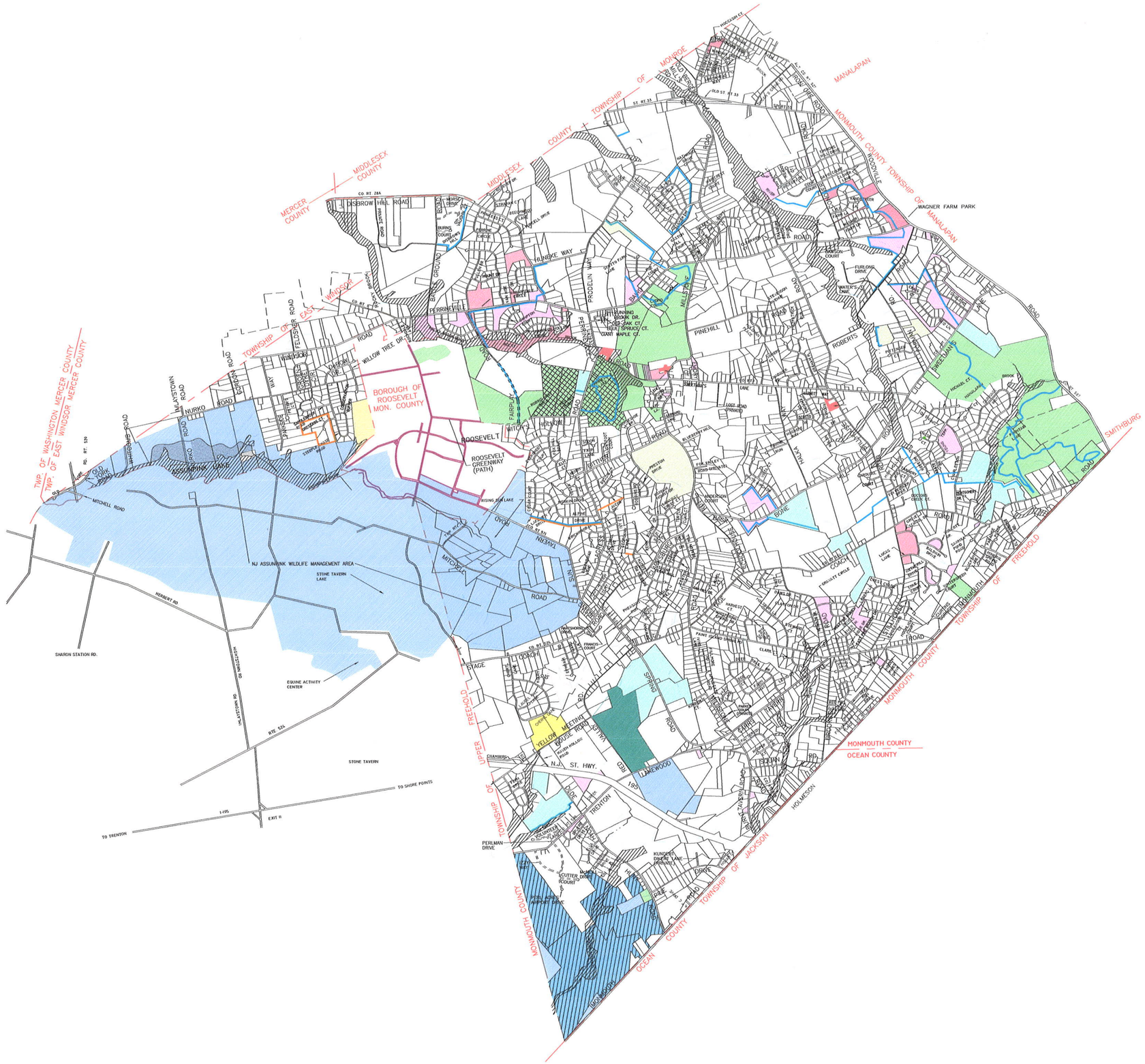



M.C.A.D.B. approved ADAs on January 4, 2006
S.A.D.C. approved ADAs on February 23, 2006

0 1.25 2.5 5 Miles

N

# MILLSTONE TOWNSHIP
Monmouth County, New Jersey
# PRESERVED LANDS
Scale: 1" = 5000'




## LEGEND

- TRAIL EASEMENTS
- WILDLIFE CORRIDOR
- PRIVATE TRAIL W/ OWNERS PERMISSION

## OPEN SPACE

- PRESERVED FARMLAND
- JOINT WITH STATE
- STATE OWNED
- COUNTY OWNED
- TOWNSHIP OWNED DEVELOPED & PARTIALLY DEVELOPED LANDS HELD
- TOWNSHIP OWNED WHOLLY UNDEVELOPED LANDS HELD FOR RECREATION & CONSERVATION
- FLOOD HAZARD
- GREEN ACRES CONSERVATION EASEMENT
- RIDING OPEN SPACE - DEED RESTRICTED
- GREEN ACRES CURRENTLY UNDER CONTRACT WITH STATE
- COUNTY CURRENTLY UNDER CONTRACT
- GREEN ACRES FEE SIMPLE PURCHASE BY TOWNSHIP UNDER CONTRACT
- EXISTING ROAD
- ROAD PROPOSED OR UNDER CONSTRUCTION

PREPARED BY: LEON S. AVAKIAN, INC. TOWNSHIP ENGINEER
MAY 2007

MS 06-07 PRESERVATION

There are several other farmland preservation programs available, but have not yet been used in Millstone Township.

The State Agriculture Development Committee operates a Direct Easement Purchase program and a Fee Simple program, both of which a landowner applies directly to the State. Development rights are sold to the State of New Jersey via the Direct Easement Purchase program while an outright fee simple sale of land is processed through the Fee Simple Program. In both cases, the land is permanently deed-restricted for agricultural use. Farms purchased in fee simple by the SADC are later sold at public auction with a permanent deed restriction for agricultural use.

The SADC also provides grant funding to nonprofit organizations for up to 50 percent of the fee simple or development easement values on farms to assist with the preservation. These properties often involve environmental and/or recreational significance in addition to their agricultural importance.

Transfer of Development Rights (TDR) is a realty transfer mechanism that enables property owners within a designated preservation area (i.e. sending area) to sell development rights. Developers purchase the "development credits" and transfer that development potential to and area that is designated for growth at densities higher than otherwise would be permitted. Once the development rights of a property are sold the land is permanently restricted from further development.

The SADC provides Municipal Planning Incentive Grants to municipalities for the purchase of development easements to permanently protect large blocks of reasonable contiguous farmland in project areas they have identified. The municipality must have an agricultural advisory committee, must have an approved application that contains a farmland preservation plan element of the master plan, and must establish and maintain a dedicated source of funding.

The SADC provides County Planning Incentive Grants to counties for the purchase of development easements to permanently protect large blocks of reasonable contiguous farmland in project areas they have identified. Counties must have a county agricultural development board, must have an application that correlates with an adopted county comprehensive farmland preservation plan, and must have a dedicated source of funding. Under new SADC regulations, this tool will help preserve additional farmland, especially larger farms within Millstone Township. Coordination between Monmouth County and Millstone Township is critical for this program to be successful.

The SADC provides counties with the Traditional County Easement Grant to fund 60-80 percent of the costs of purchasing development rights on approved farms. It generally holds one funding round per year for this program. Landowners apply to their CADB who reviews applications and forwards approved ones to the SADC. The SADC prioritizes applications for preservation funding through a ranking system that assigns points. These quality scores establish the SADC's preliminary priority list for preservation.

## 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, as follows:

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

Through the use of the Strategic Targeting Project, the SADC hopes to more efficiently target and designate farmland for preservation by prioritizing preservation of prime and statewide soils in active agriculture areas outside sewer service areas. Millstone has no sewer service areas within the municipality. Millstone Township Agricultural Advisory Council (AAC) with the coordination of MCADB, through the completion of this 2007 Farmland Preservation Plan, meets each of the goals as outlined in the Strategic Targeting Project.

## 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.

Currently, the Township does not have any farms enrolled in the eight year program. However, as the pressure to develop increases, it is likely that more farms may enroll in this program to find temporary relief while they consider the sale of development rights or as they use the cost share funds to improve their operations. In Monmouth County, there are eight farms enrolled in the eight year program. As of June 30, 2007, four of these farms were permanently preserved and another two will be permanently preserved by the end of 2007.

## E. Coordination With Open Space Preservation Initiatives

The Township has an Open Space & Farmland Preservation Council (OSFPC) that works together with the Agricultural Advisory Council (AAC) on setting priorities, pursuing properties and making recommendations to the Township Committee. The Millstone Township Master Plan (2002) has a combined Open Space, Recreation, Conservation and Farmland Preservation Plan Element.

Further, specific parcels within the farmland project areas may be designated in the Master Plan for a public park or for recreation or community use. Should a designated parcel no longer be needed for park or for recreation or community use, it is the policy of the Township to preserve the parcel for farmland preservation.

Millstone Township supports the use of partnerships and/or funding from more than one agency to leverage farmland preservation dollars. 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 for the preservation of agricultural landscapes.

Farmland preservation and the identification of targeted farms should be coordinated with open space planning efforts. In Millstone Township, these trail easements are a benefit to the local equine industry. As the establishment of trails grows in Millstone Township, the OSFPC and the Township Committee can look to the Trails Plan to determine whether public access easements should be negotiated as part of a farmland preservation project.

The following chart lists the farm properties that are currently targeted for future trail easements.

**LIST OF FARM PROPERTIES FOR TRAIL EASEMENTS**

| Blocks | Lots | Blocks | Lots |
|---|---|---|---|
| 31 | 25 | 27, 28 | 2.01, 3, 4 |
| 17 | 24.03 | 43 | 7.02 |
| 17 | 26.24 | 42 | 1 |
| 14 | 13 | 26 | 5.01 |
| 46 | 21 | 17 | 6 |
| 46 | 9 | 30 | 14.07 |
| 46 | 11 | 17 | 24 |
| 54 | 2.11 | 28 | 17, 18 |
| 64 | 10.06 | 45 | 3 |
| 46 | 6 | 46 | 7, 10 |
| 39.01 | 7.01 | 39.01 | 10, 15.01 |
| 46 | 4.01 | 41 | 1 |
| 13, 14 | 3.04, 2 | 41 | 2 |
| 35 | 24 | 14 | 7, 11.06, 11.07 |
| 34 | 17 | 52 | 7 |
| 35 | 2 | 54 | 5.01 |
| 35 | 1.01 | 55 | 2 |
| 16 | 3 | 55 | 1 |
| 23 | 24 | 57 | 33 |
| 43 | 11, 11.01 | | |

The "Agricultural Land Map With Open Space and Trail Easements Overlay" map is provided on the following page.

## F. Farmland Preservation Program Funding To Date

Millstone Township has expended over $1 million to preserve over 700 acres of farmland. The State and County have contributed $5.9 million and $2.3 million respectively. These funds represent the following cost share: Township (13%), Monmouth County (25%) and the State of New Jersey (62%).

