



**Passaic County
Farmland Preservation Plan**

Prepared by **TM**
ASSOCIATES

Adopted on September 18, 2008

Passaic County Farmland Preservation Plan

County of Passaic, NJ

Prepared for:

Passaic County Planning Board
&
Passaic County Agriculture Development Board

Prepared May 19, 2008 by:



ASSOCIATES
Eleven Tindall Road
Middletown, NJ 07748

Richard S. Cramer, PP, AICP
NJ Professional Planner (License No.: 2207)

Robert E. Dare, PP, AICP
NJ Professional Planner (License No.: 5964)

Michael J. La Place, PP, AICP
Passaic County Planning Board (Secretary and Director)
Passaic County Planning Department (Director of Planning)
NJ Professional Planner (License No.: 5467)

This original of this document has been signed and sealed in accordance with Law

Adopted by the Passaic County Planning Board on September 18, 2008

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Pat Lepore, Deputy Director

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John Pogorelec, Jr., Esq., Assistant County Counsel

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John Pogorelec, Jr., Esq., Assistant County Counsel

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Steve Edmond, County Engineer
Mike Lysicatos, PP, AICP, Senior Planner
Jack Nigro, Buildings and Grounds
Justin Riemersma, Assistant Planner
John Pogorelec, Jr., Esq., Assistant County Counsel

Passaic County Planning Department

Michael La Place, PP, AICP, Director of Planning

Elizabeth Newton, PP, Principal Planner
Kathleen M. Caren, Open Space Coordinator
Michael Lysicatos, PP, AICP, Senior Planner
Justin Riemersma, Assistant Planner

Helen Willis, Administrative Secretary
Ramona Robinson, Clerk Typist
Dot Grazes, Receptionist

Prepared by:



Eleven Tindall Road
Middletown, NJ 07748

Richard S. Cramer, PP, AICP
Robert E. Dare, PP, AICP
Scott Kafarski, Senior Environmental Planner
Vanessa Zoe Morin Melis, PP, AICP

With Assistance from:

Elizabeth Newton, PP, Principal Planner,
Passaic County Planning Department

Kathleen M. Caren, Open Space Coordinator,
Passaic County Planning Department

Michael Lysicatos, PP, AICP, Senior Planner,
Passaic County Planning Department

Justin Riemersma, Assistant Planner,
Passaic County Planning Department

Deborah S. Hoffman, Director,
Passaic County Economic Development Department

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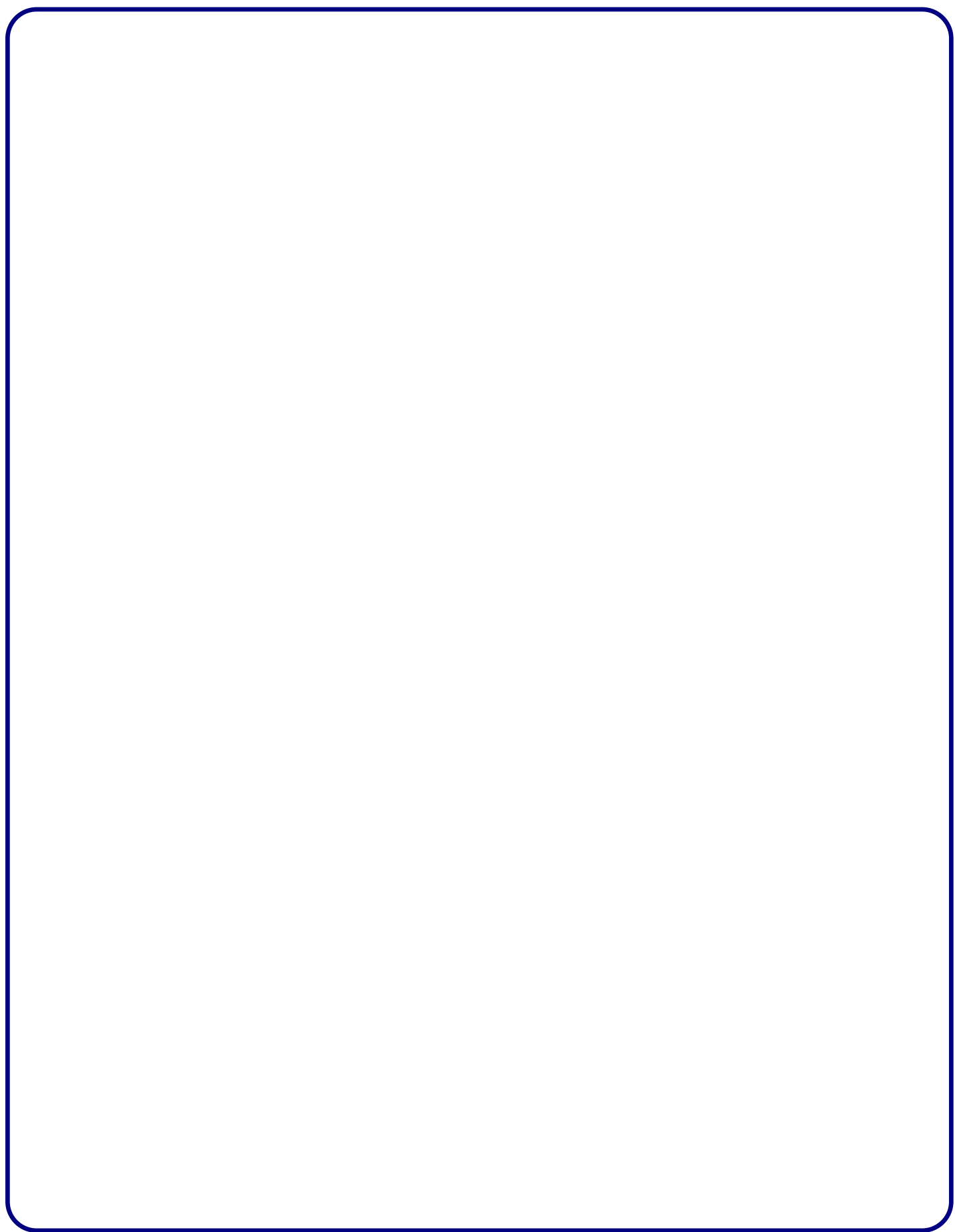
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Introduction

Located in northeastern New Jersey, the County of Passaic is characterized by its unique, hourglass-like shape and ridge-and-valley topography. Passaic County's land use patterns are also unique—with the southern section containing the heavily-urbanized municipalities of Passaic, Clifton, Little Falls, West Paterson, Paterson, Totowa, Haledon, Prospect Park, Hawthorne, North Haledon, Wayne, and Pompton Lakes, and the northern section located in the Highlands Region containing the largely rural municipalities of Bloomingdale, Wanaque, Ringwood, and West Milford.

Despite the contrast of its rural-urban land use pattern, some farmland remains in all parts of the County of Passaic, with a particular concentration in the Highlands Region. In recognition of the economic and cultural benefits of farming, the County of Passaic has prepared this Farmland Preservation Plan Element of the County Master Plan.

This is Passaic County's first Farmland Preservation Plan. Its main purpose is to guide the County's efforts in preserving its remaining farmland and ensuring the continued viability of its agricultural industry. To fulfill its purpose, this Farmland Preservation Plan sets preservation goals in one-, five- and ten-year increments, in addition to defining a project area that will be the target of farmland preservation easement acquisition efforts.

This Farmland Preservation Plan has been prepared in accordance with the guidelines of the State Agriculture Development Committee (SADC) for preparing county farmland preservation plans and qualifying the County for State funding to preserve Passaic's remaining farmland. It includes a wealth of information on: the County's agricultural land base and industry; land use planning issues; agriculture's place in the economic development of the County; natural resource conservation and protection; and agricultural industry sustainability, retention, and promotion. Additionally, this document sets a clearly-defined, County-wide Farmland Preservation Program.

An adopted element of the Passaic County Master Plan, this Farmland Preservation Plan plays an integral role in defining the future of the County's agricultural industry. It also fills a central role in shaping the County's physical development, and works to maintain the high quality of life enjoyed by its residents.

Agricultural Land Base

The key attributes of Passaic County's agricultural land base are its location, size, soils, irrigated areas, and water sources, as well as the size of individual farms and general use. These features are discussed below.

Location and Size

According to information reflected in the State's MOD-IV property tax assessment database, there is currently a total of 308 farmland-assessed tax parcels within the County of Passaic. As referenced in a Geographic Information System (GIS), these parcels represent a combined total of approximately 6,993 acres (see Appendix A).

Passaic County's farmland parcels are predominantly located within its western extents, with the majority (76.8 percent) being located within the Township of West Milford. This is consistent with the location of the Passaic's most urbanized municipalities in the easternmost portions of the County. Table 1 provides the total number and area of farmland-assessed tax parcels within the each of the County's sixteen municipalities.

Table 1:
Location of Farmland Assessed Parcels within Passaic County

Municipality	Parcels	Acres
Bloomington Borough	11	601.0
Clifton City	1	14.4
Haledon Borough	0	0.0
Hawthorne Borough	0	0.0
Little Falls Township	0	0.0
North Haledon Borough	1	13.0
Passaic City	0	0.0
Paterson City	0	0.0
Pompton Lakes Borough	0	0.0
Prospect Park Borough	0	0.0
Ringwood Borough	47	801.5
Totowa Borough	1	18.2
Wanaque Borough	0	0.0
Wayne Township	14	159.4
West Milford Township	232	5,373.0
West Paterson Borough	1	12.1
County Total	308	6,992.6

Source: GIS Analysis of MOD-IV Tax Assessment Database (Accessed on November 1, 2007)

As shown in Table 1, only eight of the County's sixteen municipalities contain farmland-assessed tax parcels. The top-three farming municipalities are West Milford Township,

Ringwood Borough, and Bloomingdale Borough with a collective total of 6,775.5 acres—or 96.9 percent—of the County’s agricultural land base.

Passaic County’s 6,992.6 acres of farmland is 5.5 percent of the County’s total land surface area. The agricultural land base has shrunk from 10,550 acres in 1995. The loss in farmland highlights the need for action to conserve the County’s agricultural land base.

Soil Type Distribution and Characteristics

A variety of soil types are present within the County of Passaic. The County’s five most prevalent soil types are: Rock Outcrop-Rockaway Complex (RNRE); Rockaway-Rock Outcrop Complex (RomC); Urban Land-Riverhead Complex (USRHVB); Urban Land-Boonton Complex (USBOOB); and Red Sandy Loam (RobCc). Table 2 provides a summary of each of these soil types.

**Table 2:
Five Most-Prevalent Soil Types**

Munsell Code	Name	Description	Acres
RNRE	Rock Outcrop-Rockaway Complex (15 to 35 percent slopes)	Exposures of bare, hard bedrock other than lava flows and rock-lined pits	11,167.5
RomC	Rockaway-Rock Outcrop Complex (8 to 15 percent slopes)	Exposures of bare, hard bedrock other than lava flows and rock-lined pits	10,731.5
USRHVB	Urban Land-Riverhead Complex (3 to 8 percent slopes)	Deep, well drained soils on outwash plains and valley trains	9,808.8
USBOOB	Urban land-Boonton Complex (0 to 8 percent slopes)	Land mostly covered by streets, parking lots, buildings, and other structures	8,322.7
RobCc	Rockaway Sandy Loam (8 to 15 percent slopes)	Deep, moderately well-drained and well-drained soils on uplands	7,321.5

Source: Natural Resources Conservation Service of the United States Department of Agriculture

About five percent of the County’s land surface area is comprised of agriculturally-significant soils. These areas are largely found in the valleys that are formed by Bearfort Mountain and Kanouse Mountain. The County’s agriculturally-significant soils are exhibited in Table 3, and mapped in Appendix B.

**Table 3:
Agriculturally-Significant Soils**

Munsell Code	Name	Description	Acres
AdrAt	Adrian Muck (0 to 2 percent slopes; frequently flooded)	Unique	599.7
BogC	Boonton Loam (8 to 15 percent slopes)	Statewide Importance	3.2
BohC	Boonton Moderately Well-Drained Gravelly Loam (8 to 15 percent slopes)	Statewide Importance	2.0
BrsA	Braceville Gravelly Silt Loam (0 to 3 percent slopes)	Prime	260.1
CarAt	Carlisle Muck (0 to 2 percent slopes, frequently flooded)	Unique	1,000.2
CatbA	Catden Mucky Peat (0 to 2 percent slopes)	Unique	247.4
ChrB	Chenango Silt Loam (3 to 8 percent slopes)	Statewide Importance	804.6
ChrC	Chenango Silt Loam (8 to 15 percent slopes)	Statewide Importance	292.6
HanB	Haledon Silt Loam (3 to 8 percent slopes)	Prime	10.1
PokA	Pompton Fine Sandy Loam (0 to 3 percent slopes)	Prime	806.5
RkrB	Riverhead Sandy Loam (3 to 8 percent slopes)	Prime	1,513.5
RkrC	Riverhead Sandy Loam (8 to 15 percent slopes)	Statewide Importance	565.3
RofCb	Rockaway Gravelly Loam (8 to 15 percent slopes, very stony)	Statewide Importance	12.6
WhphA	Whippany Silt Loam, Sandy Loam Substratum (0 to 3 percent slopes)	Prime	279.9

Source: Natural Resources Conservation Service of the United States Department of Agriculture

As shown above, the County's agriculturally-significant soils consist of Loams, Peat and Muck. With regard to a soil's classification as agriculturally-significant, it is noted that there are three further sub-classifications, all of which are represented above in Table 3. These include Prime Soils, Soils of Statewide Importance, and Unique Soils.