**PRESERVED FARMS THROUGH JUNE 2007**

| Blocks | Lots | Acres | Cost | State | County | Municipality |
|---|---|---|---|---|---|---|
| 46 | 11 | 53.88 | $294,312.60 | $206,018.82 | $88,293.78 | $0.00 |
| 46 | 21 | 24.00 | $732,840.00 | $439,704.00 | $175,882.00 | $117,254.00 |
| 64 | 10.06 | 52.00 | $387,988.00 | $236,087.00 | $92,430.00 | $59,471.00 |
| 44 | 4.01 | 38.87 | $209,166.30 | $138,732.75 | $56,339.80 | $14,093.75 |
| 17 | 24.03 | 10.00 | $122,068.32 | $73,241.00 | $29,296.00 | $19,531.00 |
| 51; 52 | 12; 5 | 78.00 | $817,797.20 | $490,678.32 | $292,771.40 | $34,347.48 |
| 54 | 2.08 | 18.27 | $293,716.50 | $176,229.90 | $70,491.96 | $46,994.64 |
| 46 | 6 | 68.58 | $934,831.80 | $560,899.08 | $224,359.63 | $149,573.02 |
| 17 | 26.2, 26.21, 26.24 | 74.28 | $476,179.14 | $380,943.46 | $57,141.41 | $38,094.27 |
| 64 | 3 | 43.77 | $274,630.75 | $174,789.67 | $63,548.91 | $36,292.27 |
| 31 | 25 | 28.24 | $796,173.75 | $477,704.25 | $267,514.38 | $50,955.12 |
| 47 | 4 | 36.56 | $1,001,776.00 | $601,065.60 | $240,426.24 | $160,284.16 |
| 51; 52 | 11; 6.01 | 70.14 | $455,910.29 | $319,136.99 | $82,063.98 | $54,709.32 |
| 45 | 10.03 | 27.68 | $481,599.95 | $288,959.86 | $115,584.05 | $77,056.03 |
| 14 | 13 | 12.00 | $369,396.00 | $221,637.60 | $88,655.04 | $59,103.31 |
| 54 | 2.11 | 54.00 | $963,960.00 | $578,375.88 | $231,350.40 | $154,233.72 |
| 46 | 9 | 19.53 | $742,520.00 | $445,512.00 | $178,204.80 | $118,803.20 |
| 1.02; 1.01 | 1,3,5;2 | 1.83 | n/a | n/a | n/a | n/a |
| | **Totals:** | **711.63** | **$9,354,866.60** | **$5,809,716.18** | **$2,354,353.78** | **$1,190,796.29** |

## G. Monitoring Of Preserved Farmland

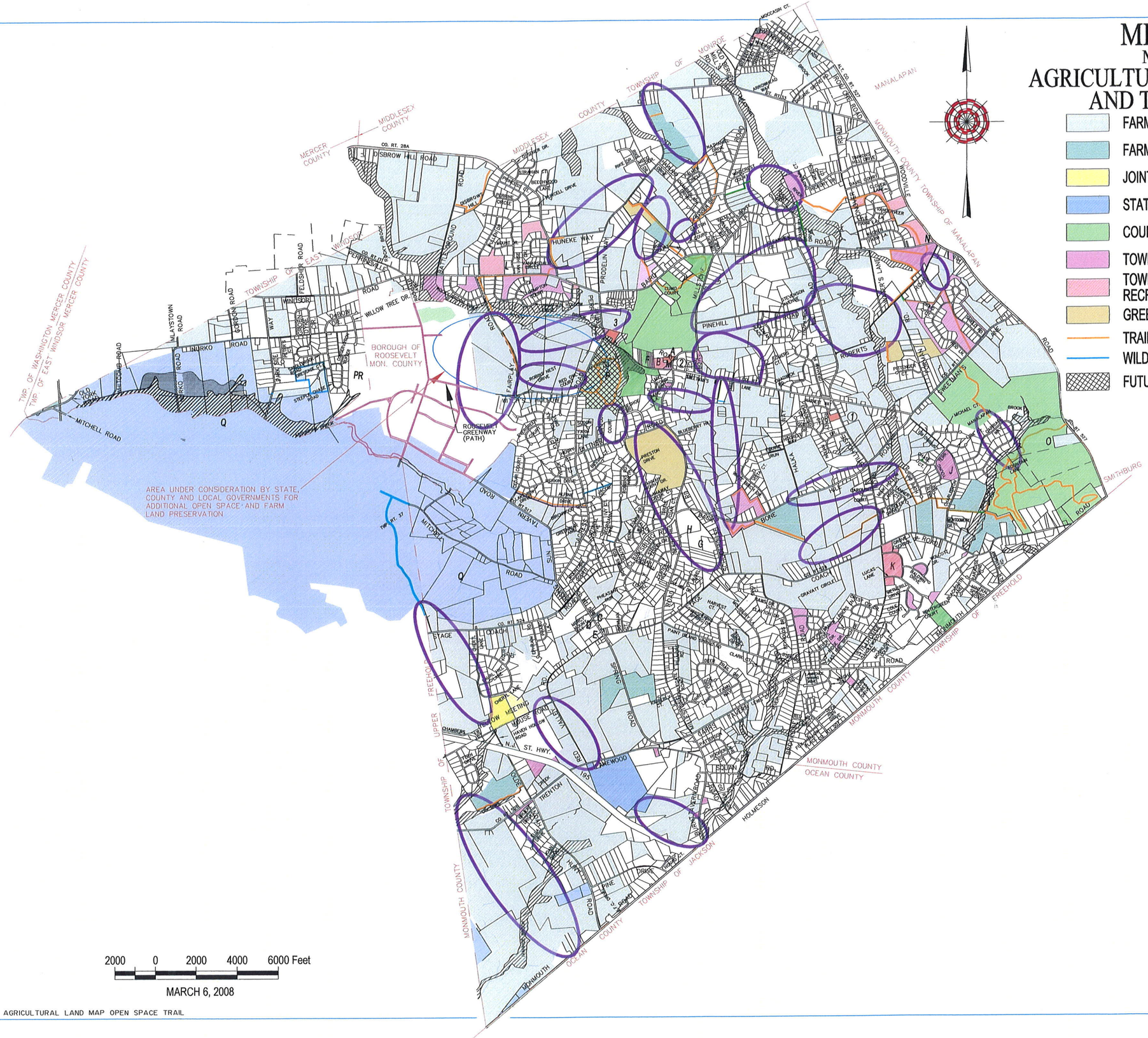
Millstone Township's preserved farms are monitored by Monmouth County Staff personnel once a year. Millstone is vigilant about reporting and working with Monmouth County when and if a violation comes to its attention.

# MILLSTONE TOWNSHIP

Monmouth County, New Jersey

## AGRICULTURAL LAND MAP WITH OPEN SPACE AND TRAIL EASEMENTS OVERLAY

- FARMLAND ASSESSED PROPERTIES
- FARMLAND PRESERVATION
- JOINT WITH STATE
- STATE OWNED
- COUNTY OWNED
- TOWNSHIP OWNED DEVELOPED & PARTIALLY DEVELOPED LANDS HELD
- TOWNSHIP OWNED WHOLLY UNDEVELOPED LANDS HELD FOR RECREATION & CONSERVATION
- GREEN ACRES CONSERVATION EASEMENT
- TRAIL EASEMENTS
- WILDLIFE CORRIDOR
- FUTURE COUNTY OWNED PARK LAND




2000 0 2000 4000 6000 Feet

MARCH 6, 2008

REF. MS 07-37 AGRICULTURAL LAND MAP OPEN SPACE TRAIL

AGRICULTURAL LAND MAP WITH OPEN SPACE AND TRAIL EASEMENTS OVERLAY

TOWNSHIP OF MILLSTONE

MONMOUTH COUNTY, NEW JERSEY

MARCH 6, 2008

PREPARED BY

LEON S. AVAKIAN, INC.

788 WAYSIDE ROAD, NEPTUNE, NEW JERSEY

BASE MAP PREPARED BY

T & M ASSOCIATES

MAY 21, 2003 ORD. SUPP. 6/03

The Millstone Township OSFPC is in the process of setting up a stewardship program for all easements in the Township. The OSFPC and the Township Land Use Department have developed an inventory of all easements including farmland, conservation, open space, drainage, and sight triangle easements. The Department is in the process of investigating software that will organize the deed of easements, base line data, maps, and the monitoring reports by block and lot. The Township intends to collect the base line data on all easements. A monitoring report will be developed and site inspections will be scheduled. Monitoring the farmland easements that are held with SADC and the County will be coordinated between Monmouth County and Millstone Township. The Township will schedule site inspections on a periodic basis and complete monitoring reports. The SADC and Monmouth County monitor annually the easements they hold within the Township.

### H. Coordination With TDR Programs

Currently, Millstone Township does not have a TDR program and, given the environmental carrying capacity constraints to development which exist throughout the Township, Millstone has no plans to implement a TDR program.

## SECTION V:
## FUTURE FARMLAND PRESERVATION PROGRAM

### A. Preservation Goals (1, 5 & 10 years)

Millstone Township has set an ambitious goal to preserve an additional 2,500 acres of farmland within the next ten years. The Township anticipates preserving an additional 500 acres within one year and 1,250 acres within five years. The overall goal is based on projecting that 250 acres of farmland will be preserved per year.

One year target: 500 acres
Five year target: 1,250 acres
Ten year target: 2,500 acres

### B. Project Area Summaries

There are 712 acres of preserved farmland within Millstone Township and an additional 461 acres are expected to be preserved by mid-2008. The Township has established four project areas in which to focus its farmland preservation efforts. For each project area, an analysis was completed to identify the amount and density of preserved farmland, soils and size of the area. More specifically, the following information was determined for each project area:

- 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.

The four established project areas were developed by applying the minimum criteria to the potential farms and by examining the areas for wetlands, steep slopes and soils as shown on the "Potential Preservation Properties With Critical Area" map (see page 35). A few of the potential farms may be close to the minimum standard in one of these categories. Whenever an application is received, the Township will conduct a site inspection to verify compliance with the standards.

The 4,038 acres of potential farmland located within the project areas are shown on the "Planning Incentive Grant Program Targeted Farms For Preservation" map (see page 36). To date Millstone Township has preserved 15% of its potential farmland base. By mid-2008, the Township anticipates that this amount will increase to 25% of its potential farmland base. A summary of the existing preserved farmland and open space is listed within Appendix II.

## Millstone Township Project Areas

The **Perrineville East Project Area** targets nineteen farms for preservation, consisting of 968 acres. This project area is situated south of Route 33 and east of the Hickory Drive preserved open space, and is bounded by Baird Road and Millstone Road to the west, Sweetman's Lane to the south, and by Route 527 to the east. There are no currently preserved farms within this project area, but one farm is under contract and is expected to close by the end of 2007. The Township has received applications for the preservation of four additional farms. The density in this project area, including the targeted farms, is approximately 0.5 (50%).

**Perrineville East Project Area Chart**

| Block | Lot | Acres | Block | Lot | Acres |
|---|---|---|---|---|---|
| 23 | 8 | 140.00 | 41 | 1 | 30.40 |
| 23 | 14.01, 24 | 81.00 | 41 | 2 | 38.73 |
| 23 | 28 | 18.50 | 42 | 1 | 61.14 |
| 26 | 4.06 | 20.00 | 42 | 4 | 31.50 |
| 26 | 5.01 | 111.00 | 42 | 8.01 | 36.18 |
| 27 | 8 | 8.77 | 42 | 9 | 17.43 |
| 27 | 4.01 | 1.00 | 42 | 5.01, 5.02 | 30.03 |
| 28 | 17, 18 | 65.13 | 42 | 11, 11.01 | 29.00 |
| 27; 28 | 2.01; 3, 4 | 129.19 | 43 | 7.02 | 20.56 |
| 40 | 6 | 73.19 | 43 | 16.01 | 25.14 |
| **Total Acres = 967.89** | | | | | |

# Millstone Township Potential Preservation Properties with Critical Area

Potential Preservation Property

Potential Preservation Property Currently Under Contract

## Critical Areas

Flood Hazard Area

Wetlands

Slopes > 15%

Slopes 10-15%

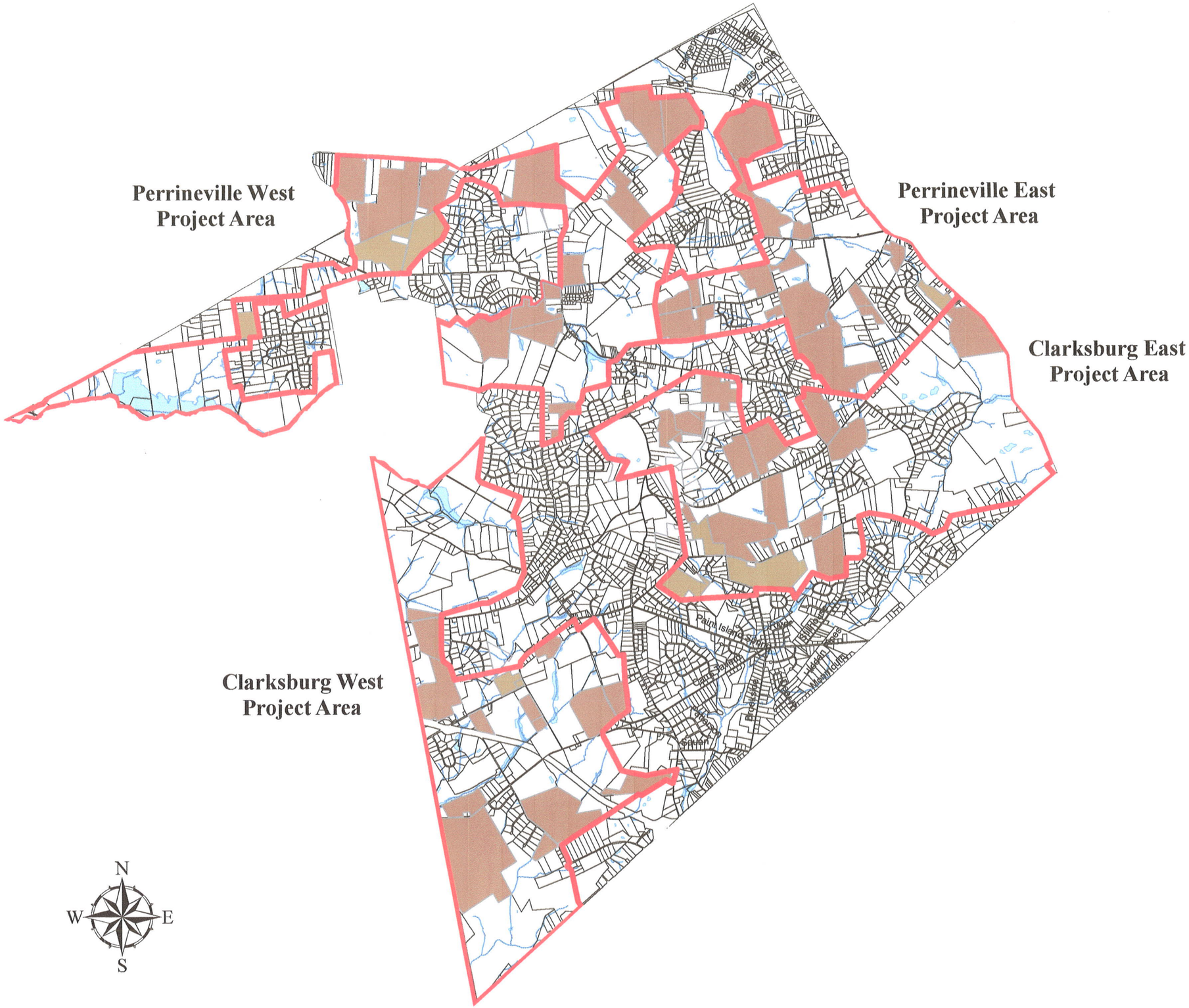
N
W E
S

Sources: NJDEP GIS
Monmouth County GIS

1:60,000

Prepared By:
Leon S. Avakian, Inc.

# Millstone Township Planning Incentive Grant Program Targeted Farms For Preservation




Sources: NJDEP GIS
Monmouth County GIS

1:60,000

Prepared By:
Leon S. Avakian, Inc.

The **Perrineville West Project Area** targets seventeen farms for preservation, consisting of 1,271 acres. This project area is situated south of Route 33 and west of Millstone Road, north of the New Jersey Equine Clinic and Witches Hollow Road, and east of Disbrow Hill Road. It includes the agricultural lands within the vicinity of Battleground Road between Moto Industrial Park and Prodelin Way. Two of these farms are expected to be preserved by mid-2008 and will add an additional 200 of preserved farmland to the already existing 98 acres of preserved farmland from four preserved farms. There is a total of 1,272 acres of preserved and potential farmland. The density in this project area, including the targeted farms, is approximately 0.7 (70%).

**Perrineville West Project Area Chart**

| Block | Lot | Acres | Block | Lot | Acres |
|---|---|---|---|---|---|
| 7 | 2 | 32.00 | 14 | 11.06 | 42.62 |
| 11 | 10 | 47.00 | 14 | 11.07 | 42.59 |
| 11 | 11 | 29.90 | 16 | 3 | 149.67 |
| 11 | 17, 23 | 211.75 | 17 | 6 | 111.00 |
| 11 | 22.02 | 90.87 | 17 | 10 | 85.60 |
| 12 | 1.17 | 86.28 | 17 | 19 | 39.12 |
| 13; 14 | 3.04; 2 | 104.23 | 17 | 24 | 82.00 |
| 14 | 7 | 12.19 | 30 | 14.07 | 27.34 |
| 12 | 2 | 77.22 | | | |
| **Total Acres = 1,271.38** | | | | | |

The **Clarksburg East Project Area** targets fifteen farms for preservation, consisting of 922 acres. The Clarksburg East Project Area extends south of Sweetman's Lane, east of Millstone Road, north of Stage Coach Road and west of Route 527. There are nine preserved farms within this project area, totaling 365 acres. There are three farms consisting of 117, 36, and 52 acres respectively, which are under contract and are expected to close in early 2008. Another farm has submitted an application for farmland preservation. There are 1,287 acres of preserved and potential acres in this project area. The density for this project area, including the targeted farms, is approximately 0.5 (50%).

**Clarksburg East Project Area Chart**

| Block | Lot | Acres | Block | Lot | Acres |
|---|---|---|---|---|---|
| 30 | 14.07 | 27.34 | 46 | 4.01 | 36.44 |
| 39.01 | 10 | 45.64 | 46 | 10 | 62.01 |
| 39.01 | 15.01 | 58.80 | 46 | 7 | 111.82 |
| 39.01 | 29 | 41.69 | 46 | 22 | 24.55 |
| 39.01 | 30.01 | 30.00 | 47 | 2 | 118.36 |
| 39.01 | 17 | 54.50 | 47 | 5 | 78.34 |
| 44 | 2 | 119.42 | 48 | 3 | 52.50 |
| 45 | 3 | 60.53 | | | |
| **Total Acres = 921.94** | | | | | |

The **Clarksburg West Project Area** targets eleven farms for preservation, consisting of 877 acres. Clarksburg West lies between the western municipal boundary line and Route 571, south of Roosevelt and north of Route 537. One farm is under contract and is expected to close by the end of 2007. Three additional farms have submitted applications. A total of six farms containing 248 acres have already been preserved. In total, there are 1,108 acres of currently preserved and potentially preserved farmland in this project area. The density in this project area, including the targeted farms, is approximately 0.75 (75%).

**Clarksburg West Project Area**

| Block | Lot | Acres | Block | Lot | Acres |
|---|---|---|---|---|---|
| 34 | 17 | 16.30 | 55 | 2 | 159.20 |
| 35 | 2 | 59.95 | 55 | 1 | 124.00 |
| 35 | 23, 24 | 26.00 | 57 | 33 | 56.00 |
| 35 | 34 | 97.58 | 55; 57.01 | 4.22, 4.24-4.28; 25, 26, 26.01 | 168.72 |
| 52 | 7 | 89.83 | | | |
| 65 | 1.01 | 18.08 | | | |
| 53 | 3.02 | 18.66 | | | |
| 54 | 5.01 | 42.67 | | | |
| **Total Acres = 877** | | | | | |

## C. Minimum Eligibility Criteria Coordination

Millstone Township will adopt the State minimum eligibility requirements. The criteria that have been established by the State include the following:

***Lands less than or equal to 10 acres:***

- Production of agricultural/horticultural products of at least $2500/year;
- 75% or 5 acres (whichever is less) is tillable;
- 75% or 5 acres (whichever is less) has soils capable of supporting agriculture; and
- Land must exhibit development potential.
-

***Lands greater than 10 acres:***

- 50% or 25 acres (whichever is less) is tillable;
- 50% or 25 acres (whichever is less) has soils capable of supporting agriculture; and
- Land must exhibit development potential.
-

***Lands less than 25 acres:***

- Cannot contain more than 80% of soils that are classified as freshwater wetlands or modified agricultural wetlands (as identified by NJDEP); and
- Cannot contain more than 80% of soils with slopes in excess of 15% (as identified by USDA)

While Monmouth County has established some additional criteria for the County Planning Incentive Grant program, the County has agreed to cost share on Municipal PIG projects using the State criteria as adopted by Millstone Township. However, in general, properties that meet the State's criteria, but not the County's criteria, will be preserved via the Municipal PIG program. All other properties may be considered under either the Municipal PIG or County PIG Programs. Applications will be accepted throughout the year. The Township will continue to provide regular communication with Monmouth County. In the event that the Township and County target the same property at the same time, the two entities will work together to determine which program is in a better financial position to complete the transaction.