Prime agricultural soils are of the greatest interest to farmers, and have the ideal chemical and physical properties for producing food, feed, forage, fiber, and row crops. They are known for their good moisture-holding capacity, permeability, fertility, level land, chemical composition, till-ability, and good pH.

Soils of statewide importance include those lands that are determined by the United States Department of Agriculture (USDA) to be important for agriculture, but having less utility and more limitations for practical agricultural use than prime agricultural soils. They require more care and management than prime agricultural soils.

Unique soils are frequently used for specialty crops, and are known to be agriculturally-productive for specific, limited crop varieties.

Irrigated Acres and Available Water Sources

According to the 2004 Farmland Assessment of the New Jersey Department of Agriculture (NJDA), there were only 45 irrigated acres in 2004. Indeed, this represents only an insignificant and very small portion (0.6 percent) of the County's agricultural land base. Table 4 provides an overview of the County's irrigated acres.

**Table 4:
Irrigated Acres**

Municipality	Acres
Bloomington Borough	0
Clifton City	5
Haledon Borough	0
Hawthorne Borough	0
Little Falls Township	0
North Haledon Borough	0
Passaic City	0
Paterson City	0
Pompton Lakes Borough	0
Prospect Park Borough	0
Ringwood Borough	0
Totowa Borough	0
Wanaque Borough	0
Wayne Township	36
West Milford Township	4
West Paterson Borough	0
County Total	45

Source: 2004 Farmland Assessment of the New Jersey Department of Agriculture

Though there are few irrigated acres within the County of Passaic, the supply of water is of critical importance to the agricultural community. In fact, the State Farm Bureau has identified water supply as a top-ten critical issue in 2007. The criticality of this issue is underscored by the 2004 enactment of the Highlands Water Protection and Planning Act (PL 2004, c. 120)—with the fundamental goal of protecting, restoring and enhancing the quality and supply of the Region's water—as well as increased stream corridor buffer and surface water regulation by the New Jersey Department of Environmental Protection (NJDEP).

The chief water sources within Passaic County include the Wanaque, Clinton, Point View, Oak Ridge, Charlotteburg, and Monksville reservoirs, as well as Greenwood and Echo lakes, and many smaller bodies of water. Additionally, Passaic County is situated above portions of the Brunswick Aquifer; community wells in Hawthorne, Pompton Lakes, Ringwood, Wanaque and West Milford tap into this and other smaller aquifers.

Despite the significant number of water sources within the County, the aforementioned supply issues dictate a need for increased water conservation measures. This need is confirmed by the fact that the Final Draft of the Highlands Regional Master Plan documents the existence of water deficits in the northern area of the County, where the majority of the County’s agricultural lands are situated. Conservation techniques are suggested in these areas, and many farm operations already utilize methods such as capturing rainwater for irrigation. Future efforts are currently being explored to expand upon water availability. Fortunately, most of these areas are not the subject of intensive crop operations, and annual rainfall appears to support woodlot management and tree farms. However, this Farmland Preservation Plan, nonetheless, includes a detailed discussion of water conservation techniques.

Statistics and Trends

Applicable tax assessment information and the Census of Agriculture provide a wealth of statistical information on the County’s Agricultural Land Base. A sampling of this information is provided below.

Number of Farms

Of the farms in existence since the NJDA’s 2004 Farmland Assessment, most (76.6 percent) of Passaic County’s farms were located within West Milford Township. With West Milford Township ranking as the County’s most farm-rich municipality, Ringwood Borough and Bloomingdale Borough are left in second and third place, respectively. Table 5 illustrates the allocation of Passaic County’s farms among its municipalities.

**Table 5:
Number of Farms in 2004**

Municipality	Number of Farms
Bloomingdale Borough	11
Clifton City	2
Haledon Borough	0
Hawthorne Borough	0
Little Falls Township	0
North Haledon Borough	1
Passaic City	0
Paterson City	0
Pompton Lakes Borough	0
Prospect Park Borough	0
Ringwood Borough	18
Totowa Borough	1

Source: 2004 Farmland Assessment of the New Jersey Department of Agriculture

**Table 5 (Continued):
Number of Farms in 2004**

Municipality	Number of Farms
Wanaque Borough	1 ¹
Wayne Township	9
West Milford Township	144
West Paterson Borough	1
County Total	188

Source: 2004 Farmland Assessment of the New Jersey Department of Agriculture

As shown in Table 5, there were 188 individual farms within the County at the time of the 2004 New Jersey Farmland Assessment, which is up 11.7 percent since the 1995 New Jersey Farmland Assessment. However, since 1995 the size of the County’s agricultural land base has shrunk by about 34 percent, which illustrates that the average size of Passaic County’s farms is decreasing considerably. This trend is discussed below in *Average and Median Farm Size*.

¹ The 2004 Farmland Assessment of the New Jersey Department of Agriculture reports one (1) farm within the Borough of Wanaque. The 2004 Farmland Assessment indicates that this land is used for silviculture, but the MOD-IV Tax Assessment Database indicates that it is not assessed as farmland for tax purposes. Therefore, this farm is not reflected in Table 1.

Farms by Size

At the time of the 2002 United States Census of Agriculture, the most frequent farm size was between nine (9) and 49 acres. Indeed, the number of farms sized between nine (9) and 49 acres has grown considerably since 1982². Table 6 provides information on farm sizes in the County.

**Table 6:
Farms by Size**

	Size of Farm (Acres)				Total Number of Farms
	≤ 9	> 9, ≤ 49	> 49, ≤ 179	> 179, ≤ 499	
Passaic County (2002)	24	42	3	1	70
Passaic County (1997)	24	20	8	3	55
Passaic County (1992)	27	20	6	2	55
Passaic County (1987)	24	25	7	1	57
Passaic County (1982)	22	19	7	1	49

Note: United States Census of Agriculture total farm estimates differ from New Jersey Department of Agriculture estimates. The difference is likely do to methodological differences in reporting and calculations. This information is provided as a general indicator only.

Source: United States Census of Agriculture (Reported by SADC)

Average and Median Farm Size

The average and median farm sizes for Passaic County and each of its municipalities are presented in Table 7.

**Table 7:
Average and Median Farm Size**

	Average Size	Median Size
Passaic County (2002)	22	11
Passaic County (1997)	41	11
Passaic County (1992)	33	Unavailable
Passaic County (1987)	24	Unavailable
Passaic County (1982)	31	Unavailable

Source: United States Census of Agriculture (Reported by SADC)

As shown above, the average size of Passaic County farms was 22 acres at the time of the 2002 United States Census of Agriculture. This has decreased by approximately 29

² Because of the fact that the County’s average farm size is decreasing, it is anticipated that most of the farms sized between nine (9) to 49 acres are actually sized near the lower end of the range.

percent since 1982. The median size of all farms in the County was consistent at 11 acres since the previous United States Census of Agriculture in 1997³.

Agricultural Land Area and Use

As previously noted, the County’s agricultural land area comprises approximately 6,993 acres. As shown in Table 8, the current agricultural land area is about 34 percent less than the 1995 agricultural land acreage.

**Table 8:
Historic Agricultural Land Acreage**

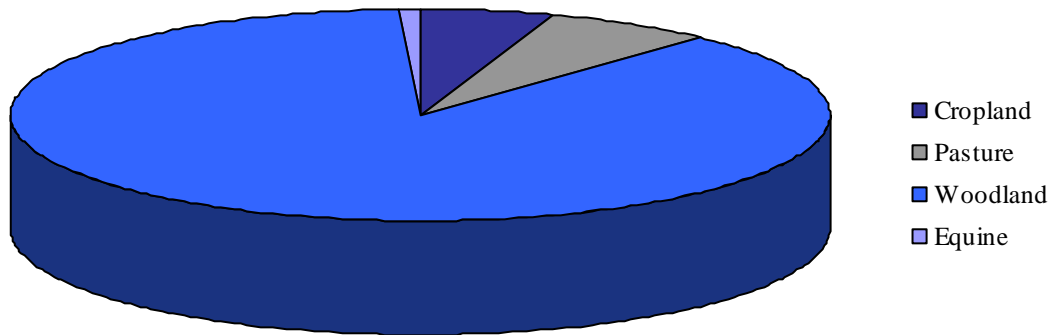
	2007	2004	2003	2002	2001	2000	1995	1990	1983
Acres	6,993	6,967	7,127	7,043	7,562	7,656	10,550	7,564	6,391
Percent Δ	0.4	-2.2	1.2	-6.9	-1.2	-27.4	39.5	18.4	N/A

*Source: 2004-1983 Farmland Assessment of the New Jersey Department of Agriculture
2007 MOD-IV Tax Assessment Database (Accessed on November 1, 2007)*

Though the agricultural land acreage has grown—overall—by about 9.4 percent since 1983, it has decreased by 33.7 percent in just the past twelve years. This trend stresses the need for this Farmland Preservation Plan.

Of the County’s current agricultural land area of 6,992.6 acres: 5.3 percent is used for cropland; 6.7 percent is used for pasture; 87.3 percent is used for woodland; and 0.8 percent is used for purposes related to the husbandry of equine species⁴. The distribution of Passaic County’s agricultural lands among these uses is presented in Chart 1.

**Chart 1:
2004 Agricultural Land Use**



Source: 2004 Farmland Assessment of the New Jersey Department of Agriculture

³ Earlier data is unavailable.

⁴ This information assumes that there has been stability in the proportion of agricultural land use from 2004 to 2007.

Table 9 provides estimates of agricultural land use for each of the County’s sixteen municipalities.

Table 9:
Estimated 2007 Agricultural Land Use, by Municipality

Municipality	Agricultural Land Use (Percent of Municipal Total)				Total	
	Cropland	Pasture	Woodland	Equine	Acres	Percent (County)
Bloomington Borough	0.2	5.3	94.0	0.5	601.0	8.6
Clifton City	100.0	0.0	0.0	0.0	14.4	0.2
Haledon Borough	0.0	0.0	0.0	0.0	0.0	0.0
Hawthorne Borough	0.0	0.0	0.0	0.0	0.0	0.0
Little Falls Township	0.0	0.0	0.0	0.0	0.0	0.0
North Haledon Borough	38.5	0.0	61.5	0.0	13.0	0.2
Passaic City	0.0	0.0	0.0	0.0	0.0	0.0
Paterson City	0.0	0.0	0.0	0.0	0.0	0.0
Pompton Lakes Borough	0.0	0.0	0.0	0.0	0.0	0.0
Prospect Park Borough	0.0	0.0	0.0	0.0	0.0	0.0
Ringwood Borough	2.4	9.6	87.5	0.6	801.5	11.5
Totowa Borough	50.0	0.0	50.0	0.0	18.2	0.3
Wanaque Borough	0.0	0.0	0.0	0.0	0.0	0.0
Wayne Township	45.8	5.4	48.8	0.0	159.4	2.3
West Milford Township	4.2	6.6	88.3	0.9	5,373.0	76.8
West Paterson Borough	0.0	0.0	100.0	0.0	12.1	0.2
County Total	5.3	6.7	87.3	0.8	6,992.6	100.0

Note: Prepared by T&M Associates

Note: These estimates have been made by applying the agricultural land use characteristics reflected in the 2004 Farmland Assessment of the New Jersey Department of Agriculture to the distribution of farmland assessed parcels within the County of Passaic during 2007 (as reflected in Table 1). The result is a historically-based estimate of current activity that is suitable for general information purposes only.

Source: 2004 Farmland Assessment of the New Jersey Department of Agriculture 2007 MOD-IV Tax Assessment Database (Accessed on November 1, 2007)

Passaic County’s Agricultural Industry

Passaic County’s agricultural industry is discussed below within the contexts of market value, production trends, agricultural support services, and agglomeration industries.

Trends in Market Value

The market value of agricultural products is inherently volatile, and affected by a broad range of issues, such as weather, seasonal changes, public policy, supply, and demand. Because of this volatility, the market value of individual agricultural products varies within the short term.

However, the National Agricultural Statistics Service of the United States Department of Agriculture publishes the monthly All Farm Products Index of Prices Received. This index measures the difference in prices received by farmers from the first buyers of all farm products over the average 1990-1992 prices for all farm products. Table 10 presents selected All Farm Products Index of Prices Received values from July 1985 through July 2007.

**Table 10:
All Farm Products Index (Selected Dates)**

	July 2007	July 2005	July 2000	July 1995	July 1990 ⁵	July 1985 ⁶	Total Δ	Percent Δ
Index	142	119	98	102	109	92	50	54.3

Note: Index of 100 = Average Price of All Farm Products in 1990, 1991, and 1992

Source: National Agricultural Statistics Service of the USDA

As shown in Table 10, the All Farm Products Index of Prices Received has increased by 54.3 percent since July 1985. In effect, this means that the price received by farmers for all agricultural goods produced has increased by more than half in the past 22 years.

Indeed, there has been considerable growth in the average price of all farm products. However, it is important to note that this growth has been outpaced by inflation, which was approximately 94 percent during the period from 1985 through 2007.

With regard to the total market value of agricultural products sold, it is noted that, as reported by the USDA, market value has increased by 38.5 percent from \$5,160,300 to \$7,147,433 (in inflation-adjusted, 2008 dollars) during the period from 1992 to 2002. This loosely mimics the trend represented in Table 10. However, information on the total

⁵ Originally reported as 151. Readjusted to match scale of July 1995 through July 2007 based on information provided in the All Farm Products Index of December 29, 1995

⁶ Originally reported as 127. Readjusted to match scale of July 1995 through July 2007 based on information provided in the All Farm Products Index of December 29, 1995

market value of agricultural products sold for additional years is not readily available from the USDA, which makes it impossible to illustrate a longer trend.

This underscores the need for this Farmland Preservation Plan to not only act to preserve as much farmland as possible in the short term, but also to support the increased efficiency and development of the agricultural industry.

Production Trends

Trends in Passaic’s agricultural production are illustrated in tables 11 and 12, which provide information on the County’s ten largest crops and livestock population.

**Table 11:
Passaic County’s Ten Largest Crops⁷, by Acres Covered**

Crop	Acres Occupied (Approximate)				
	1984	1990	2000	2004	Percent Δ
Other Hay (Not Alfalfa)	167	74	88	49	-70.7
Trees and Shrubs	38	43	56	51	34.5
Christmas Trees	45	35	46	36	-20.6
Mixed Vegetable Crops	32	21	48	47	48.9
Sweet Corn	19	16	29	26	36.8
Lettuce	18	34	7	5	-71.4
Tomatoes	12	16	13	18	55.2
Apples	35	11	5	5	-85.8
Bedding Crops	11	8	10	18	60.0
Pond Fish	5	24	1	5	4.6
Percent of Agricultural Land Occupied	6.0	3.7	3.9	3.7	-37.5

Source: 1984, 1990, 2000, and 2004 Farmland Assessments of the New Jersey Department of Agriculture

As shown above, the ten largest crops in Passaic County have historically been: Non-Alfalfa Hay; Tees and Shrubs; Christmas Trees; Mixed Vegetables; Sweet Corn; Lettuce; Tomatoes; Apples; Bedding Crops; and Pond Fish. In 2004, these crops occupied a total of just 3.7 percent of all agricultural lands, a 37.5 percent decrease over 1984 when they occupied 6.0 percent.

The low percentage of Passaic County’s ten largest crops is result of the fact that the single largest agricultural product in the County is its timber, the output of which is measured in the footage of board length and cords⁸. During the each of the years in the historic period shown in Table 11, the County’s farmers produced an average of 202,759

⁷ Based on average acres covered; includes fish pond areas; excludes woodlands

⁸ One cord is the equivalent of 128 cubic feet of wood.

feet of timber and 784 cords of pulp- and fuel-wood. As shown in Chart 1, woodlands currently occupy about 87 percent of the County’s agricultural lands.

With regard to animal husbandry, it is noted that the head of livestock kept within the County is generally increasing. This generally appears to be the result of a growing number of chickens in the County, which may be a manifestation of smaller average farm sizes⁹. The County’s growing livestock population is illustrated in Table 12.

**Table 12:
Head of Livestock Kept¹⁰**

1984	1990	2000	2004	Raw Δ	Percent Δ
1,587	1,766	2,675	2,205	618	38.9

Source: 1984, 1990, 2000, and 2004 Farmland Assessments of the New Jersey Department of Agriculture

Agglomeration Industries

Agglomeration industries are those industries that work synergistically with one another. They tend to cluster for reason of efficiency. Some examples that fit within the context of farmland preservation are equipment and feed dealers, as well as food processing facilities, which fit into the broader categories of agricultural support services and related industries.

Agricultural Support Services

The viability of Passaic County’s agricultural industry is attested to by the presence of a significant number of agricultural support services within the market area, which includes Passaic County and surrounding areas. Table 13 provides a partial listing of these businesses.

**Table 13:
Agricultural Support Services**

Name	Type	Location
High Vista Farm	Equine Boarding/Supply	929 Warwick Turnpike Hewitt, NJ 07421
Farm Service Agency	Government Office	1480 Union Valley Rd West Milford, NJ 07480

Note: A directory of additional providers of agricultural support services is available from the Rutgers Cooperative Extension at: <http://salem.rutgers.edu/greenpages/service.pdf>

Note: Inclusion in Table 13 shall not be construed as an endorsement by Passaic County. Additional agricultural support services may exist. Passaic County assumes no liability for the completeness and accuracy of this information.

Source: Internet searches

⁹ Reflected in Table 7

¹⁰ Excludes bee hives

**Table 13 (Continued):
Agricultural Support Services**

Name	Type	Location
Indian Hills Farm	Equine Boarding/Supplies	277 Germantown Rd West Milford, NJ 07480
Pequannock Feed	Feed Supply	85 Marshall Hill Rd West Milford, NJ 07480
San's Inc.	Feed Supply	1170 Greenwood Lake Turnpike Ringwood, NJ 07456
Warwick Valley Feed & Grain	Feed Supply	29 West St Warwick, NY 10990
Farmside Supplies, Inc.	Farm Supply	15 Loomis Ave Sussex, NJ 07461
Country Side Feed & Supply	Feed and Farm Supply	17 US Highway 206 Augusta, NJ 07822
Country Feed & Grain	Feed Supply	400 Union Ave., Suite 4 Haskell, NJ 07420
Mike's Feed Farm	Feed Supply	90 Hamburg Turnpike Riverdale, NJ 07457
Mike's Feed Farm	Feed Supply	140 Furler St Totowa, NJ 07512
Ralph's Feed	Feed Supply	52 8th Ave Paterson, NJ 07524
Amato's Grain & Feed Co.	Feed Supply	18 River Road, Suite 2 Fair Lawn, NJ 07410
Westwood Seed & Feed Co.	Feed Supply	515 Broadway Westwood, NJ 07675
Northern Valley Feed & Turf	Feed Supply	207.5 Closter Dock Rd Closter, NJ 07624
Animal Feeds & Needs	Feed Supply	115 Locust Ave Wallington, NJ 07057
Agway Wadeson Home Center	Farm Supply	60 Forester Avenue Warwick, NY 10990
Agway, Inc. Farm Home & Garden	Farm Supply	176 Ridgedale Ave Morristown, NJ 07960
Fairfield Tractor Co.	Tractor Supply	482 Horseneck Rd Fairfield, NJ 07004

Note: A directory of additional providers of agricultural support services is available from the Rutgers Cooperative Extension at: <http://salem.rutgers.edu/greenpages/service.pdf>

Note: Inclusion in Table 13 shall not be construed as an endorsement by Passaic County. Additional agricultural support services may exist. Passaic County assumes no liability for the completeness and accuracy of this information.

Source: Internet searches

Indeed, there are many agricultural support services within the market area. Feedback from Passaic County's agricultural operators indicates that the Internet also provides a means to access vendors throughout the United States and Canada.

In addition to the above-listed agricultural support services, it is important to note that agricultural support services may also include support services that are geared to the end-stage of the production process, such as farmers' markets, processing and distribution facilities, and specialized marketing consultants.

Consequently, this Farmland Preservation Plan examines the availability and need for such facilities and finds, as noted in *Economic Development* (below), that there is a need to increase the number of farmers' markets within the County and other agricultural support services. It also finds that there is also a need to increase cooperation and ties between the agricultural industry and existing services, especially processing and distribution facilities.

Additionally, there is a need for, and the County's agricultural industry would benefit from, the services of a specialized marketing consultant. These services would enable the agricultural community to better-enable and support its access to the regional market, which focuses on Passaic and the surrounding counties. This issue is further discussed in *Economic Development* (below).

Related Industries¹¹

Passaic County's agricultural industry is supported by the presence of related tourism-, and consumer-oriented industries, both within the County and the greater region. Just one of many examples is Pine Ridge Equestrian Center, which is located at 40 Stephens Road in West Milford and offers horseback riding activities to the public. Farm's View Road Stand, which sells local produce from its retail operation at 945 Black Oak Ridge Road in Wayne, is another example. The presence of such establishments is an asset to Passaic County and surrounding communities since they popularize agriculture and foster an understanding of—as well as a respect for—the industry as a whole.

There are also several industrial operations that are related to the agricultural industry. One example is the Bay State Milling Company, which has an industrial grain milling operation in Clifton. This mill produces wheat flours, which are sold throughout the Mid-Atlantic and New England regions. In addition, there are also other industrial food operations, including specialized dairies that prepare ethnic cheeses and other products in the southern section of the County.

The aforementioned examples provide truth to the notion that agriculture-related industries are an important part of the County's economy. This importance confirmed by the 2002 US Census of Agriculture, which indicates that in the food manufacturing sector

¹¹ Specific business names are provided as examples for informational purposes only. Mentioning of business names shall not be construed as an endorsement of the business by the County of Passaic.

alone, there are a total of 207 establishments in Passaic County. These establishments report a total of 7,843 employees and nearly \$1.4 billion (\$1,374,328,000) in sales, shipments, receipts, and revenues. Reported annual payroll for the 7,843 employees totals nearly \$2.8 million (\$277,536,000).

Land Use Planning Context

The following section discusses the land use planning context of farmland preservation within the County of Passaic.

State Development and Redevelopment Plan (SDRP)

On March 1, 2001, the State Planning Commission adopted the new State Development and Redevelopment Plan (State Plan). The State Plan establishes a statewide planning framework that is designed to support the preservation and promotion of New Jersey's agricultural industry, incorporate innovative planning techniques to preserve farmland, and to conserve natural resources, as well as support rural farming communities. The State Plan acknowledges that agriculture contributes to over \$1.2 billion (\$1,200,000,000) to New Jersey's economy and directly creates over 20,000 jobs, in addition to 16,000 jobs in related industries. As farming is such a significant economic engine, and because much of the 1,049,351 acres of farmland in the State is subject to development pressures, the State Plan has set forth 23 separate policies that provide for best management practices for the planning and economic viability of agricultural resource protection, natural resources protection, and the support of human services.

The State Plan Policy Map is the underlying land use-planning and management framework that directs funding, infrastructure improvements, and preservation for programs throughout New Jersey. The policy map sets forth growth areas and conservation areas through planning areas, centers, and environs. The current State Plan defines these areas based on infrastructure and natural features, which do not necessarily correspond with municipal or county boundaries as follows:

- Areas for Growth: Metropolitan Planning Area (PA1), Suburban Planning Area (PA2) and Designated Centers in any planning area;
- Areas for Limited Growth: Fringe Planning Area (PA3), Rural Planning Area (PA4), and Environmentally Sensitive Planning Area (PA5). In these planning areas, the intent is the promotion of conservation and limited growth—environmental constraints affect development and preservation is encouraged in large contiguous tracts; and
- Areas for Conservation: Fringe Planning Area (PA3), Rural Planning Area (PA4), and Environmentally Sensitive Planning Area (PA5).

Passaic County is shaped like an hourglass, and the northern and southern halves are strictly different from each other. In the northern half of Passaic County, the State Plan Policy Map recognizes the rural fabric of the County with the majority of the area being located in the Environmentally Sensitive Planning Area (PA5), a portion in the Suburban Planning Area (PA2), and the remainder in designated State Parks. In this area of Passaic County, the State Plan has designated Bloomingdale and Wanaque as Town Centers. In the southern half of Passaic County, the State Plan Policy Map recognizes the dense development patterns and concentrated population, and has designated this area as Metropolitan Planning Area (PA1), with only a small portion in the Environmentally Sensitive Planning Area (PA5). The State Plan has designated Paterson as an Urban

Center and the municipalities of Haledon and Totowa as Town Centers. There are currently no endorsed plans in Passaic County. Appendix H provides an overview of the State Plan as it relates to Passaic County. Appendix I provides an overview of the of the Cross Acceptance III map of the County, which was created as part of a process of municipal- and county-level validation of the State Plan.

Agriculture practices are supported in the policy objectives of the Metropolitan Planning Area (PA1) and Suburban Planning Area (PA2) of the State Plan. These objectives include the following:

1. Metropolitan Planning Area (PA1)
 - Use development and redevelopment opportunities wherever appropriate and economically feasible to meet the needs of the agricultural industry for intensive agricultural production, packaging and processing, value-added operations, marketing, exporting and other shipping
 - Provide opportunities for farms, greenhouses, farmers markets, and community gardens
2. Suburban Planning Area (PA2)
 - Guide development to ensure the continued viability of agriculture and the retention of productive farmland in strategically located agricultural areas and in other adjacent Planning Areas
 - Actively promote more intensive, new-crop agricultural enterprises and meet the needs of agricultural industry for intensive packaging, processing, value-added operations, marketing, exporting and other shipping through development and redevelopment

The County's Agricultural Development Areas (ADA) that are located in PA1 include those in Clifton, North Haledon, Totowa, and Wayne. Bloomingdale includes ADAs that are located in the Suburban Planning Area (PA2).