Millstone Township's Ranking Site Assessment (see Ranking Criteria Used to Prioritize Farms described more fully below) includes all of the same minimum criteria used by Monmouth County, including the size of the farm, tillable acres, soils, development potential and slopes. Farms must receive a minimum score in order to be considered for preservation.

**D. Ranking Criteria Used To Prioritize Farms**

Farmland Preservation is a voluntary program. Landowner applications are accepted all year. After receiving an application, members of the OSFPC make an appointment to visit the farm, interview the landowner and complete the Farm Site Assessment Form.

The farm is ranked and given points considering all the following factors: proximity to other preserved farms and open space; size of property; percentage of property actively farmed; stewardship (e.g. existing Farm Conservation Plan, enrollment in the 8-year program, etc.); boundaries and buffers; soils; tillable acres; distance to conflicting uses; and development potential. Other factors that the OSFPC may consider are: historic significance, landowners willingness to enter into a "bargain sale", accept Installment Purchase Agreements (IPA) or other creative finance arrangement; willingness to sell an easement for a trail; estate; foreclosure; willingness and ability of county and state to cost share; and expected cost.

Applications will be ranked and prioritized by the Township. When funding becomes available, the OSFPC may make a recommendation to the Township Committee for further consideration. If the property remains under consideration, the landowner would be required to sign a one year option agreement during which time the SADC will authorize the Township to proceed with appraisals. The appraisals are reviewed and a market value is certified by the SADC. The Township can then extend an offer to the landowner. If the landowner does not accept the offer of certified market value, they are not permitted to reapply until two years from the date of the original application.

The Municipal Landowner Rally has proven a very successful forum in which the Township is able to solicit farmers interested in preservation. Of the eight (8) key properties that submitted applications following the rally, two (2) were preserved last year and five (5) more are under County or State review and expected to close within the next six months. Landowner interest remains high due, in part, to recommendations by the farmers who have successfully preserved their farms. The OSFPC is considering conducting another Landowner Rally when additional funding is secured.

Additionally, the State of New Jersey permits municipalities to consider the historic significance of a farm for ranking farmland applications. There are at least four farms targeted for preservation in Millstone Township that have historic significance. Each is listed on the Monmouth County Historic Sites inventory. The following descriptions are based on preliminary research with the NJDEP Office of New Jersey Heritage Individual Structure Survey.

**Block 31/ 25 (26 Rising Sun Tavern Road)**
This site is one of the best remaining late 19th century farmsteads in Millstone Township due to the number and condition of the barns remaining standing and the survival of the farm site acreage and setting.

**Block 23/Lot 25 (54 Baird Road)**
Despite recent renovations, this is a good example of farmsteads in Millstone during the early 19th century. The original portion of the house has been incorporated into the new structure. The late 19th century barn and 53 acre site contribute to the historic rural landscape. Samuel Wetherill, who is listed as head of household on the 1850 Federal Census, may have been the original owner and builder of the house.

**Block 57/Lot 26 (42 Olde Noah Hunt Road)**
This large Greek Revival dwelling retains its original form and a number of its original design features. It is a good example of the sizable farmhouses built by prosperous farmers in western Monmouth County during the mid-19th century. The house was built by Noah Hunt who developed the property and is shown as the owner of the property on maps dating back to 1851.

**Block 23/Lot 2.02 (25 Millstone Road)**
Hom House was built in 1821 as recorded on a beam in the attic. The house was built on the site of an earlier house and was located in a settled community with a tannery across the road, a dam (the remains of which are still evident), a mill pond, and a gristmill that was operated by Peter Bergen.

There are several other examples of historic properties in Millstone Township that may be eligible for farmland preservation, but will require further research. Other properties that appear on pre-1900 maps of Millstone Township include Pearl Acres (Block 55/Lot 2), Showplace Farm (Block 23/Lot 8), and the Horzepa property (Block 42/Lot 11.01).

## E. Policies Related To Farmland Preservation Programs

Millstone Township follows Monmouth County guidelines and policies related to the approval of housing opportunities. Labor housing and house replacement requests are forwarded to the MCADB for consideration. After the applicant completes that process, if approved, they proceed to the building department for permits.

Millstone Township currently has no Residential Dwelling Site Opportunities (RSDOs) on farmland preserved farms. However, one targeted farm, soon to be preserved, will have one RSDO for a farm over 100 acres in size as part of their deed of easement. If the municipality were to receive an application for a RSDO, it would forward the request to MCADB who would follow P-31.

Millstone Township has received one Division of Premises request this year. If granted, the owner of a preserved property would be permitted to subdivide an agricultural easement and sell one or more resulting farms. The Township forwards these requests to MCADB. The AAC may offer an opinion to the MCADB and SADC for their consideration.

Non-Severable Exceptions are areas of a farm that are specifically delineated so they will not be subject to the deed restrictions. While the Township considers requests on a case-by-case basis, for all cases the size and location of exceptions may not negatively impact the farming operation. An exception often depends on the presence of nonagricultural uses on the site, future plans for the farm (such as a veterinarian clinic), or whether the project is a joint project with the municipality or county to buy a trail or a portion of the property is purchased for open space.

Severable Exceptions are areas of a farm that are specifically delineated and separated by deed. The Township, by ordinance, has permitted the request of local farmers for one residential building lot opportunity after the farm is preserved, provided the acreage is delineated prior to preservation and that no payment was taken on that acreage. The severable exception may be no less than two acres in size, which is smaller than the minimum lot size required in the RU-P (6 acres) or RU-C (10 acres) zoning districts.

## F. Funding Plan

### Description of Municipal and County Funding Sources

The Millstone Township Open Space and Farmland Preservation program primarily relies on revenue from the Township's dedicated open space and farmland preservation tax to preserve open space and farmland. The six cent tax generates $830,000 in revenue per year. As of December 31, 2006, the open space trust account had a balance of $1,057,000. Over the years, Millstone Township has adopted multiple bond ordinances related to open space and farmland preservation. In 2006, the Township authorized the issuance of $900,000 in bonds for preservation projects.

The Open Space and Farmland Preservation Council and the Agricultural Advisory Board generate approximately $5,000 - $10,000 per year through community supported fundraising. In addition, the Township aggressively seeks several hundred thousand dollars in additional grant opportunities for preservation including NJDEP Green Acres grants and Monmouth County open space grants. The governing body has reached a consensus to maximize the preservation capacity of this revenue by issuing bonds to fund the preservation of farmland and open space. It is anticipated that the annual revenue can support up to $12,000,000 in bonds for preservation acquisition.

## Financial Policies Related To Cost-Share Requirements Among County And Municipal/Other Funding Partners/Installment Purchases

Using the Planning Incentive Grant program, the Township follows the cost-share guidelines set forth by SADC; the SADC contributes 60%, Monmouth County 24% and the Township 16%.

The Township also entertains the option of preserving land and purchasing easements through (IPA) with the farmer. In those instances the tax revenue from the dedicated tax would be applied towards making the annual interest payments to the IPA holders, with State and County matching funds being utilized to fund the purchase of the zero coupon bonds for the IPA. To date the farmers have indicated a preference for cash purchases.

The Township has developed relationships with non-profit groups that assist with preservation projects. These organizations include D&R Greenway Land Trust and Monmouth Conservation Foundation. These organizations could be useful in working with the Township to purchase annuities for landowners who wish to structure a payment schedule over time. Installment purchases have not yet been used in the Township.

## Cost Projections And Funding Plan Associated With 1, 5, And 10 Year Preservation Goals

Millstone Township develops a capital budget estimate each year to help plan for future acquisition spending. Millstone Township plans to preserve several properties each year.

The Township currently has several large farms under contract for purchase of development easements, and several others are under consideration or negotiation. The acquisitions listed on the table below are expected to close within one year and will have a large impact on the Township's total available preservation funding.

It is anticipated that Millstone will have to advance significant sums beyond the traditional 16% to cover shortfalls in available funds for cost sharing from the State and County PIG. If additional State and County funds do not become available for cost share in future years, the ability of the Township to preserve additional farmland will be seriously hampered beyond the next 1-3 period once the expected $12,000,000 debt capacity has been reached. Meeting the projected cost for 5 and 10 year preservation goals are dependent upon new State and County funds becoming available.

**2008-2009 COST PROJECTION**

| Property Name | Acreage | Total Cost | Cost Per Acre | State Share | County Share | Municipal Share |
|---|---|---|---|---|---|---|
| Baldwin | 25 | $ 826,268 | $34,000 | $ 495,760 | $198,304 | $ 132,230 |
| Teller/Klein | 26.25 | $ 682,500 | $26,000 | $ 409,500 | $163,800 | $ 109,200 |
| Boyken | 35 | $1,170,715 | $35,000 | $ 702,429 | $280,971 | $ 187,314 |
| Kenny | 48 | $1,536,000 | $32,000 | $ 921,600 | $368,640 | $ 245,760 |
| Lee | 163 | $6,466,150 | $39,500 | $3,061,190 | $250,000 | $3,154,960 |
| Wong | 117 | $4,060,000 | $35,000 | $1,990,560 | $796,224 | $1,273,216 |
| Hom | 168 | $4,980,000 | $30,000 | $2,390,400 | $956,160 | $1,633,440 |
| Nurko | 30 | $1,311,300 | $43,710 | $786,780 | $314,712 | $ 209,808 |
| Casola | 124 | $1,984,000 | $16,000 | $1,190,400 | $476,160 | $ 317,440 |
| **Totals:** | **736.25** | **$23,016,933** | | **$11,948,619** | **$3,804,971** | **$7,263,368** |

**2010 - 2012 COST PROJECTION**

| | | | | | | |
|---|---|---|---|---|---|---|
| | **400.00** | **$12,000,000** | **$30,000** | **$7,200,000** | **$2,880,000** | **$1,920,000** |

**2013-2017 COST PROJECTION**

| | | | | | | |
|---|---|---|---|---|---|---|
| | **600.00** | **$18,000,000** | **$30,000** | **$10,800,000** | **$4,320,000** | **$2,880,000** |

### Any Other Financial Information As Appropriate

Millstone Township would like to pursue creative mechanisms to preserve farmland and open space, and the Township will continue to pursue the use of option agreements, installment purchases and encourage donations for permanent development easements, and also will seek out other options as deemed necessary and appropriate. Partnerships with local nonprofit land trusts and conservancy groups are critical to the success of the Township's efforts to preserve farmland. The ability of these groups to obtain donations of development rights and their flexibility in structuring land transactions can play a key role in land preservation.