In the Environmentally Sensitive Planning Area (PA5), the State Plan encourages the protection of environmental resources through the preservation of large contiguous areas of land. The State Plan notes that these environmental resources are "highly vulnerable to damage of many sorts from new development in the Environs . . . [and are] irreplaceable resources which are vital for the preservation of ecological integrity of New Jersey's natural resources." Agriculture is not seen as a conflicting use in the Environmentally Sensitive Planning Area (PA5) as the State Plan encourages the preservation of farmland while directing new growth and development into existing centers. The State Plan agricultural policy for the Environmentally Sensitive Planning Area (PA5) is as follows:

- Promote agricultural practices that prevent or minimize conflicts with sensitive environmental resources.
- Guide development to ensure the viability of agriculture and the retention of farmland in agricultural areas.
- Encourage farmland retention and minimize conflicts between agricultural practices and the location of Centers.

- Ensure the availability of adequate water resources and large, contiguous tracts of land with minimal land use conflicts.
- Actively promote more intensive, new-crop agricultural enterprises and meet the needs of the agricultural industry for intensive packaging, processing, value-added operations, marketing, exporting and other shipping through development and redevelopment.

ADAs in the Environmentally Sensitive Planning Area (PA5) are found in Ringwood and West Milford.

The Passaic County Farmland Preservation Plan will advance the State Plan’s objectives not only for encouraging the economic viability of agricultural practices, but also by providing a framework in which farmland can be prioritized and preserved so that overall rich natural resource integrity of the County is protected. Therefore, the Passaic County Farmland Preservation Plan is consistent with the goals and objectives of the 2001 State Plan.

Highlands Special Resource Area

The State Plan defines Special Resource Areas as an “... area or region with unique characteristics or resources of statewide importance which are essential to the sustained well being and function of its own region and other regions or systems—environmental, economic, and social—and to the quality of life for future generations.” A significant portion of the Highlands Special Resource Area is located within Passaic County.

Consistent with the intent of the Highlands Special Resource Area, Governor James E. McGreevy issued Executive Order No. 70 in 2003, thereby forming the Highlands Task Force and taking the first step towards implementing the State Plan goals. The Task Force assisted the State Legislature in making recommendations for the legislation that created the Highlands Water Protection and Planning Act in 2004. The fundamental goal of this Act is to protect, restore and enhance water quality and water quantity in the State. The Act seeks to promote agricultural viability, discourage conversion of agricultural lands to urban development, establish incentives for landowners to participate in farmland preservation activities, and promote the Highlands regional transfer of development rights (TDR) program.

The New Jersey Highland Region consists of 859,358 acres comprised of two areas: the Preservation Area and the Planning Area. A total of 83,853 acres of the Highlands Region is located in Passaic County, which comprise over two-thirds of the County acreage. The Passaic County Highland Region municipalities include Bloomingdale, Pompton Lakes, Ringwood, Wanaque, and West Milford. The majority of the Highlands Region in Passaic County is located in the Preservation Area. The Act established immediate protections for those areas of these municipalities that are located in the Preservation Area. Participation for portions of the municipalities located in the Planning

Area is voluntary. The majority of the affected areas of Passaic County are located in the Preservation Area. These areas are mapped in Appendix J.

The Highlands Act sets forth the following goals for the Preservation Area and the Planning Area:

1. Preservation Area Goals:

- Protect, restore, and enhance water quality and quantity;
- Preserve extensive and contiguous areas of land in its natural state;
- Protect the resources of the Highlands (contiguous forests, wetlands, stream corridors, steep slopes, scenic resources, and critical habitat for fauna and flora);
- Preserve farmland and historic sites and resources;
- Preserve outdoor recreation, hunting and fishing, on publicly owned land;
- Promote conservation of water resources;
- Promote brownfield remediation and redevelopment;
- Promote compatible agricultural, horticultural, recreational, and cultural uses; and
- Prohibit or limit to the maximum extent possible construction or development which is incompatible with preservation of this unique area.

2. Planning Area Goals:

- Protect, restore, and enhance water quality and quantity;
- Preserve environmentally sensitive, recreational, and conservation lands;
- Protect and maintain the essential character of the Highlands environment;
- Preserve farmland and historic sites and resources;
- Promote the continuation and expansion of agricultural, horticultural, recreational, and cultural uses;
- Preserve outdoor recreation, hunting and fishing, on publicly owned land;
- Promote conservation of water resources;
- Promote brownfield remediation and redevelopment;
- Encourage appropriate patterns of compatible residential, commercial, and industrial development, redevelopment, and economic growth, in or adjacent to areas already utilized for such purposes and discourage piecemeal, scattered, and inappropriate development; and
- Promote a sound and balanced transportation system.

The Act establishes the New Jersey Highlands Council which requires that a Regional Master Plan be prepared and adopted so that the preservation goals of the Act can be achieved. A draft Regional Master Plan was submitted for public comment on November 30, 2006 with the public comment ending on May 11, 2007. A final draft was released on November 19, 2007 and is slated for adoption in 2008.

The draft Highlands Regional Master Plan indicates that “[a]griculture is an important part of the essential character of the Highlands Region’s culture, landscape and economy. It provides important economic benefits to the Highlands Region in the form of agricultural production and agro tourism, provides food to area residents using less

energy than would be required to import produce from other regions and helps maintain the Highland's rural character.”

With regard to specific policies of the Highlands Regional Master Plan, it is noted that Policy 3E3 requires conforming municipalities to incorporate right-to-farm provisions into their master plans and development ordinances. In addition, Policy 3A11 and 3A12 require the preparation of a Farm Conservation Plan and Resource Management System Plan for certain agricultural operations in the Preservation Area, which is currently regulated by NJAC 2:92-1.1 et al.

County Master Plan

The development goals and policies found in the County Master Plan reflect the goals of the farmland preservation plan, and call for a balance between housing and jobs in order to concentrate development with existing infrastructure. This pattern of development will lead to the protection and conservation of what the Master Plan identifies as environmentally sensitive lands, including floodplains, watershed areas, upland forests and areas of excessive slope.

In terms of leading infrastructure and growth management, the County Master Plan indicates that sewer service is to be limited to new developments, as well as developments that are inadequately serviced by septic systems. There are no plans to extend the current delineation of the County's sewer service areas.

Additionally, the County Master Plan indicates that development should be limited to areas with sufficient infrastructure and used as a means for urban renewal in blighted residential areas or older sections of Passaic County. In more environmentally sensitive areas in and around the Highlands Region, the plan calls for low densities that can be served by septic or the existing sewer and water service.

With regard to the potential of growth inducing transportation improvements, the County Master Plan states that its goal is to: “[e]nhance a pattern of sound land use, [which reinforces] ... the health and vitality of commercial and industrial centers, while maintaining the character of less-developed areas; [focus] ... economic development in those areas [that are] prepared to accommodate it; and[,] ... [improve] the condition of the environment, particularly the quality of the air.”

The County Master Plan also places a significant amount of emphasis on improving mass transit, particularly bus service to the large suburban areas. Improvements to rail transit are also called for in order to provide links for the new bus service and to serve the urban centers of Passaic County. The Plan clearly states that new roads shall only be built where “socially, economically, and environmentally feasible.”

In addition to the above, it is noted that the County adopted an Open Space and Recreation Master Plan in 2001, which includes as one of its main objectives providing

funding and support to the Passaic County Agriculture Development Board for the preservation of farmland in the County. The open space plan features a land acquisition component that identifies specific farms as potential open space acquisitions in the County.

County Development Regulations

The County subdivision resolution regulating development was adopted in 1970 and has been amended from time to time through 2005. The County site plan resolution regulating development was adopted in 1988 and has been amended from time through 2005. The County regulations have no specific provisions relating to agriculture.

Current Land Use

The most recent digital geographic data on land cover from the New Jersey Office of Smart Growth provides valuable insight into the current land use patterns of the County. This information indicates that the most predominant land use within the County is Forest, which represents 47.3 percent of the County’s total land surface area. Forest usage is followed by Residential and Water, which represent 23.7 and 7.1 percent of the total land surface area, respectively. Table 14 provides complete details of the current use of lands in Passaic County.

**Table 14:
Current Land Use**

	Acres	Percent
Forest	59,558.9	47.3
Wetlands	8,704.5	6.9
Agriculture	871.0	0.7
Brush/Shrubland	824.4	0.7
Water (Natural and Artificial)	8,957.8	7.1
Infrastructure	2,006.5	1.6
Other (Natural)¹²	422.7	0.3
Industrial and Commercial	8,866.7	7.0
Other (Artificial)¹³	3,535.4	2.8
Recreational	2,285.3	1.8
Residential	29,875.2	23.7
Total	125,908.4	100.0

Source: New Jersey Office of Smart Growth

¹² This category includes: bare exposed rock; rock slides; old fields with less than 25 percent brush/shrub coverage; and undifferentiated barren lands.

¹³ This category includes: unclassified altered lands; cemeteries; extractive mining; military installations; mixed urban/developed land; unclassified urban/developed lands; stadiums; theaters; cultural centers; zoos; and transitional areas.

The County’s land use patterns are mapped in Appendix C. This map reflects the distinct difference in land use patterns between the rural northern portion and urbanized southern portions of the County.

Land Use Trends

An indication of recent land use trends is obtainable when the aforementioned land use data is paired with information from 1995. This pairing indicates that the County’s land use patterns have remained fairly consistent since the mid-part of the 1990s. The land use category with the greatest relative change between 1995 and 2002 was Residential, which changed by just 0.8 percent. Table 15 facilitates the analysis of Passaic County’s land use trends.

**Table 15:
Land Use Change, 1995 through 2002**

	1995		2002		1995 – 2002
	Acres	Percent	Acres	Percent	Relative Δ (Percent) ¹⁴
Forest	60,020.2	47.7	59,558.9	47.3	-0.4
Wetlands	8,837.1	7.0	8,704.5	6.9	-0.1
Agriculture	870.5	0.7	871.0	0.7	0.0
Brush/Shrubland	1,353.2	1.1	824.4	0.7	-0.4
Water (Natural and Artificial)	8,962.2	7.1	8,957.8	7.1	0.0
Infrastructure	1,923.9	1.5	2,006.5	1.6	0.1
Other (Natural)¹⁵	705.5	0.6	422.7	0.3	-0.3
Industrial and Commercial	8,758.8	7.0	8,866.7	7.0	0.0
Other (Artificial)¹⁶	3,456.5	2.7	3,535.4	2.8	0.1
Recreational	2,216.6	1.8	2,285.3	1.8	0.0
Residential	28,803.7	22.9	29,875.2	23.7	0.8
Total	125,908.4	100.0	125,908.4	100.0	N/A

Source: New Jersey Office of Smart Growth

¹⁴ Relative change in percent is defined as difference between the reported percentages in 1995 and 2002.
¹⁵ This category includes: bare exposed rock; rock slides; old fields with less than 25 percent brush/shrub coverage; and undifferentiated barren lands.
¹⁶ This category includes: unclassified altered lands; cemeteries; extractive mining; military installations; mixed urban/developed land; unclassified urban/developed lands; stadiums; theaters; cultural centers; zoos; and transitional areas.

The stability in Passaic County’s land use patterns is also confirmed by more-generalized landscape change information from the Grant F. Walton Center for Remote Sensing and Spatial Analysis at Rutgers University. This information is presented in Table 16.

**Table 16:
Landscape Change, 1984 through 2001**

	Percentage of County Lands Occupied			
	1984	1995	2001	Range
Developed Lands	34.8	36.8	37.7	3.0
Cultivated Lands/Grasslands	2.2	2.2	2.0	0.2
Upland Forests	48.9	48.0	47.2	1.6
Bare Lands	0.6	0.6	0.6	0.1
Unconsolidated Shore	0.3	0.4	0.4	0.1
Costal Wetlands	0.0	0.0	0.0	0.0
Inland Wetlands	7.9	6.2	6.2	1.7
Water	5.5	5.8	5.8	0.4

Note: Normal rounding errors may be present.

Source: Rutgers University, Center for Remote Sensing and Spatial Analysis

As shown in Table 16, although developed lands have increased, the County of Passaic’s land use patterns have not dramatically changed since 1984. In fact, no single land use category had fluctuated more than three percentage points, and the average fluctuation of all categories was just nine-tenths (0.9) of a percentage point.

Sewer Service Areas

The County’s sewer service areas comprise a total of approximately 46,401 acres and are located in all of the County’s municipalities. Of the farmland acres, approximately 303, or about four percent, are located within the County’s various sewer service areas.

Table 17 provides information on the area of each municipality that is located within a sewer service area.

**Table 17:
Location of Municipalities within Sewer Service Areas (SSA)**

Municipality	Total Acres	Acres in SSA	Percentage of Acres in SSA
Bloomington Borough	5,899.2	1,696.8	28.8
Clifton City	7,293.3	7,150.0	98.0
Haledon Borough	760.9	705.3	92.7
Hawthorne Borough	2,175.7	2,152.9	99.0
Little Falls Township	1,802.7	1,689.6	93.7
North Haledon Borough	2,252.4	1,868.2	82.9

Source: NJDEP and NJDEP

**Table 17 (Continued):
Location of Municipalities within Sewer Service Areas (SSA)**

Municipality	Total Acres	Acres in SSA	Percentage of Acres in SSA
Passaic City	2,059.8	1,981.5	96.2
Paterson City	5,547.7	5,313.5	95.8
Pompton Lakes Borough	2,034.5	1,886.2	92.7
Prospect Park Borough	298.3	293.2	98.3
Ringwood Borough	17,998.6	169.4	0.9
Totowa Borough	2,628.2	2,565.5	97.6
Wanaque Borough	5,894.3	1,158.5	19.7
Wayne Township	16,084.2	15,144.7	94.2
West Milford Township	51,206.5	1,258.4	2.5
West Paterson Borough	1,972.1	1,367.5	69.3
County Total	125,908.4	46,401.4	36.9

Source: NJDEP and NJDEP

Table 18, which shows the percentage of each municipality’s farmland that is located within one of the County’s various sewer service areas, supplements the information contained in Table 18.

**Table 18:
Location of Farmland in Sewer Service Areas (SSA)**

Municipality	Total Farmland Acres	Farmland Acres in SSA	Percentage of Farmland Acres in SSA
Bloomington Borough	601.0	0.0	0.0
Clifton City	14.4	14.4	100.0
Haledon Borough	0.0	0.0	0.0
Hawthorne Borough	0.0	0.0	0.0
Little Falls Township	0.0	0.0	0.0
North Haledon Borough	13.0	13.0	100.0
Passaic City	0.0	0.0	0.0
Paterson City	0.0	0.0	0.0
Pompton Lakes Borough	0.0	0.0	0.0
Prospect Park Borough	0.0	0.0	0.0
Ringwood Borough	801.5	0.0	0.0
Totowa Borough	18.2	18.2	100.0
Wanaque Borough	0.0	0.0	0.0
Wayne Township	159.4	159.4	100.0
West Milford Township	5,373.0	86.3	1.6
West Paterson Borough	12.1	12.1	100.0
County Total	6,992.6	303.4	4.3

Source: GIS Analysis of MOD-IV Tax Assessment Database (Accessed on Nov. 1, 2007) and NJDEP

In addition to the above, it is noted that the Highlands Water Protection and Planning Act (PL 2004, c. 120) restricts the extension of Sewer Service Areas into the Preservation Area (see page 17 for additional information).

Appendix D provides an illustration of the extent of Passaic County's Sewer Service Areas.

Public Water Supply Service Areas

The public water supply service areas within the County include an extensive area covering the lower southerly portion of the County. This is the urbanized area of the County that corresponds to the Metropolitan Planning Area (PA1) of the State Plan. The upper northerly portion of the County is rural and corresponds to the Environmentally Sensitive Planning Area (PA5) of the State Plan. The areas served by public water supply are very limited in the rural portion of the County.

The sources of public water supply in the County include surface water bodies and wells. The Passaic Valley Water Commission withdraws water from the Passaic River at Little Falls and maintains several reservoirs in the County. These water sources are of critical importance to the County and greater region. This is exemplified in the fact that County's vast watershed lands and reservoirs, which are predominantly located in West Milford Township and Ringwood Borough, serve more than four million (4,000,000) northern New Jersey residents.

Municipal Master Plans and Zoning

The Master Plan documents and Zoning ordinances of the municipalities in which there is significant potential for ADA preservation efforts were reviewed for this plan. The municipalities that were reviewed include the Borough of Bloomingdale, the Borough of Ringwood, the Township of Wayne, and the Township of West Milford. As of the drafting of this document, these municipalities do not have adopted Farmland Preservation Master Plan Elements. Only the Township of West Milford specifically provides for an objective in its master plan to promote farmland preservation. However, the Township of Wayne is actively pursuing County and State Programs to preserve two working farms within the municipality, and the preservation of these farms in their entirety has been—and continues to be—a high land use priority for the Township.

Master Plans

In general, the municipalities include statements in their master plans to protect and conserve open space for the purpose of preserving environmentally sensitive lands. This issue is discussed below, within the context of the Borough of Bloomingdale, the Borough of Ringwood, the Township of Wayne, and the Township of West Milford.

Borough of Bloomingdale: The 1996 Master Plan's overall goal is to present strategies that preserve and enhance the Borough of Bloomingdale's existing quality of life. To that end, the Borough has stated goals and objectives that support a balanced growth approach to economic development and preservation. Relevant goals that support the quality of life included in the Master Plan are:

- *Protect and preserve existing residential areas;*
- *Creation of stable neighborhood environments while maintaining a balanced mixed of land uses;*
- *Enhance the appearance of new and existing commercial areas;*
- *Acquire and retain passive open space as development occurs; and*
- *Preserve and protect natural features including lakes, streams, woods, wetlands, floodplains, open spaces, and steep slopes.*

The Master Plan provides for a Planning Area approach where development and preservation activities can be directed. The Borough encompasses a total area of 8.8 square miles or 5,894.4 acres. The Planning Areas are based on land use character, circulation characteristics, topography, and other natural features. The plan acknowledges that there are vast amounts of land that are currently encumbered by the State and other environmentally sensitive lands. This includes the 4,982 acre State-owned Norvin Green State Forest located in the northern section of the Borough. Planning Area II, where many of the ADAs are located, is proposed as a "Conservation/Limited Development" area. This planning area encompasses a total of approximately 3,305.7 acres or about 56.1 percent of the municipality. The Master Plan notes that this area is 67 percent publicly owned and the remaining 33 percent consists of the residential lake communities of Kampfe Lake, Glenwild Lake, and Lake Iosco, as well as small commercial areas. The land area not in State-ownership and not located around the lake residential communities is zoned primarily R-130, which provides for a minimum lot size of three (3) acres. The Master Plan acknowledges that private land owners located within the R-130 zone district are limited by the minimum lot size, as well as the environmental constraints. Therefore, the Master Plan proposed that a cluster option be investigated to reduce the minimum lot size from three (3) acres to one (1) acre, with the remainder dedicated for open space. Currently, the cluster option is provided only in the areas zoned as the R-G-Cluster Garden Apartment and Open Space Zone, which is not located in the Master Plan's Planning Area II delineated areas.

The Master Plan references the Borough's Environmental Resource Inventory, which was prepared in 1989. As described in the Master Plan, the concept of natural resource planning is to define:

*Areas worthy of preservation as open space include (but are not necessarily limited to): wetlands, floodplains, aquifer recharge areas, areas of steep slope, potential dam sites or impoundments, **exceptional agriculture land** [emphasis added], unique and high-grade woodlands and wildlife habitats, unique landforms, rare ecological associations, vital watersheds, and historic sites (page 110).*

It is important to note that the Land Use Map included in the Master Plan of the Borough of Bloomingdale does not depict agricultural land uses.

Borough of Ringwood: The 1998 Master Plan Reexamination Report reaffirmed that the 1991 Master Plan remained a valid policy document in the Borough of Ringwood. The Reexamination Report modified the goals and objectives, which specifies the Borough's recognition of the preservation of natural resources as an important planning issue. The goals and objectives include:

- *To encourage a desirable visual environment by protecting ridgelines, natural vistas and natural areas and other natural amenities;*
- *To allow limited use of flag lots as a mechanism to lessen land disturbance;*
- *To protect areas of groundwater recharge as well as the quality of all subsurface water in Ringwood in recognition of the Borough's designation as a sole source aquifer community; and*
- *To recognize and protect the watershed lands and the drainage basin of the reservoir lands in the Borough as an important regional source of potable water.*

Over two-thirds of the Borough is comprised of State and County parks, and water supply lands. This includes Ringwood State Park, the Wanaque and Monksville reservoirs, Norvin Green State Park, and the New Jersey Botanical Gardens. Sterling Forest is also located within the Borough. The remaining developable land is environmentally constrained due to steep slopes and soil limitations. The Borough's overall land use pattern is to provide for land uses that do not negatively impact the environmentally sensitive characteristics of the Borough.

The 1991 Master Plan notes that there is a considerable amount of farm-qualified land in the Borough; however, only 13 acres were identified to be actively used for agricultural purposes. The Plan identified the qualified farms as the Petzold Farm on Burnt Meadow Road, and a horse farm on West Brook Road.

In terms of innovative planning strategies to provide for environmental and agricultural conservation, the 1991 Master Plan also notes that the concept of clustering for the purpose of preserving open space was discontinued in the 1980s, and that there are no additional cluster of open space provisions contemplated for the 1991 Master Plan.

Township of Wayne: The Township of Wayne adopted its Master Plan in 1994, and indicated that its primary overall goal was to "preserve Wayne Township's existing quality of life." This overall goal is explained as follows: "Quality of life has been a consistent concern in Wayne, whether relation to transportation issues, land use issues, or environmental issues." The 2003 Master Plan Reexamination Report affirmed the overall planning objectives of the Township.

Historically, Wayne has been a farming community. However, since the 1990s significant parcels of land in the Township were converted from farming and other agricultural uses to residential and commercial development. Officials in the Township of Wayne, have

been sensitive to preserving open space, and now, because of diminishing farmland, are focusing on promoting farmland preservation. The reasons officials cite are increased monetary value of Wayne's land for tax rates, and that existing estate tax laws prevent heirs from retaining farmland they inherited.

During the preparation of the State Development and Redevelopment Plan, Wayne's Mayor expressed the Township's desire to preserve the "Kuehm" farm property, the largest remaining produce farm in the Township as well as in Passaic County. In addition, the Wayne Environmental Commission strongly supported, and continues to support, this effort. The Kuehm farm draws irrigation from the Pompton River and has had this continued right since the 1930s. The farm is located in an ideal location close to Route 23 and alongside Route 202 (Black Oak Ridge Road) making it readily accessible as an active farm and produce seller. Although the State Development and Redevelopment Plan designates the Township of Wayne in the Metropolitan Planning Area (PA1), the Township recognizes that the farm contains environmentally sensitive features that should be preserved as open space and for groundwater recharge.

The 2003 Master Plan Reexamination Report recommended the following regarding the "Kuehm" farm property:

The zoning status of the Kuehm farm needs to be assessed as the Township proceeds to prepare a new zoning ordinance. The tract is presently zoned for RB residential development. The Township, however, is supportive of the County's efforts to purchase the development rights to the farm stemming from the funding available in the state Farmland Protection Act. This tract is the larger of only two working farms left in the Township and is located at a busy intersection (Black Oak Road and Pompton Crossroad). Portions of the tract are also impacted by the flood plain associated with the Pompton River that flows past the westerly property line of the property. The preservation of the Kuehm farm would serve to protect the Township's past legacy as a farming community and preserve open space.

...

The Kuehm tract should be preserved as permanent open space as a working farm utilizing State funds set aside to preserve agricultural lands.

In 2007 Passaic County bought approximately fifteen (15) acres of the Kuehm farm. The preservation of the entire Kuehm Farm has been—and continues to be—a high land use priority for the Township. The State is currently considering buying the development rights for a 30 acre farm adjacent to the Kuehm farm. This land owner is willing to undertake this process, and there is continued support from area residents to preserve this farm. In addition, the Passaic County Agriculture Development Board has consistently supported the preservation of both of these parcels.

Both parcels are currently being actively farmed. Their permanent preservation would greatly enhance Passaic County's ability to protect and provide for an agricultural industry in the County that would serve the needs of its residents for agricultural goods

and services. Both farms are located within the State Plan Policy Map Metropolitan Planning Area (PA1). Support for contained preservation of these areas is consistent with the State Development and Redevelopment Plan's preservation goals.

Township of West Milford: The Township of West Milford's 2003 Master Plan Reexamination Report reaffirmed the 1987 Master Plan's goals and objectives, and acknowledged the revised goals proposed in the 1993 Master Plan Reexamination Report and the 1999 Master Plan Reexamination Report. The 1987 Master Plan's goal of preserving the semi-rural character of the Township provided a specific objective related to farmland preservation as follows:

- I. *To preserve the semi-rural character of the Township*
 - a. *Objectives:*
 - i. *Acquisition of lands of scenic, cultural or historic value*
 - ii. *Encourage development to be aesthetically pleasing and energy efficient*
 - iii. *Preserve and encourage open space retention of sensitive lands*
 - iv. *Promote farmland preservation through appropriate zoning*

According to the 1987 Master Plan, West Milford is the second largest municipality in northern New Jersey and is located at the top of the northern Highlands. The City of Newark receives over half of its water supply from the Pequannock Watershed located within the Township. The Pequannock Watershed in West Milford is 35,000 acres and consists of five separate reservoirs. The existing land use map prepared for the 1987 Master Plan did not include agriculture land uses. However, the 1987 plan did provide recognition of the 1980 State Development Guide Plan which delineated the majority of the Township as a conservation area and the southern area nearest to High Crest Lake and Lake Larriwien as a growth area¹⁷. The 1987 plan also included a Rutgers Planning Capacity Study related to the capacity of water and sewer and projected population growth and appropriate lot size recommendations for the Township's Land Use Element. The 1993 Master Plan Reexamination Report made reference to the USDA Forest Service 1992 New York-New Jersey Highlands Regional Study that was updated in 2002 and also served as the basis for the development of the 2004 Highlands Water Protection and Planning Act (PL 2004, c. 120).