## G. Farmland Preservation Program & Administrative Resources

Farmland preservation efforts are led by the five member Millstone Township Committee as the governing body for the Township. Open space and farmland preservation projects are referred by the Open Space & Farmland Preservation Council (OSFP) and the Agricultural Advisory Council (AAC) to the Township Committee for its consideration to purchase the development rights, pathway easement or the property in fee simple. Four affirmative votes of the Township Committee are required to authorize the issuance of either a Bond Anticipation Note or a Bond for preservation projects.

The Agricultural Advisory Council (AAC) is composed of five resident volunteers. The majority of the members must be farmers and own land in Millstone Township. The powers and duties of the Council are:

1. To maintain an inventory of all land within the Township currently used for farming and/or agricultural related purposes.

2. To analyze how the Township can best protect the continuance and preservation of farmland.

3. To determine existing and future problems facing farmers and the farming community and to recommend reasonable and desirable solutions to the Township Committee.

4. To promote appropriate farming and agricultural related activities.

5. To encourage existing farmers to continue their farms in active operation.

6. To recommend to the OSFPC lands for farmland preservation.

7. To assist in minimizing conflicts between farming/agricultural uses and adjacent or nearby residential and commercial uses.

8. To promote the Right to Farm Act (N.J.S.A. 4:1C-1 et seq.), including educating the community about the Act and assisting in mediating right to farm issues.

9. To make an annual report to the Township Committee setting forth the activities and operations of the Board during the preceding year.

10. To keep the Township Committee informed of developments in the farming community.

11. To respond to any ordinances introduced by the Township Committee that may have an impact on the farming community.

12. To advise the Township Committee with respect to pending legislation at the county or state level that may impact on the farming community.

13. To keep the farming community informed of any municipal, county, or state legislation which may impact on the farming community.

14. To advise the Planning Board of its findings and recommendations on land use, land management, and farmland preservation.

The Open Space & Farmland Preservation Council (OSFPC) is comprised of seven resident volunteers, two of whom are alternates, and one Planning Board member and one Township Committee member. The powers and duties of the Council are:

1. To foster and promote the preservation of open space and farmland within the Township.

2. To work cooperatively with the County and State Offices of Farmland Preservation.

3. To assist interested parties with processing applications for farmland preservation with applicable County and State Offices.

4. To help create and disseminate information promoting farmland and open space preservation.

5. To assist the Millstone Township Economic Development Council in promoting the agricultural industry, as well as promoting the benefits which result from preserving farm operations.

6. To assist in obtaining grants for open space and farmland preservation for the Township.

The OSFPC and AAC Secretary performs administrative duties relating to the Agricultural Advisory Council and the Open Space & Farmland Preservation Council, and maintains the database for preserved and potential farmland.

Several other professionals assist with preservation including the Township Engineer who provides lot-yield calculations for the appraisals, survey review, and maintains the Geographic Information System database and prepares mapping; a consulting Environmental Engineer who performs grant writing, investigates suspected wetlands, and conducts Phase 1 Environmental Site Assessments; the Township Planner who ensures consistency with farming related ordinances and coordinates the farmland plan with the Township Master Plan; and the Township Attorney who provides legal counsel on matters relating to acquisitions and enforcement, reviews contracts and conducts the real estate closings.

The Township Tax Assessor supplies database for municipal property tax assessment, specifically farm properties, and the Township Tax Collector informs the OSFPC regarding pending sales of properties resulting from a municipal property tax lien.

General guidance is provided by the Monmouth County Planning Board and the County staff assists with the appraisal review, surveys and contracts and providing general guidance. Municipal officials coordinate preservation projects with the County staff, and the County closes on municipal PIG easements.

There are two regional nonprofit organizations, the Monmouth Conservation Foundation and the D&R Greenway Land Trust, which also provide technical and financial assistance to the Township.

Millstone Township encourages participation on joint projects with all preservation groups. The OSFPC and the AAC maintain good communication between the groups regarding inventory of land used and available for agriculture and identification and prioritization of farms to be preserved. Millstone Township OSFPC maintains good communication with Monmouth CADB by fostering open conversations regarding farmland preservation of targeted farms, coordination of preserved open space, trail easements on farmland, and other concerns as needed. Millstone Township works closely with two local non-profit organizations: Monmouth Conservation Foundation and the D & R Greenway Land Trust. The goal of Millstone is to preserve as much land in the Township as possible.

## H. Factors Limiting Farmland Preservation Implementation

Challenges to the farmland preservation program include the available supply of farmland, the cost of purchasing that land, the 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 farmland preservation program in Millstone Township.

Landowner interest remains high and applications continue to be submitted to the Township. Millstone Township prides itself on innovative partnerships, which can be seen by the popularity and success of the municipal PIG program and the local conservation projects with local nonprofit groups, including the Monmouth Conservation Foundation and the D&R Greenway. It will take the effort and teamwork of landowners, government officials, nonprofit organizations and local residents to ensure that the farmland preservation program remains popular, supported and successful.

Project Areas in Millstone Township were designed with sound planning and both existing and proposed land uses in mind. Developed areas of the Township 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. Focusing on preservation will result in a sustainable supply of agricultural land for farming to continue into the future.

The rising cost per acre is the most significant factor limiting farmland preservation in Millstone Township. Land values have increased rapidly and the Township finds that developers are able to offer more per acre than the farmland appraises for under the current State guidelines. The only items limiting farmland preservation in Millstone Township is funding and cost. The Township has over 9,000 acres currently farmed or undeveloped. Many active farms are interested in entering the preservation program and the existing municipal outreach projects continue to increase farmer interest each year. It is anticipated that the interest in preservation will exceed the funds available for preservation at the county and municipal level.

### Funding

Funding for preservation comes from several sources including the municipal open space tax, various state funding programs including the State Agriculture Development Committee (SADC) and Green Acres, Monmouth County, non-profit organizations and partnerships with conservation buyers. The Township has an open space tax of six cents that generates approximately $830,000 annually. The Township uses this money to pay down old debt and to preserve additional open space and farms.

The Township received approval in 2001 from the State Agriculture Development Committee (SADC) for participation in the Planning Incentive Grant (PIG) program. Using this program, the Township has preserved over 700 acres, using over $5.8 million in State funds and $2.3 million in County funds.

### Projected Costs

The residents of Millstone Township remain firmly committed to land preservation. The dedicated open space/farmland preservation tax has been increased three times and is presently at six cents. The Township has committed to raise approximately $12,000,000 through the sale of municipal bonds. This level of municipal commitment to preservation is striking considering the municipal property tax rate is currently nine cents, only three cents higher than the preservation tax.

However, financial projections indicate that once those farms presently under contract are preserved, the Township will be limited to preserving, at most, an additional 1,000 acres at $30,000 per acre over the next twenty years. As the cost per acre increases, the number of acres that can be preserved will decrease accordingly.

Further, while the cost of future development will continue to increase the revenues generated from the open space tax, a one to two cent increase may also need to be presented to the voters within the next five years to support further preservation.

## SECTION VI: ECONOMIC DEVELOPMENT

### A. Consistency With NJDA Economic Development Strategies

The State of New Jersey offers farmers a number of support services and programs ranging from technical advice to farm loans. One of these services 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.

As part of this emphasis on the business of agriculture, NJDA has issued its *2007 Economic Development Strategies,* which identify and propose methods to expand and enhance various subsets of the agriculture industry in New Jersey, including produce, horticulture, dairy, livestock and poultry, field crops, organic, equine, wine, and agri-tourism. 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."

As Millstone Township farmers continue to look for ways to reinvent themselves and their products, and to explore new markets and new methods for promoting their businesses, it is important that the Township continues to develop new ways to help farmers increase their profitability and coordinate with federal, state and county agencies and other organizations, both in the public and private sector to find solutions. These may include workshops, newsletters and other opportunities for farmers to continue to educate themselves about:

- Better ways to manage their farm as a business;
- Trends in agriculture;
- Ways to diversify, add value and maximize profitability;
- Technical advice and assistance with choosing and marketing their products; and
- Advances in technology that may help them farm more efficiently and productively.

As the produce sector continues to grow in Millstone Township and with the increased interest by consumers in organic produce and animal products, Millstone Township farmers may be encouraged to expand or diversify into this sector. As a result, Millstone Township may look to:

- Improve marketing of organic and natural produce;
- Explore various additional markets, including local restaurants and grocery markets and cooperative farm stands at municipal and county events;
- Explore the feasibility of establishing licensed food preparation facilities and meat processors in the County to facilitate growth of value-added products in this sector;
- Promote agri-tourism 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, such as assisting growers, with the help of the NJDA and the Rutgers Extension, to identify products that can benefit as organic (high value/high demand products).

## B. Agricultural Retention, Expansion & Recruitment Strategies

The Millstone Township website (www.millstone.nj.us) includes information regarding the Trading Post, Right to Farm Ordinance, Right to Farm Act, press releases and seasonal advisories (i.e. bagworms, farm tractors, etc.). The local cable news channel also provides seasonal advisories.

The Millstone Township OSFPC has worked hard to develop a good relationship with the local farmers and landowners and to bring credibility to the program. The AAC holds seminars; past topics included farmland assessment, the State's Right-to-Farm Act and the Farm Conservation Plan.

In 2005, the Township hosted a Land Rally that was widely attended by local farmers. Speakers included representatives from the SADC, Green Acres, Monmouth County Parks Commission, Monmouth County Farmland Preservation Program, Monmouth Conservation Foundation, the D& R Greenway, and a financial expert. The rally resulted in five major property applications which are now under contract and anticipated to close in 2008.

Millstone has about 10 applications on hold now; with two of the applications amounting to approximately 330 acres.

The OSFPC participates in a variety of community events, such as Millstone Day, that promote local farms and farmland preservation, as well as raise awareness of the commercial farm building code. The AAC also facilitates right to farm issues. The Township also educates the members of the Planning and Zoning Board on matters related to farmland, including presentations on the State's Right to Farm Act, the Township's Right to Farm Ordinance and the Commercial Farm Building Code.

The Township has a regular newsletter that spotlights local farms, and maintains an electronic mail distribution list to provide timely notices and alerts to farmers. The Township also has a reduced building permit fee schedule for farm buildings.

In the future, the Township intends to establish a farmers market, encourage farmers to use the Trading Post for products produced locally, and solicit topics for upcoming seminars. The Township will continue to conduct educational seminars and promote the image that the Township is interested in preserving all the farmland it can.

Many businesses are needed to support the agriculture industry. Appendix I lists the suppliers and services available locally and regionally.

Millstone Township is well positioned geographically within the center of the eastern seaboard between Boston and Richmond, VA, a one hour drive to either New York City or Philadelphia with easy access to the New Jersey Turnpike, Garden State Parkway and Routes 195, 295 and 9. As the cost of fuel continues to rise, the Township's location allows farmers to benefit from shorter trips than farmers in Lancaster, PA and other farming areas to the west and south. Shorter travel times also provide the added advantage that perishable items can travel safer with less damage.