The Master Plan recommends that the Township provide for rural residential districts that would include farmland assessed properties and larger lots with the expressed purpose of preserving the existing character of land in its current state. This includes the rural residential district and the low density district. Included as part of this plan is a recommendation for cluster-type development, as well as instituting the concept of a TDR program to preserve watershed from excess capacity and to promote infill development. The 2003 Master Plan Reexamination Report identified that the Planning

¹⁷ The State Development Guide Plan was later adopted as the 2001 State Development and Redevelopment Plan which included the Town Center concept. The Township investigated the Town Center designation process as a potential strategy to designate growth areas. The 2003 West Milford Smart Growth Plan recommended that the Township not consider the Town Center designation process.

Board should conduct an analysis to determine if lot size averaging was appropriate for a Land Development Ordinance revision. The Township's zoning ordinance does not currently provide for lot size averaging; however, it does provide for a cluster option in the R-2, R-3, and R-4 residential districts.

In 1997, West Milford's Environmental Commission prepared a Natural Resource Inventory, which includes a map of agricultural capable lands. The map shows suitable areas for farming based on Soil Conservation Service (SCS) classifications for soil capability classes.

Zoning Ordinances

In general, the municipalities regulate farming and farming activities within their zoning ordinances. Some municipalities specifically reference agriculture in their purpose statements.

Borough of Bloomingdale: The Borough of Bloomingdale's Land Use Ordinance provides the following purpose statement related to preservation of environmentally sensitive lands:

Promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land.

Consequently, the Borough provides for a demarcation line on the Zoning Map for a conservation area and a growth area, and requires that all applicants indicate on their site and subdivision plans which area they are located in (Zoning Map last revised January 12, 1993). In the conservation area, the properties not zoned for a public use or surrounding the residential lake communities are located within the R-130 zone district. The R-130 zone provides for a minimum lot area of three (3) acres. The other zone district located in the conservation area is the Summer Camp and Conference Center (SC) Zone District. As noted above, regarding the Borough's concept of delineated planning areas, the ADAs are for the most part located within the conservation area of the Borough's Zoning Map.

The Borough's regulations governing certain uses permit the keeping of livestock in any residential zone in Bloomingdale, with certain conditions related to minimum lot size, buffer requirements to adjoining properties, and other livestock restrictions (Section 92-21, Residential and Agricultural uses; Hotels and Motels).

Borough of Ringwood: The Borough of Ringwood’s Land Development Ordinance provides the following purpose statement related to preservation activities—such as agriculture—as follows:

To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens (Section 40-1.4, Purposes).

The Borough provides a regulatory definition of farm or farm land as follows:

Farm or Farm Land shall mean an area of land which is actively devoted to agricultural or horticultural use which occupies no less than five (5) acres exclusive of the land upon which the farm house is located and such additional land, in conformance with the minimum lot size of the zone in which the farm is located, as may actually be used in connection with the farm house as provided in NJSA 54:4-23.3, 54:4-23.4, 54:4-23.5, and 54:4-23.11 (Section 40-2.2, Definitions).

The Borough’s regulations provide for the provision of hoofed animals in all Residential and Conservation Zones as an accessory use and specify requirements for animal shelters, the number of hoofed animals as well as minimum distances from property lines (Section 40-8.9, Hoofed Animals in Residential and Conservation Zones). Riding stables, academies, riding clubs, and other similar activities shall be permitted in the Conservation Zone only and a minimum area of ten (10) acres is required.

The Borough’s regulations governing certain conditional uses permit agricultural and horticultural uses, including customary farm occupations and land which qualifies as farmland in the R-40V, the R-40, the R-20, RT-40, and C-200 zone districts in Ringwood with certain conditions pertaining to buffer requirements to adjoining properties with residential properties and the display and sale of products (Section 40-9.1, Agricultural and Horticultural Uses).

In addition, the conditional use standards provide for regulations concerning tree harvesting (Section 40-9.8, Tree Harvesting). Tree harvesting is permitted on a minimum tract size of 25 acres where the growing and harvesting of forest crops has been certified by the American Tree System through the New Jersey Tree Farm Committee and is harvested in accordance with a forest management plan prepared by the New Jersey Bureau of Farm Management or a consultant forester. Additional conditions to tree farming practices are stipulated in the ordinance related to the timing of tree harvesting, road placement, stream crossings, and returning disturbed land to a natural state.

The term “Right-to-Farm” is incorporated in the definition of “development” in the regulations that govern Stormwater Management.

Township of Wayne: The Township of Wayne’s planning and development regulations provide the following purpose statement related to agriculture:

[To] provide sufficient space for agricultural, residential, recreational, commercial and industrial uses” (Section 134-1, Purpose).

The Township’s planning and development regulations provide for a definition related to farmland conservation:

Farm Conservation Plan — A plan which provides for use of land, within its capabilities, and treatment, within practical limits, according to chosen use to prevent further deterioration of soil and water resources (Section 134-2, Definitions).

Lands that are defined as follows: “[a]gricultural use of lands when operated in accordance with a farm conservation plan approved by the local Soil Conservation District or when it is determined by the local Soil Conservation District that such use will not cause excessive erosion and sedimentation” are exempt from the provisions of the Township’s Soil and Sediment Control regulations (Section 134-118, Exemptions).

Farming activity is permitted in all residential zones provided that certain conditions are met regarding the farm animal type, horticulture operation, and the farm product sold (Section 211-3, Permitted Uses and Structures). The regulations provide for a minimum lot size and yard requirements for the specific farming activity.

Residential clustering is also permitted in the RBC, RC-1.25, and RC-2.5 zone districts in specific areas for the purpose of limiting development on environmentally constrained lands and preserving open space.

Township of West Milford: The Township of West Milford’s Land Development Ordinance provides the following purpose statement related to preservation activities such as agriculture, as follows:

To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements.

...

To promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land. (Section 16-2, Purposes).

The Township ordinance also provides the following regulatory definitions related to agriculture:

Commercial Horse Stables means any stable, equestrian center, barn, riding academy, ranch, equestrian arena or other property where horses are boarded and kept for the owners thereof or for hire to the general public, and/or where lessons, clinics and other equestrian activities are held for profit

...

Equestrian Center means any stable, barn, riding academy, ranch, equestrian arena or other property where horses are boarded and kept for the owners thereof or for hire to the general public, and/or where lessons, clinics and other equestrian activities are held.

...

Farm means:

- a) *Principal Uses. A lot of at least five acres used for the growing and harvesting of crops and the raising and breeding of certain animals ,including truck farms, fruit farms, nurseries and greenhouses, dairies and livestock produce. Commercial piggeries are prohibited.*
- b) *Accessory uses. Buildings incidental to farms such as barns and packing, grading and storage buildings for produce raised on the premises, except that no processing of produce shall be permitted in buildings for keeping of poultry and permitted livestock or in garages for the keeping of equipment and trucks used in farm operations.*

Farm Animals means animals produced or used in agriculture, including, for example but not limited to horses, cattle, swine, sheep, goats, poultry, fowl, fur bearing animals, but excluding dogs, cats, and other animals commonly kept as household pets.

Farmland assessment means as defined by R.S. 54:4-23.20 et. seq.

...

Residential Agriculture means the growing and harvesting of plant life and the keeping of farm animals for the enjoyment of the residents on the property and not primarily for commercial purposes. A small roadside produce stand associated with the residential agricultural use shall be permitted provided that:

- a) *All of the produce offered for sale is grown on the property.*
- b) *The produce is not grown primarily for commercial purposes.*
- c) *The stand is not furnished with permanent heating facilities.*
- d) *The floor area of the stand does not exceed 100 square feet.*
- e) *The stand is set back from all street rights-of-way and property lines at least 20 feet.*
- f) *Sufficient on-site, off-street parking lot provided.*

One unlighted sign, not exceeding four square feet in area, shall be permitted and shall be attached flat against the front façade of the stand (Section 16-6, Definitions).

The Township development regulations provide for rural density zoning and encourage community-wide sewer and water facilities. These include the R-2, R-3, and R-4 zone districts which provide for a minimum lot area of two (2) acres, three (3) acres and four (4) acres, respectively. Farms are permitted as a principal use in all residential districts and Equestrian Centers are permitted as a principal use in the R-3 and R-4 Zones (Section 18-3.3, Residential Districts). Agriculture also is permitted in the Airport Hazard Zone District. In the commercial districts, farms are permitted as a principal use in the Limited Manufacturing and Industrial Zone (LMI).

The Township has specific regulations as they relate to the housing of farm animals at Section 18-9.27 (Farm Animals). The regulations note that these standards do not apply to “commercial horse stables” and “farms” as defined by Section 16-6 (Definitions). Regarding minimum tract size and the number of farm animals permitted per tract, West Milford has requirements based on farm animal types and whether a major subdivision approval has been made on the site. The keeping of animals on a site is considered a non-conforming use if the owner does not register the operation with the Zoning Officer.

Residential clustering is also permitted in the R-2, R-3, and R-4 zone districts in specific areas for the purpose of preserving open space. The Township states the following regarding residential clustering: residential clustering is encouraged “. . . to accommodate pressures for growth while fostering properly coordinated open spaces, recreational areas, floodplains, wooded tracts and optimum street networks within the utilitarian rationale of an overall development design.” In the R-4 district, “residential clustering shall be permitted in this zone to conserve open space and environmentally sensitive land areas and provide reasonable lot sizes consistent with planning principles.”

In addition to the above, the term “Right-to-Farm” is incorporated in the definition of “development” in the regulations that govern Stormwater Management.

Development Pressures

Despite the County’s stable land use patterns, comparatively slow population development¹⁸, and partial location within the Highlands Special Resource Area its attractiveness and location within the heart of the New York City metropolitan area result in significant development pressures.

The impact of development pressures on the County is most noticeable on a macroscopic level. This is particularly evident upon reexamination of Table 16, which demonstrates landscape change in the County from 1984 through 2001. As shown in Table 16, the proportion of developed land increased by just three (3) percent between 1984 and 2001.

¹⁸ The United States Census Bureau indicates that Passaic County’s population grew by just 1.6 percent between 2000 and 2006 when the populations were 489,049 and 497,093, respectively. On the other hand, the State of New Jersey population grew by 3.7 percent from its 2000 population of 8,414,350 residents. This represents an increase that is 124.1 percent more than the increase experienced by the Passaic County during the same period.

This is both a reflection of the County's stable land use patterns, and a clear manifestation of development pressures within the County.

However, development pressures frequently make their mark upon the County's farmland. This is evident in the 33.7 percent loss¹⁹ of County farmland since 1995. The reality of this statistic is confirmed when even a cursory survey of Passaic County's development activity is undertaken. For instance, in November 2007 one of Wayne Township's last remaining farms received subdivision approval for the development of nine residential dwelling units.

Passaic County's future level of development is expected to result in land use characteristics that are consistent with the historic information presented in Tables 15 and 16 (see pages 20 and 21). As the County's southern portion is largely developed and the majority of the northern portion is located within the Highlands Special Resource Area, it is anticipated that future development will consist predominantly of infill development in the South and Highlands-permissible land uses in the North.

Nonetheless, should the future development patterns manifest in unexpected ways, there are a number of innovative planning techniques that can be taken at the local level to stabilize general land use patterns. Examples include: cluster zoning; non-contiguous cluster zoning; lot size averaging; TDR; and, the use of mandatory vs. voluntary options. A brief description of each tool follows:

Cluster Zoning: Cluster zoning is intended to create open space tracts as a result of development. It works by reducing the required minimum lot size in exchange for the permanent dedication of open space areas. This tool is presently used in Bloomingdale, West Milford, and Wayne.

Non-Contiguous Cluster Zoning: Like traditional cluster zoning, non-contiguous cluster zoning is intended to create open space tracts as a result of development. It works by reducing the required minimum lot size in exchange for the permanent dedication of open space areas. Unlike standard cluster zoning, however, this innovative planning technique does not require that the development consist of contiguous parcels. In this regard, non-contiguous cluster zoning is similar in concept to a TDR transaction. This tool is not currently used within the County of Passaic.

Lot Size Averaging: Lot size averaging is a technique whereby lot sizes can be below the minimum required lot size, provided that the average of all lots is equal to the minimum required lot size. It is a useful planning technique in that it allows large lots to meet certain land conservation objectives. There are no significant instances of this tool being used within the County of Passaic.

¹⁹ Complete details are reported above in Table 8 (see page 8).

TDR: Under a TDR program, sending districts and receiving districts are delineated within the project area. Property owners in the sending district may then sell their development rights to property owners in the receiving area. This type of program allows for the concentration of development within a receiving area to preserve the open space and farmland of the sending areas. The State's planning requirements make TDR difficult to implement at the municipal level. This tool is not currently used within the County. However, the City of Clifton currently has an agreement with the Highlands Council to participate, and Prospect Park has long-term plans to participate. An expanded discussion of TDR programs is provided in *Municipal and Regional TDR Opportunities*.

Use of Mandatory vs. Voluntary Options: In this case the use of mandatory vs. voluntary options relates to the concept of TDR. Under a mandatory option, lands are down-zoned so as to make the sale of the development rights the only equitable option for landowners. Under voluntary options, zoning is not affected and the TDR represents only an option—not a requirement—to accessing land development potential. Though such options may help efforts to get a TDR program off the ground, the range of potential legal issues resulting from the down-zoning has the potential to significantly complicate any such efforts. An expanded discussion of TDR programs is provided in *Municipal and Regional TDR Opportunities*.

Please note that these are only examples of the types of measures that may be taken to positively guide growth. Additional options may be available.

Municipal and Regional TDR Opportunities

The New Jersey Highlands Council is in the process of developing a Regional TDR program. The Council's Internet site provides the following information:

*The Highlands Council is currently developing its Transfer of Development Rights (TDR) program to be implemented throughout the seven Highlands Region counties (see the "Overview of TDR Program Development"). This program will serve as one mechanism to provide compensation to property owners in the Preservation Area that have been affected by implementation of the Highlands Act through a TDR credit system. This system will allocate TDR credits to such property owners, which credits may be sold to developers for their use in appropriate voluntary receiving zones. Use of TDR credits by developers in the receiving zones that have been established by participating municipalities will permit developers to increase the density of proposed projects in those zones. Through the TDR program, development potential will be transferred from the most ecologically or agriculturally sensitive lands in the Highlands (sending zones) to those lands within the seven Highlands counties that are best able to accommodate this development potential (receiving zones). Participation as a receiving zone is voluntary.
(Source: <http://www.state.nj.us/njhighlands/master/tdr/>).*

If realized, this program has the potential to dramatically shape the land use patterns of the seven (7) county Highlands Region and beyond. With particular regard to Passaic

County, the enactment of such a program may enable some of the communities in the southern portion of the County to attract new development and redevelopment by acting as receiving municipalities. This can be beneficial to the receiving municipalities by helping to expand the community's ratable base, and providing new uses and revitalization in the community.

Additionally, the Highlands Water Protection and Planning Act (PL 2004, c. 120) notes that any municipality within the Highlands Planning Area whose master plan and development regulations have been determined by the Highlands Council to be in conformance with the Highlands Regional Master Plan, and whose development regulations have been amended to accommodate voluntary receiving zones with minimum residential densities of five dwelling units per acre, shall be eligible for numerous incentives. These incentives include: eligibility for an enhanced planning grant from the Highlands Council of up to \$250,000; eligibility for a grant to reimburse the reasonable costs of amending the municipal development regulations; authorization to impose impact fees; entitlement to legal representation; and, priority status in the Highlands Region for any State capital or infrastructure programs. With the exception of legal representation, the same incentives are extended to municipalities located outside of the Highlands Region, but in any county that has a municipality in the Highlands Region, when the municipality has received plan endorsement from the State Planning Commission and establishes a receiving zone that allows for a minimum residential density of five units per acre and accepts development rights from a sending zone in the Highlands Region.

As indicated above, the City of Clifton and Prospect Park Borough have seen the merits of TDR and plan to participate in the program. The participation of such receiving municipalities is advantageous to the cause of farmland preservation insofar as it helps to fulfill a regional need for housing and non-residential space, which thereby has the potential to relieve some of the development pressure on more traditionally-agricultural areas of the County and greater region.

With regard to the potential for intra-municipal opportunities for TDR programs within Passaic County, it is noted that the current and stable development patterns of the County, as well as the location of the majority of the northern portion of the County within the Highlands Preservation Area, suggest only limited opportunities for such TDR programs.

Trends in Land Value

Trends in land value are influenced by many factors, such as market trends, land use and other public policies, supply, demand, and a myriad of other factors. Consequently, the following analysis shall be used for generalization purposes only.

Recent trends in Passaic County land values have been studied through information from the State's MOD-IV property tax assessment database. This analysis examines the sale

price and acreage for each property contained in the average of two random samples²⁰ of one hundred properties each that were sold within the County during 2001 and 2006. This information is presented in Table 19.

**Table 19:
General Trends in County-Wide Land Value**

	Average Cost per Acre		
	2001 ²¹	2006	Δ Percent
Random Sample of 100 Transactions (1)	\$538,132	\$1,162,855	116.1
Random Sample of 100 Transactions (2)	\$474,498	\$1,259,095	165.4
Average	\$506,315	\$1,210,975	139.2

Source: NJDEP and NJDEP

As shown in Table 19, this analysis indicates that the average land value for all types of land in Passaic County has risen dramatically—at the County level—since 2001. While this information provides a very general overview of land values in the county, it should be noted that 2007 values may actually be impacted by the slow down in the residential housing market.

²⁰ The sample does not include transactions with a sale amount of \$1.00 since such transactions do not reflect accurate values and are usually indicative of a transfer of ownership between related parties.

²¹ 2001 values are adjusted for inflation based on the Bureau of Labor Statistics’ Consumer Price Index for 2006.

Passaic County Farmland Preservation Program

The County Farmland Preservation Plan provides direction for the future preservation of County farmland and County participation in SADC-funded programs.

Agricultural Development Areas

Agricultural Development Areas (ADAs) are central to the Passaic County Farmland Preservation Program. They are areas where agricultural uses have been prioritized due to their environmental suitability and satisfaction of the following criteria:

- The land is not already committed to nonagricultural development
- The land meets the statutory criteria for the identification of ADAs as promulgated in NJAC 4:1C-18(a) through NJAC 4:1C-18(d) and cited below:
 - a. *Encompasses productive agricultural lands which are currently in production or have a strong potential for future production in agriculture and in which agriculture is a permitted use under the current municipal zoning ordinance or in which agriculture is permitted as a nonconforming use;*
 - b. *Is reasonably free of suburban and conflicting commercial development;*
 - c. *Comprises not greater than 90% of the agricultural land mass of the county;*
 - d. *Incorporates any other characteristics deemed appropriate by the board.*

In order to be eligible for participation in any of the SADC-funded farmland preservation programs, farms must be located within an ADA. While, the PCADB may consider written requests for waivers from the strict application of the aforementioned criteria provided that the statutory criteria are met, SADC funding is not available for farms located outside of an ADA. Consequently, this Farmland Preservation Plan recommends further study of the County's ADA giving specific consideration to its expansion, although no amendments to the ADA are proposed at this time.

Mapped Agricultural Development Areas

The County's mapped ADAs currently comprise approximately 6,599 acres, and are located within West Milford Township, Ringwood Borough, Wanaque Borough, Bloomingdale Borough, Wayne Township, North Haledon Borough, Totowa Borough, and Clifton City. They represent a significant potential for the preservation of farmland within the County.

The County of Passaic's ADAs are mapped in Appendix E.

Preserved Farmland

As of April 15, 2008, none of the County’s farmland has been preserved through SADC-appropriated funds. However, the County of Passaic has preserved a total of 21.5 acres of farmland through its Open Space Trust Fund. The County of Passaic notes that the preservation easements for these properties include provisions that enable the parcels continue to operate as farmland for perpetuity.

The County’s preserved farmland is mapped in Appendix F and presented in Table 20.

**Table 20:
Preserved Farmland and Farmland Preserved as Open Space, by Program**

	Tract Name	Municipality	Block(s), Lot(s)	Acres
County Easement	Cluff Tract (Eden Farms)	West Milford	Block 7212, Lot 4.01	6.6
County PIG	N/A	N/A	N/A	N/A
Municipal PIG	N/A	N/A	N/A	N/A
SADC Direct Easement	N/A	N/A	N/A	N/A
SADC Fee Simple	N/A	N/A	N/A	N/A
Non-Profit	N/A	N/A	N/A	N/A
Other Program	N/A	N/A	N/A	N/A
County Fee Simple Purchase	Passaic County Farm (Former Kuehm)	Wayne Township	Block 34.04, Lot 48	14.9
Total Preserved Acreage: 21.5				

Source: Passaic County Planning Department

It is an objective of the County of Passaic to expand its inventory of preserved farmlands. It is anticipated that the County will be able to meet this objective since there are several pending applications for farmland preservation, and interest in farmland preservation has recently increased.

Consistency with SADC Strategic Targeting Project

The goal of the SADC Strategic Targeting Project is to prioritize the public investment in farmland preservation in order to support the future of New Jersey's agricultural industry.

Its primary goals are:

- To coordinate farmland preservation/agricultural retention efforts with proactive planning initiatives;
- To update and create maps to target preservation efforts; and
- To coordinate with open space, recreation and historic preservation efforts.

By requiring that farms targeted for preservation be located within an ADA, the Passaic County Farmland Preservation Plan is keeping with the Strategic Targeting Project's goal of focusing on prime agricultural soils, which are emphasized in ADAs. In addition, the County's Farmland Preservation Plan is coordinated with the County's 2001 Open Space and Recreation Master Plan. Therefore, the Farmland Preservation Plan is generally consistent with the SADC's Strategic Targeting Project.

In addition to the above, it is noted that the delineation of the County's farmland preservation project area is intended to create an inclusive approach to farmland preservation within the County. It is the chief goal of this Farmland Preservation Plan to preserve as much of the County's farmland as possible, regardless of the availability of SADC funding for a particular parcel.

Municipal Planning Incentive Grant Programs

No municipality is currently participating in the SADC Municipal Planning Incentive Grant Program.

Eight-Year Programs

Owners of farmland property can volunteer to restrict nonagricultural development on their property for a period of eight years. There are two types of these eight-year programs: municipally approved, and non-municipally approved. Municipally approved eight-year programs require a formal agreement among the landowner, County, and municipality. Non-municipally approved programs require an agreement only between the landowner and the County.

All agreements are recorded in the County Clerk's office in the same manner as a deed. The agreements are irreversible, with the exception of cases of death, bankruptcy, incapacitating illness, or other serious hardship. All reversals must be approved by the PCADB and—in cases of municipally approved eight-year programs—the municipality in which the land is situated.

While farmland owners enrolled in both municipally and non-municipally approved programs do not receive direct financial compensation for participating in an eight-year

preservation program, they are eligible to apply for SADC grants that fund up to half of the costs associated with soil and water conservation projects. They are also permitted the royalty-free use of SADC-commissioned designs for agricultural structures, and awarded additional points toward the site assessment score for purchase of development easements. Greater protection from nuisance complaints, emergency fuel and water rationing, zoning changes and eminent domain actions are added benefits of participation in municipal programs.

Coordination with Open Space Preservation Initiatives

In November 1996, County voters approved by referendum the creation of a County Open Space and Farmland Preservation Trust Fund to restore and enhance County Parks and preserve farmland and open space. The Trust is funded by a dedicated levy of one cent for every \$100 of equalized assessed value from the County property tax. Fifteen (15) percent of the Trust Fund revenue is earmarked for purposes of acquiring farmland proposed by the Passaic County Agriculture Development Board and approved by the County Board of Chosen Freeholders.

The Goals and Objectives of the 2001 Passaic County Open Space and Recreation Master Plan (Open Space Plan) include the goal (Goals No. 9) of “[providing] ... funding and support of the Passaic County Agriculture Development Board (CADB) for preservation of farmland.” In addition, Chapter 7 of the Open Space Plan, which is entitled Public and Private Outreach, indicates that the PCADB, as a stakeholder, had identified 70 farms in the County, 55 of which were in West Milford. Most of these farms are involved in woodlot management. The preservation of open space and purchase of development easements on adjacent farmland was given considerable weight in order to increase the vast trail networks in the northern areas of the County. Promotion of active recreation in terms of horseback riding at equine operations, as well as along permitted trails, has also been taken into consideration. While no formal plans are in place, Chapter 10 of the Open Space Plan identifies greenways, and potential target acquisitions, throughout the County.

With regard to targeting and type of acquisition, it is noted that there is no real differentiation between farmland preservation and open space, except in the case of fee-simple acquisition. Each property is identified in the potential acquisition target lists, and forestry and woodlot preservation is identified as an Open Space, Natural Resource and Recreation policy, as cited in Chapter 9 of the Open Space Plan.

A copy of the County’s Green Acres Open Space Inventory (ROSI) map is provided in Appendix K.

Farmland Preservation Program Expenditures

To date, no SADC funds have been expended on farmland preservation within the County of Passaic. However, there has been a total of about \$3 million from the County’s Open Space Trust Fund that has been spent on the permanent preservation of farmland.