Further, produce and nursery stock growers benefit from the affluent residential markets of central and northern New Jersey, New York City, Philadelphia and Long Island. So that while many nursery farms have experienced flat commercial markets over the last four to five years, many of the local nursery operations have tapped into the affluent residential markets located within a two hour drive of the Township.

The "Jersey Fresh" program that is promoted by the State of New Jersey has increased retail opportunities for vegetable and field crop growers, which has proven beneficial since wholesale prices tend to fluctuate more frequently than retail prices.

Millstone farmers have also begun to grow specialty crops such as Asian vegetables and organic crops.

While the strong horse industry, Purdue granary in Bordentown, and the hay, straw, and grain growers support each other and help keep both sectors of agriculture strong, external impacts, such as drought conditions in other parts of the country, can impact prices which benefit one sector while burdening another. As an example, this past year, local hay, straw and grain prices doubled due to the demands from the southern states such as North Carolina, which experienced drought conditions.

Additionally, Millstone Township has some of the best soils in the State which produce higher protein grains and flavorful vegetables (such as "Jersey" corn and tomatoes) than other areas.

Agriculture is a business that requires land to produce crops, nursery stock, livestock, etc. Access to a pool of workers is also essential. Therefore, access to affordable land and dependable labor is critical to a farm's success. Land grants, more preservation funding, or creative programs that can make land affordable for farmers would help maintain the land base that is vital to the industry and additional government assistance in setting up a work visa center where farm employers could go to arrange for farm labor are some ideas to help maintain the viability of agriculture. Access to low interest loans, or grants to assist farmers to begin a farming operation is essential to offset costs associated with equipment, crop insurance and fertilizer leaves.

Additional stores, suppliers and large tractor supplies are all needed by local farmers but whether the demand can sustain these supportive businesses is not known. Local farmers are likely to continue to travel to Lancaster and/or buy supplies over the internet.

There are many agriculture community representatives who are active in the business and industry development groups. The following is a partial list of leadership roles in agriculture related organizations that farmers in Millstone have served:

Member of the MCADB
Member of the Millstone Township Economic Development Committee
President of the New Jersey Horse Council
Member of the New Jersey Equine Advisory Board
President of the Board of Directors Tri County Co Op
Members of the Monmouth County Equine Commission

Members of the Board of Directors Standardbred Breeder and Owners Association
Member and Past President of the American Equine Practitioners
Members of the New Jersey Vegetable Growers
Members of the Millstone Township OSFPC
Members of the Millstone AAC

Funding to preserve farming is the primary resource needed to help make positive changes for agriculture in Millstone Township. Without a strong agricultural land base, the viability of farming is questionable. With more land being lost to development, time is running out for preservation. Other resources that were raised as needs by local farmers included an adequate farm labor source, updated equipment and the ability to get parts and expertise to repair the machinery, water for irrigation, elected officials to support necessary farm legislation, and the possibility for farmers to receive a reduction in the cost for electricity used for farming and fuel for growing and transporting produce.

Millstone Township and the AAC can assist in the economic development of agriculture as an industry by encouraging residents and farmers to participate in business and agriculture industry groups to further establish farm friendly programs, such as farmland preservation, low interest loans, and a farm labor program. Notable recent examples include a member of the Millstone Economic Development Committee who is a farmer and can encourage local businesses to further their efforts to become "farmer friendly". Additionally, two residents have been named to the Monmouth County Equine Commission.

## SECTION VII:
## NATURAL RESOURCE CONSERVATION

Preservation of farmland is the cornerstone of the New Jersey Department of Agriculture's (NJDA) Agricultural Smart Growth Plan, and the state and County's Farmland Preservation Program. However, there is more to farmland preservation than the retirement of development rights or the outright purchase of farms. 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 New Jersey's preserved farmland would be in doubt. Millstone Township recognizes the conservation of these natural resources as a long term goal, and a necessary part of farmland preservation.

### A. Natural Resource Protection Agencies

#### 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 assists landowners and managers with conserving soil, water and other natural resources. The agency has a field office at the county's agricultural building in Freehold Township and offers technical and financial assistance and oversees conservation programs such as the Wildlife Habitat Incentive Program (WHIP) and Environmental Quality Incentive Program (EQIP).

Technical assistance is provided for the preparation of conservation plans. These plans are a written record of management suggestions and conservation practices to be used on a farm and are intended to help protect soil fertility and productivity, improve water quality and attract desirable wildlife.

Conservation Plans are required within one year of the date of the deed of easement for those who wish to sell their property or sell a development easement via the Farmland Preservation Program, or apply for natural resource conservation program grants such as the 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 that the contract conservation practices are implemented and maintained.

Based on the NRCS mapping of soils within Millstone Township, approximately 23% of the soils have low runoff rates and high infiltration rates; approximately 45% of the soils have moderate runoff and infiltration rates; approximately 31% of the soils have high to very high runoff rates and low to very low infiltration rates; and the remaining 1% of the Township is underlain with unclassified urban soils or are covered with water.

Hydric soils are defined as being saturated, flooded or ponded for usually one week or more during the growing season. These soils often support hydrophilic vegetation. According to the NRCS soil mapping, hydric soils account for approximately 20% of the Township.

A study by the Soil Conservation Service in Monmouth County prior to 1992 identified low-ph or acid soils in fifteen locations within Millstone Township. Thirteen of those locations were in the northwestern half of the Township. The acid soils were found in outcrop zones of the Englishtown, Wenonah, Marshalltown and Navesink formations and ranged in depth from 4-16 feet. The Monmouth County Soil Conservation District provides a detailed method of mitigation for acid producing soils.

Based on its large agricultural use both currently and in the past, historic pesticide contamination is a concern within Millstone Township. The Land Development Ordinance requires site investigation and soil sampling for all development applications prior to Board approval to ensure that contamination levels do not exceed the New Jersey Department of Environmental Protection Soil Cleanup Criteria.

## 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 the natural resource conservation programs administered by the State Soil Conservation Committee (SSCC). These programs provide engineering services and regulatory guidance to soil conservation districts, homeowners, engineers and planners regarding virtually all development activities, with the goal of reducing the danger from stormwater runoff, retarding non-point source pollution from sediment, and conserving and protecting the land, water and other natural resources of the State.

Millstone Township is served by the Freehold Soil Conservation District. The Soil District Office mailing address and website is:

Freehold Soil Conservation District
4000 Kozloski Road
P.O. Box 5033
Freehold, NJ 07728-5033
www.freeholdscd.org

The Freehold Soil Conservation District 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.

In accordance with soil standards, construction, grading and demolition projects that disturb more than 5,000 square feet of the surface area of the land require soil erosion and sediment control plans. Commercial farms may be required to prepare such plans for parking lot installation, soil grading and the erection of agricultural structures. Cultivation of farmland for food, fiber or animals is typically exempt.

## B. Natural Resource Protection Programs

### SADC Soil And Water Conservation Grant Program

The SADC Soil and Water Conservation Grant Program awards grants of up to 50% the project cost to owners of permanently preserved farms and eight year program participants. Irrigation, erosion control, and stream corridor enhancement projects are among those that are eligible.

### Federal Conservation Programs

The NRCS and Farm Service of America (FSA) administer a number of Federal Farm Bill programs including the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP) and the Conservation Reserve Enhancement Program (CREP). EQIP funding is utilized for irrigation projects, manure management, and conversion of gas engines to diesel. The WHIP program is designed for non-federal landowners who wish to improve or develop fish and wildlife habitats. CREP is intended to reduce agricultural water runoff and improve water quality by paying farmers to remove highly erodible pastureland and cropland from production.

As of 2007 fiscal year, Millstone Township has no farmers participating in WHIP or CREP. However, one farmer is addressing water conservation and air quality on approximately 500 acres within the EQIP program.

### NJDEP Landowner Incentive Program

New Jersey's Landowner Incentive Program provides technical and financial assistance to private landowners interested in conserving threatened and endangered plant and animal species on their property. Potential projects include vernal pool restoration, prescribed burns, and stream fencing.

## C. Water Resources

The protection of the water resource as it relates to agriculture and farmland preservation in Millstone Township cannot be overstated. Without a consistent, plentiful, adequate and clean water source, agriculture cannot exist. In addition, farms provide critical open space areas for aquifer water recharge. To a certain extent, some aspects of ensuring clean and plentiful water can be controlled at the individual farm level, by doing the following:

- 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.

### Supply Characteristics

The quality of the surface and groundwater within Millstone Township is of both local and regional importance. Millstone Township serves as a recharge area for one of the fastest growing regions in New Jersey and is at the headwaters for five watersheds: Crosswicks Creek, Barnegat Bay, Central Delaware Tributaries, Lower Raritan-South River-Lawrence, and the Millstone River. Further, the source of all drinking water within the municipality is from individual wells fed by groundwater. Therefore, the protection of groundwater resources is especially important to the Township.

Water quantity is also critical to the quality of life of Millstone Township residents. The Township is located entirely within the Coastal Plain Sole Source Aquifer. According to the United States Environmental Protection Agency, sole source aquifers are those aquifers which contribute more than 50% of the drinking water to a specific area and the water would be impossible to replace if the aquifer were contaminated.

In June 2002, the Township contracted M2 Associates to conduct an evaluation of groundwater resources of the Millstone Township. The study was requested because the increased density of housing and surface/subsurface improvements can impact aquifers which may lead to reduced recharge, lower yields, increased interference, and the degradation of groundwater quality.

The report found that Millstone Township could sustain the water supply demands of a population of approximately 9,800 persons, or approximately 800 more than resided within the Township during the 2000 census. The report also found that groundwater is withdrawn from a confined/semi-confined aquifer system and disposed into an overlying unconfined system throughout most of the Township.

At least 84% of the Township's wastewater is not returned to the aquifer from which it was originally withdrawn. This results in a depletion of the confined/semi-confined aquifer. In 16% of the Township, discharges from the septic system could be returned to the originating aquifer. However, the wastewater from a septic system does not meet Federal or State Drinking Water Quality standards and would require dilution within the aquifer to adequately reduce the concentrations of contaminants.

The M2 report found all but one aquifer system within Millstone Township is capable of meeting most or possibly all of the water supply needs. Of the five aquifers within Millstone Township (Englishtown, Wenonah-Mount Laurel, Shrewsbury, Vincentown and Kirkwood-Cohansey) only the Kirkwood-Cohansey system does not meet NJDEP regulatory requirements because it contains aquicludes or other confining units that are essentially incapable of yielding adequate groundwater supply demands and, therefore, cannot be utilized for resident well systems.

### Agricultural Demand & Supply Limitations

According to the Rutgers New Jersey Agricultural Experiment Station which monitors water applications within Millstone Township, the following table outlines the current water demand for the Township.

**MILLSTONE TOWNSHIP AGRICULTURAL WATER RESOURCES 2007**

| | **Quantity** |
|---|---|
| Agricultural Water Use Certifications | 7 farms |
| Irrigated acres of farmland | 585 acres |
| Number of irrigation wells | 1 |
| Number of irrigation ponds | 9 |
| Number of stream/pond water diversion sites | 7 |
| Total number of Water Diversions | 17 |
| Total Maximum certified Monthly Water Use | 117 million gallons |
| Total Maximum Certified Yearly Water Use | 639 million gallons |

Of the 585 acres of irrigated farmland, most is in vegetables and nursery stock. The seven stream or pond water diversion sites are fed by streams.

**Conservation & Allocation Strategies**

An adequate water supply is important to successful agriculture operations in Millstone Township. According to the 2006 Agricultural Smart Growth Plan, the SADC encourages farmers to accelerate the use of efficient water conservation technologies, such as drip irrigation, and to identify and promote new and efficient methods to conduct water distribution on farms, such as farm ponds and water reuse options.

The field crops rely on rain and some groundwater for water needs, and as such water conservation strategies per se are difficult to implement; however, an increase in the organic content of the soil will improve water holding capacity. This can be done by spreading manure, applying composts, using cover crops between or amid cash crops, and reducing tillage.

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. When managing plants for water conservation, farmers should select species adapted to local conditions. Native and drought tolerate plants can help reduce water needs. For livestock, floats and timers in watering troughs can conserve water by negating the need for constantly running water to keep troughs full.

Millstone Township farmers should implement water conservation strategies whenever feasible, and include such in Conservation Plans whenever practicable.

## D. Waste Management Planning

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 also is a sign of good environmental stewardship, as is recycling of farm by-products whenever possible.

According to the Farmland Assessment and Census, Millstone Township had 2,234 farm animals in 2004. The waste from these animals can contribute to water pollution by increasing nutrients, nitrates, sediment and bacteria at unhealthy levels in surface waters.

Concentrated Animal Feeding Operations (CAFO) are operations with more than 1,000 slaughter or feeder cattle, 700 dairy cattle, 2,500 swine, 500 horses or other animal populations 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. These farms 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. 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. The strategy emphasizes the use of cost-effective voluntary measures, limiting the need for permits.

Millstone Township researched a waste management program to recycle farm animal manure for horse farms and other animal enthusiasts. The program would hire high school and college students and provide experience in horticulture and agriculture waste education along with providing the region with topsoil and potting soil for commercial and residential needs. The plan anticipated that the project would start with four five-acre plots. Each plot would take 90 days to process the horse manure and would produce 67,000 cubic yards of soil. The facility would comply with all State and Federal regulations. The project would also invest in the collection of stormwater runoff that could be utilized as organic fertilizer for pepper farms and other customers. A privately-owned commercial operation that accepts farm animal manure is another option.

**E. Energy Conservation Planning**

The New Jersey Department of Agriculture emphasizes the importance of energy conservation and alternative energy use in its Agricultural Smart Growth Plan. The Plan indicates that it is important to promote the use of innovative technologies, recycling, energy conservation and renewable energy systems on New Jersey's farms and to provide technical assistance for the agricultural community about new and existing energy conservation and renewable energy programs by promoting the financial and environmental benefits of implementing these programs.

The agricultural community has shown initiative in pursuing alternative energy sources, such as solar, wind and bio-gas in running farm operations, and by being a leader in the pursuit of ethanol and bio-diesel fuel markets. Millstone Township encourages farmers to participate in alternative and sustainable energy sources.

### F. Outreach & Incentives

Millstone Township provides information and education of natural resources to local residents and farmers, including guidelines, seminars and newsletter and information regarding State programs. This information is presented to the residents, both in paper and internet formats. The OSFPC publishes a newsletter that addresses recent preservation of land, local ordinances, how preservation laws work within the Township, and other issues. The Stormwater Pollution newsletter has raised awareness on fertilizers, pesticides, household cleaning products and pet waste. The Township website posts articles, newsletters, and information on upcoming seminars. Links to useful websites also are provided.

## SECTION VIII:
## AGRICULTURAL INDUSTRY SUSTAINABILITY, RETENTION & PROMOTION

### A. Existing Agricultural Industry Support

**Right To Farm/Agricultural Mediation Programs**

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.

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 the eighteen County Agriculture Development Boards (CADBs). Both the SADC and CADB implement the Right to Farm Act on the State and local levels.

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 the AMPs recommended by the SADC, or site specific AMPs developed by the Monmouth 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.

Millstone Township's Right To Farm Ordinance was adopted on October 6, 1980 to recognize the benefits derived from farming and prohibit customary farming practices from being found a nuisance. It also set forth the Township's policy for preservation of farmland and the Township's rich farming heritage. Today, Millstone proudly strives to retain its agricultural base and strongly support its agricultural community while maintaining its rural character and quality of life. The Township plans to update its RTF ordinance when the equine rules are adopted.

Presently, the Township does not have a formal mediation program. However, the Township recommends that the mediation process begin with the Agricultural Advisory Committee (AAC) which will commence communication between the parties in order to work toward a mutually acceptable solution. If either party is dissatisfied with the suggestions of the AAC, the next step is for the farmer to seek the counsel of the Monmouth County Agriculture Development Board, and thereafter the State Agriculture Development Committee.

As required by local ordinance, new property owners receive a written notice of any agricultural uses which are adjacent to the residential subdivision.

Millstone Township fosters interaction between farmers and residents, as well as addresses rural issues, in the following ways:

1. Encourage OSFPC and AAC to host educational booths at Millstone Day.
2. Establish a farm market within the town so residents will have access to fresh produce and products and farmers will have another viable market to sell their produce and products.
3. Support OSFPC's Clambake in June as a community event to appreciate good food and celebrate preservation achievements for the year.
4. Publish articles relevant to Right to Farm, preservation, farm life, wildlife, legislation and other topics in the Millstone Township OSFPC Newsletter.
5. Post agriculture information on Township Website directing residents to other links such as SADC website for more information.

**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 agricultural production. 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.

Millstone Township's Tax Assessor has developed criteria for farmland assessment based upon these State-mandated criteria. The application for farmland assessment is due annually before August 1st.

**B. Other Strategies To Sustain, Retain & Promote Agriculture**

Over the last 50 years, Monmouth County and the State of New Jersey have transformed from a largely rural and agricultural landscape, to a more urban and suburban landscape. However, farming remains strong and viable in many portions of the state, including Millstone Township.

If the Township's remaining agricultural areas are to survive and prosper, the non-farming public needs to be aware of, and be financially supportive of, the continuing economic, cultural, scenic and agricultural contributions made by Millstone Township farmers. Public education and outreach will increase the recognition of the farm industry's importance to the non-agriculture resident, and should be continued and expanded whenever possible. Agri-tourism is one form of public outreach that exists in Millstone Township and should be expanded wherever possible, and other public outreach mechanisms should be explored and instituted when feasible.

Preservation of the land is only a small part of the farmland preservation process, and the focus must also be on how to maintain agriculture as a viable industry. Some measures being undertaken by Millstone Township include:

- Township leasing open space, when appropriate, to farmers.
- Adopting an ordinance that requires homebuyers are notified of the proximity of farms to a new subdivision.
- Adopting an ordinance that permits smaller lot sizes if the balance of the land is deed restricted and goes to public use such as open space or preserved farmland.
- Adopting an ordinance that permits a severable exception after farmland preservation provided that the landowner located the exception prior to preservation and was not compensated for that portion of the property.
- Exempting all farms from the municipal ordinance regarding lock boxes.
- Adopted an ordinance that reduced permit fees for agriculture building permits.
- Posting "It's the Law" signs at all roads entering Millstone to indicate a 25 mile per hour speed limit when passing a horse and rider, or horse and carriage.

- Conducting a deer management program on Township-owned land to reduce the population of white-tailed deer to assist with the reduction of crop damage and automobile accidents.

Millstone Township is proud of its farming community. According to the 2006 Farmland Assessment Data, there are 9,242 acres of farmland, representing a significant amount (38%) of the Township. Of this acreage, 712 acres have been preserved at a cost of $9,354,866, and there is an additional 430 acres of farmland is anticipated to be preserved by mid-2008. The Township estimates that another 4,038 acres of farmland could potentially be preserved. The Township's first priority is to secure additional funding in order to continue to aggressively preserve the remaining farmland. The Township must also continue to pursue strategies that will maintain agriculture as a viable industry. And finally, the Township must maintain communication between farmers, the State, County and residents and businesses of Millstone Township by providing information and education opportunities including seminars, newsletters and information in order to help maintain Millstone's vibrant agricultural community.

# APPENDIX I

## LOCAL AND REGIONAL SERVICE PROVIDERS

**LIST OF LOCAL AND REGIONAL SUPPORT SERVICES**
**MILLSTONE TOWNSHIP, NEW JERSEY**
**[3 page table]**

| SUPPORT SERVICES | LOCATION |
|---|---|
| **Parts, Equipment, & Service** | |
| Advanced Generator Exchange | Monroe, NJ |
| Cherry Valley Tractor | Mount Holly, NJ |
| Erb Repairs | Monroe, NJ |
| Farm Brokerage & Supply | Allentown, NJ |
| Freehold GMC | Freehold, NJ |
| Harter Equipment | Millstone, NJ |
| Hights Farm Equipment Co. | Hightstown, NJ |
| M & M Repairs | New Egypt, NJ |
| Major Tool | Freehold, NJ |
| Noreika Sales, LLC | Clarksburg, NJ |
| Tommy Fox | New Egypt, NJ |
| Trenton Tractor | Trenton, NJ |
| Trico Case Equipment | Freehold, NJ |
| ABC Groff | New Holland, PA |
| Hoobers, Inc. | Intercourse, PA |
| Messick | Elizabethtown, PA |
| Brinkley & Hurst | Litiz, PA |
| Lehigh Ag Equipment | Lehigh, PA |
| **Feed & Tack** | |
| Conselina Hay & Straw | Jackson, NJ |
| Dills | Freehold, NJ |
| Englishtown Ag | Englishtown, NJ |
| Hague's Feed Mill | East Brunswick, NJ |
| Hightstown Global Ag | Hightstown, NJ |
| Rick's Saddle Shop, Inc. | Cream Ridge, NJ |
| **Fencing** | |
| Hiteck Fencing | Ohio |
| **Lumber Yards** | |
| Millhurst Mills Lumber | Freehold, NJ |
| Northeastern Building Supply | Jamesburg, NJ |
| Riephoff Saw Mill | Allentown, NJ |
| | |

| | |
|---|---|
| **Seeds** | |
| Bamboo & Rattan | South Lakewood, NJ |
| Englishtown Agway | Englishtown, NJ |
| Global Ag | Hightstown, NJ |
| Harris Seed Co. | Rochester, NY |
| Stokes Seed Co. | Buffalo, NY |
| Rupp Seed Co. | Wauseon, OH |
| Twilley Seed Co. | Hodges, SC |
| Seedway Seed Co. | Lakeland, FL |
| Abbott & Cobb | Festerville, PA |
| Burpee Seed Co. | Warminster, PA |
| **Barn Builders** | |
| SMS Builders, LLC | New Holland, PA |
| **Farriers** | |
| Kevin Davis | 843-333-6384 |
| Paddy Doyle | West Orange, NJ |
| John Rispoli | 732-859-6413 |
| Lyn Rowley | Manalapan, NJ |
| **Fertilizers & Pesticide Sprays** | |
| Allentown Grow Mark | Allentown, NJ |
| Farm Brokerage & Supply | Allentown, NJ |
| Penn State Seed | Mount Holly, NJ |
| Plant Food Company, Inc. | Cranbury, NJ |
| Reed & Perrine | Tennant, NJ |
| **Greenhouse Supplies** | |
| Penn State Seed | Mount Holly, NJ |
| Spinelli Packing Containers | Marlboro, NJ |
| Farm Co Op of South Jersey | |
| **Hay & Shavings** | |
| Conselina Hay & Straw | Jackson, NJ |
| Etsch Farms | Monroe, NJ |
| Gravatt hay & Straw | Allentown, NJ |
| Reeds Sod Farm | Allentown, NJ |
| Spencer Hill Farm | Nicholson, PA |
| Weabor, Inc. | Lebanon, PA |
| **Insurance** | |
| Farm Family Casualty Insurance Co. | Albany, NY |

| **Veterinarians** | |
|---|---|
| Colts Head Veterinary Services | Clarksburg, NJ |
| Colts Nick Equine Associates | Farmingdale, NJ |
| Keenan McAlister Equine | Bordentown, NJ |
| James L Smith Jr. DVM | Califon, NJ |
| **Wells & Water Treatment** | |
| Aqua Soft Water Conditioning | Millstone, NJ |
| East Coast Salt | 732-833-2976 |
| US Water Treatment Co. | Millstone, NJ |
| W & B Well Drilling | Roosevelt, N.J |
| Wagner & Sons | Freehold, NJ |

# APPENDIX II

## EXISTING PRESERVED FARMLAND AND OPEN SPACE

**EXISTING PRESERVED FARMLAND**
**MILLSTONE TOWNSHIP, NEW JERSEY**
**[1 page table]**

| Block | Lot | Acreage | Project Area |
|---|---|---|---|
| 31 | 25 | 28.24 | Clarksburg West |
| 51 | 11 | 35.92 | Clarksburg West |
| 51 | 12 | 28.58 | Clarksburg West |
| 52 | 5 | 49.50 | Clarksburg West |
| 52 | 6.01 | 34.22 | Clarksburg West |
| 54 | 2.08 | 18.27 | Clarksburg West |
| 54 | 2.11 | 54.00 | Clarksburg West |
| 44 | 4.01 | 38.87 | Clarksburg East |
| 45 | 10.03 | 27.68 | Clarksburg East |
| 46 | 6 | 68.58 | Clarksburg East |
| 46 | 9 | 19.53 | Clarksburg East |
| 46 | 11 | 53.88 | Clarksburg East |
| 46 | 21 | 24.00 | Clarksburg East |
| 47 | 4 | 36.56 | Clarksburg East |
| 64 | 3 | 43.77 | Clarksburg East |
| 64 | 10.01 | 52.00 | Clarksburg East |
| 1.02;1.01 | 1,3,5;2 | 1.83 | Perrineville West |
| 14 | 13 | 12.00 | Perrineville West |
| 17 | 24.03 | 10.00 | Perrineville West |
| 17 | 26.2 | 11.58 | Perrineville West |
| 17 | 26.21 | 16.00 | Perrineville West |
| 17 | 26.24 | 46.70 | Perrineville West |
| **Total Preserved Farmland Acreage:** | | **711.71** | |

**EXISTING PRESERVED OPEN SPACE**
**MILLSTONE TOWNSHIP, NEW JERSEY**
**[3 page table]**

| Block | Lot | Acreage | Project Area |
|---|---|---|---|
| 53.01 | 2.01 | 12.30 | Clarksburg West |
| 54.03 | 3.03 | 0.49 | Clarksburg West |
| 57 | 2.02 | 113.00 | Clarksburg West |
| 57 | 34 | 13.77 | Clarksburg West |
| 35 | 24.02 | 34.75 | Clarksburg West |
| 35 | 24.01 | 14.88 | Clarksburg West |
| 33 | 1 | 32.50 | Clarksburg West |
| 33 | 2 | 24.00 | Clarksburg West |
| 33 | 3 | 6.12 | Clarksburg West |
| 34 | 1 | 5.20 | Clarksburg West |
| 34 | 2.01 | 24.40 | Clarksburg West |
| 34 | 2.02 | 1.50 | Clarksburg West |
| 34 | 3.01 | 12.90 | Clarksburg West |
| 34 | 19 | 62.00 | Clarksburg West |
| 34 | 18.01 | 100.60 | Clarksburg West |
| 34 | 17.01 | 33.20 | Clarksburg West |
| 34 | 5 | 42.54 | Clarksburg West |
| 34 | 15.01 | 64.17 | Clarksburg West |
| 34 | 14.01 | 2.83 | Clarksburg West |
| 34 | 7.04 | 59.56 | Clarksburg West |
| 34 | 7.01 | 1.54 | Clarksburg West |
| 34 | 7.02 | 0.92 | Clarksburg West |
| 34 | 7.03 | 0.92 | Clarksburg West |
| 34 | 6 | 35.38 | Clarksburg West |
| 34 | 4.02 | 2.43 | Clarksburg West |
| 34 | 4.03 | 4.00 | Clarksburg West |
| 34 | 3.02 | 12.30 | Clarksburg West |
| 32 | 17 | 31.34 | Clarksburg West |
| 32 | 1.02 | 65.22 | Clarksburg West |
| 32 | 16 | 9.35 | Clarksburg West |
| 32 | 15 | 13.05 | Clarksburg West |
| 32 | 14 | 4.62 | Clarksburg West |
| 32 | 19 | 6.24 | Clarksburg West |
| 32 | 18 | 4.72 | Clarksburg West |
| 32 | 13.01 | 8.27 | Clarksburg West |
| 32 | 13.02 | 2.03 | Clarksburg West |
| 32 | 13.03 | 7.90 | Clarksburg West |

| | | | |
|---|---|---|---|
| 32 | 12.01 | 41.49 | Clarksburg West |
| 32 | 12 | 10.65 | Clarksburg West |
| 32 | 11 | 12.60 | Clarksburg West |
| 32 | 9 | 12.44 | Clarksburg West |
| 32 | 10 | 5.16 | Clarksburg West |
| 32 | 5 | 11.00 | Clarksburg West |
| 32 | 4 | 25.03 | Clarksburg West |
| 32 | 6 | 11.54 | Clarksburg West |
| 32 | 2.02 | 1.20 | Clarksburg West |
| 32 | 2.01 | 1.00 | Clarksburg West |
| 32 | 2 | 63.32 | Clarksburg West |
| 32 | 1.01 | 7.36 | Clarksburg West |
| 32 | 3 | 1.00 | Clarksburg West |
| 38 | 1 | 128.80 | Clarksburg East |
| 46 | 5 | 19.02 | Clarksburg East |
| 39.01 | 19.01 | 30.11 | Clarksburg East |
| 45 | 5.33 | 25.21 | Clarksburg East |
| 44 | 14.01 | 389.96 | Clarksburg East |
| 64 | 11.01 | 126.15 | Clarksburg East |
| 44 | 6 | 20.80 | Clarksburg East |
| 44 | 5 | 1.72 | Clarksburg East |
| 44 | 6.01 | 2.98 | Clarksburg East |
| 64 | 13 | 6.50 | Clarksburg East |
| 64 | 14 | 5.36 | Clarksburg East |
| 64 | 16 | 1.82 | Clarksburg East |
| 64 | 17 | 4.93 | Clarksburg East |
| 44 | 22.02 | 6.85 | Clarksburg East |
| 44 | 21 | 1.00 | Clarksburg East |
| 64 | 17.01 | 0.40 | Clarksburg East |
| 62.03 | 1 | 23.18 | Clarksburg East |
| 62.02 | 1 | 7.02 | Clarksburg East |
| 62.02 | 48 | 3.48 | Clarksburg East |
| 43.01 | 1 | 34.72 | Perrineville East |
| 43 | 12.06 | 15.60 | Perrineville East |
| 42 | 3.08 | 17.00 | Perrineville East |
| 25 | 1.1 | 40.51 | Perrineville East |
| 24.03 | 15.15 | 23.31 | Perrineville East |
| 24.03 | 11.21 | 22.50 | Perrineville East |
| 23 | 13.15 | 23.28 | Perrineville East |
| 23 | 13.02 | 1.08 | Perrineville East |
| 23 | 13.26 | 1.01 | Perrineville East |
| 43 | 4 | 1.87 | Perrineville East |
| 43 | 5 | 0.08 | Perrineville East |

| | | | |
|---|---|---|---|
| 43 | 6 | 0.33 | Perrineville East |
| 29 | 7.03 | 23.35 | Perrineville West |
| 29 | 8 | 48.24 | Perrineville West |
| 29 | 5 | 24.41 | Perrineville West |
| 29 | 9.01 | 134.4 | Perrineville West |
| 29 | 3.01 | 40.00 | Perrineville West |
| 29 | 21 | 17.50 | Perrineville West |
| 30 | 3 | 105.54 | Perrineville West |
| 30 | 4 | 51.70 | Perrineville West |
| 14 | 3 | 32.75 | Perrineville West |
| 14 | 4.01 | 53.83 | Perrineville West |
| 17 | 18.05 | 6.00 | Perrineville West |
| 5 | 4 | 90.67 | Perrineville West |
| 5 | 3.01 | 7.05 | Perrineville West |
| 5 | 3.02 | 10.80 | Perrineville West |
| 5 | 2 | 105.00 | Perrineville West |
| 5 | 1 | 90.20 | Perrineville West |
| 5 | 17 | 0.92 | Perrineville West |
| 5 | 16 | 0.92 | Perrineville West |
| 5 | 15 | 0.92 | Perrineville West |
| 5 | 14 | 0.92 | Perrineville West |
| 5 | 13 | 16.98 | Perrineville West |
| 6 | 5 | 88.28 | Perrineville West |
| 6 | 6.01 | 35.60 | Perrineville West |
| 2.02 | 3 | 115.00 | Perrineville West |
| 2.02 | 6 | 26.00 | Perrineville West |
| 2.02 | 1 | 10.20 | Perrineville West |
| 2.01 | 3 | 16.50 | Perrineville West |
| 2.01 | 2 | 26.20 | Perrineville West |
| 2.01 | 1 | 8.50 | Perrineville West |
| 2.01 | 1.01 | 0.15 | Perrineville West |
| 1.01 | 1 | 13.59 | Perrineville West |
| **Total Preserved Open Space Acreage:** | | **3,333.23** | |