**Table 21:
Funds Expended, by Tract and Program**

	Tract Name	Municipality	Block(s), Lot(s)	Funds Expended
County Easement	Cluff Tract (Eden Farms)	West Milford	Block 7212, Lot 4.01	\$272,000
County PIG	N/A	N/A	N/A	N/A
Municipal PIG	N/A	N/A	N/A	N/A
SADC Direct Easement	N/A	N/A	N/A	N/A
SADC Fee Simple	N/A	N/A	N/A	N/A
Non-Profit	N/A	N/A	N/A	N/A
Other Program	N/A	N/A	N/A	N/A
County Fee Simple Purchase	Passaic County Farm (Former Kuehm)	Wayne Township	Block 34.04, Lot 48	\$2,700,000
				Σ \$2,972,000

Source: Passaic County Planning Department

Monitoring of Preserved Farmland

Before County funds are committed to preserving a specific farmland property, the PCADB shall conduct a survey of existing conditions. The findings of this survey are carefully documented and placed on file within the offices of the PCADB. Subsequent investigations are then conducted on an annual basis by the PCADB in order to verify that the subject property is not being used in a manner that is inconsistent with the contractual terms of the preservation easement. However, in the event that the easement in question was purchased through either the SADC direct easement purchase or fee simple programs, the SADC would then be responsible for monitoring the use and condition of the property since the easement is State-owned.

Future County Farmland Preservation Program

Passaic County seeks to establish a record of success in farmland preservation planning. The preservation targets, tools, and policies that are contained within this section of the Farmland Preservation Plan will enable County efforts to establish such a record.

Preservation Targets

The County of Passaic's farmland preservation planning objective is to preserve the greatest possible amount of its remaining farmland. To focus the County's efforts, this Farmland Preservation Plan includes the following one-, five-, and ten-year minimum preserved acreage targets.

One-Year Target

A total of 100 acres is the County's minimum preserved farmland target acreage for one year after the adoption of this Farmland Preservation Plan.

Five-Year Target

A total of 500 acres is the County's minimum preserved farmland target acreage for five years after the adoption of this Farmland Preservation Plan.

Ten-Year Target

A total of 1,000 acres is the County's minimum preserved farmland target acreage for ten years after the adoption of this Farmland Preservation Plan.

The one-, five-, and ten-year preservation targets that are presented above are designed to facilitate the preservation of a minimum of 100 acres of farmland per year. The PCADB recognizes the annual preservation target of 100 acres to be both attainable and sufficient enough to make a noticeable impact on the County.

Nonetheless, the County must be proactive in its actions since there are numerous factors that may limit the implementation of this Farmland Preservation Plan. Examples of such factors include funding, landowner interest, availability of land, land costs, and administrative resources. These limiting factors are further discussed below in *Factors Limiting Program Implementation*.

Modes of Preservation

There is a variety of preservation programs that may be implemented to preserve the County's farmlands. These include: County easement purchases; county planning incentive grants; municipal planning incentive grants; SADC direct easement purchases; SADC fee simple purchases; non-profit purchases; transfer of development rights; and, other programs and partnerships. A brief description of each is provided below.

County Easement Purchases: In the sale and purchase of a development easement, an owner of a farmland assessed property sells its non-agricultural development rights to the PCADB. The easement's value is the difference between the fair-market development value, and the value of the land if sold as farmland, both as determined by a real estate appraiser licensed in the State of New Jersey. Such a transaction allows the property owner to maintain control of the land, and preserves the farmland without the municipality in which the subject property is located, County, or State bearing the burden of maintaining the land.

County Planning Incentive Grants: The County Planning Incentive Grant replaces the County Easement Purchase Program as the SADC's primary preservation program. It encourages a comprehensive planning process for farmland preservation at the county-level, and offers several advantages over the traditional easement program. As indicated on the SADC's Internet site²², these advantages include: the enablement of counties to accept farmland preservation applications on a rolling basis; reducing the timeframe from landowner application to closing; and, rewarding counties that complete transactions in a timely manner with the potential for additional funding.

A prerequisite for participation in this program is the preparation of a county farmland preservation plan to specific standards of the SADC. The Passaic County Farmland Preservation Plan has been prepared according to these standards. Additionally, an agriculture development board and a dedicated source of funding are also prerequisites.

Municipal Planning Incentive Grants: As indicated on the SADC's Internet site²³, the SADC's Municipal Planning Incentive Grant program is, in effect, a municipal-level version of the County Planning Incentive Grant. The program enables the SADC to provide grants to eligible municipalities to purchase development easements for permanent preservation of farmland in designated project areas.

A prerequisite for participation in this program is the preparation of a municipal farmland preservation plan to specific standards of the SADC. Additionally, an agriculture development board and a dedicated source of funding are also prerequisites.

²² Located at: <http://www.state.nj.us/agriculture/sadc/farmpreserve/programs/countyPIG.html>

²³ Located at: <http://www.state.nj.us/agriculture/sadc/farmpreserve/programs/municipalPIG.html>

Currently, none of the municipalities in Passaic County have prepared such a plan. In order to further the cause of farmland preservation within the County of Passaic, it is the policy of the PCADB to encourage and support all municipalities with farmland-assessed properties to prepare a municipal farmland preservation plan in accordance with the standards of the SADC.

SADC Direct Easement Purchases: In the sale and purchase of a development easement, an owner of a farmland assessed property sells its non-agricultural development rights to the SADC. The easement's value is the difference between the fair-market development value, and the value of the land if sold as farmland, both as determined by a real estate appraiser licensed in the State of New Jersey. Such a transaction allows the property owner to maintain control of the land, and preserves the farmland without the municipality in which the subject property is located, County, or State bearing the burden of maintaining the land. Additionally, it is noted that the SADC purchases the easement without County participation, and holds it for perpetuity.

SADC Fee-Simple Purchases: Farmland can be acquired at fair-market value from willing landowners through the SADC's fee-simple program. After a property is acquired, it is then deed-restricted to prohibit non-agricultural uses and resold at auction to the highest bidder.

In order to participate in this program, the property must be located in an ADA and eligible for farmland property tax assessment. A farm must also meet the SADC's minimum eligibility standards, which considers: the property's soils, percentage of tillable acres; existence of suitable boundaries and buffers; the local commitment to agriculture; property size; intensity of agricultural uses in the general vicinity; and, development pressures placed upon the farm by current and anticipated market conditions. Applications to participate in this program are made by the landowner to the SADC.

Besides ensuring that farmland is preserved for perpetuity, the SADC's fee-simple program provides an added benefit to the property owner in that the landowner is exempt from rollback taxes, and survey and title costs.

Non-Profit Purchases: Non-profit purchases are similar to the aforementioned methods of farmland preservation. The only difference being that the funding is arranged by non-profit entities, which often receive SADC grants of up to half of fee-simple or development easement purchase costs. Such transactions are particularly advantageous to the public sector, because they free public funds for the preservation of additional farmland properties. The SADC maintains a listing²⁴ of non-profit entities that are active in farmland preservation and may be of assistance in such transactions.

²⁴ Located at: <http://www.state.nj.us/agriculture/sadc/farmpreserve/contacts/NONPROFIT%20LIST.doc>

TDR: The concept of TDR has been previously been discussed. However, it is important to include them within the County's farmland preservation toolkit.

By using a TDR program for the purpose of farmland preservation, the development rights associated with a farmland property can be sold to the owner of non-farmland property. In this type of transaction, the owner of the farmland property severs his rights to further develop his land, which leads to its effective preservation. On the other hand, the purchaser of the development rights is then entitled to apply those rights to develop his property at a higher density than would normally be permitted.

The actual valuation of the development rights is determined by the sale of credits in the open market, which is established by analyzing a sending area's ability to create demand for credits in the receiving areas. Procedures for such an analysis are promulgated by NJAC 5:86 et al, as are methods for determining the ability of the receiving property to accommodate the increased density or intensity of development.

Other Programs and Partnerships: Other approaches to farmland preservation are possible. One such approach is the solicitation of donations of land or development rights, wherein a property owner can donate the entire land area owned, or the development rights associated with the land, for the purpose of farmland preservation. There are many advantages to such a transaction, including potential tax benefits to the donor, its value as a tool in estate planning, and the fact that donations free funding and enable more farmland to be preserved.

Public-private partnerships or partnerships between two or more private entities may also be a useful tool. In any case, a creative approach to the issue of farmland preservation is needed to maximize the potential for farmland preservation within the County of Passaic.

For all these programs and partnerships, it is important to note that if farms are preserved without State funding NJAC 2:76-6.19 details a process by which these farms may become eligible for the benefits of farmland preservation.

Project Area Summary

In order to provide favorable conditions for the maximum preservation of farmland within the County, this Farmland Preservation Plan delineates the Passaic County North project area. This project area corresponds to the County's unique geography and land use patterns. It is mapped in Appendix G.

Passaic County North

The Passaic County North project area covers all lands in the County's ADAs that are located to the North of Interstate No.: 287 (I-287), which bisects the County in the boroughs of Wanaque, Pompton Lakes, and Bloomingdale. This area comprises 6,414.7 acres, and includes lands in the Township of West Milford, the Borough of Ringwood, the Borough of Wanaque, and the Borough of Bloomingdale. These lands are located

predominantly in PA5 and parklands owned by the State of New Jersey. Six and one-tenth (6.1) percent of the soils in this project area are of prime, unique, or statewide importance.

The lands within the Passaic County North project are important to the overall success of this Farmland Preservation Plan. They constitute the heart of the County's agricultural industry, and their preservation constitutes the protection of an important resource to the County.

Minimum Eligibility Criteria

To be eligible for funding consideration using County farmland preservation program funds, a farm must meet the following criteria:

- The property owner has applied to participate in the program;
- The property is located in Passaic County and assessed as (Class 3A/3B) farmland;
- The property is located within a County-designated and State-approved ADA or is an ADA expansion area that has been recommended by the Passaic County Agriculture Development Board; and
- The property is eligible for funding under the rules and regulations of the Passaic County Open Space and Farmland Preservation Trust Fund.

If State funds are to be used, the property must meet the minimum eligibility requirements of the SADC, which are detailed in NJAC 2:76-6.20 and provided in unofficial format below:

(a) All lands from which a development easement is acquired and all lands purchased in fee simple title pursuant to section 24 of P.L. 1983, c. 32 (NJSA 4:1C-31), section 5 of P.L. 1988, c. 4 (NJSA 4:1C-31.1), section 1 of P.L. 1989, c. 28 (NJSA 4:1C-38), section 1 of P.L. 1999, c. 180 (NJSA 4:1C-43.1), or sections 37 through 40 of P.L. 1999, c. 152 (NJSA 13:8C-37 through 40) shall at a minimum satisfy the following criteria:

- 1. For lands less than or equal to 10 acres, the land must meet the criteria in (a) i, ii, iii and iv, or (a)1v below.*
 - i. The land produces agricultural or horticultural products of at least \$2,500 annually;*
 - ii. At least 75 percent of the land is tillable or a minimum of five acres, whichever is less;*
 - iii. At least 75 percent of the land, or a minimum of five acres, whichever is less, consists of soils that are capable of supporting agricultural or horticultural production; and*
 - iv. The land must exhibit development potential based on a finding that all of the following standards are met:*
 - (1) The municipal zoning ordinance for the land as it is being appraised must allow additional development, and in the case of residential zoning, at least one additional residential site beyond that which will potentially exist on the premises;*

- (2) *Where the purported development value of the land depends on the potential to provide access for additional development, the municipal zoning ordinances allowing further subdivision of the land must be verified. If access is only available pursuant to an easement, the easement must specify that further subdivision of the land is possible. To the extent that this potential access is subject to ordinances such as those governing allowable subdivisions, common driveways and shared access, these facts must be confirmed in writing by the municipal zoning officer or planner;*
 - (3) *The land shall not contain more than 80 percent soils classified as freshwater or modified agricultural wetlands according to the New Jersey Department of Environmental Protection (DEP) wetlands maps. If the DEP wetlands maps are in dispute, further investigation and onsite analysis may be conducted by a certified licensed engineer or qualified wetlands consultant and/or a letter of interpretation issued by the New Jersey Department of Environmental Protection, may be secured and used to provide a more accurate assessment of the site conditions, provided, however, that nothing herein shall require the Committee to conduct such additional investigation; and*
 - (4) *The land shall not contain more than 80 percent soils with slopes in excess of 15 percent as identified on a USDA, Natural Resources Conservation Service SSURGO version 2.2 or newer soils map; or*
 - v. *The land is eligible for allocation of development credits pursuant to a transfer of development potential program authorized and duly adopted by law including development credits authorized pursuant to the Pinelands Comprehensive Management Plan and authorized rules.*
 - vi. *For evaluation purposes, the term "tillable" means lands that are classified as cropland harvested, cropland pastured and permanent pasture for farmland assessment purposes.*
 - (1) *"Cropland harvested" means land from which a crop was harvested in the current year. Cropland harvested shall include land under structures utilized for agricultural or horticultural production.*
 - (2) *"Cropland pastured" means land which can be and often is used to produce crops, but its maximum income may not be realized in a particular year. This includes land that is fallow or in cover crops as part of a rotational program.*
 - (3) *"Permanent pasture" means land that is not cultivated because its maximum economic potential is realized from grazing or as part of erosion control programs. Animals may or may not be part of the farm operation.*
2. *For lands greater than 10 acres, the land must meet the criteria in (a)2i, ii and iii, or (a)2iv.*
- i. *At least 50 percent of the land, or a minimum of 25 acres, whichever is less, is tillable;*

- ii. *At least 50 percent of the land, or a minimum of 25 acres, whichever is less, consists of soils that are capable of supporting agricultural or horticultural production; and*
- iii. *The land must exhibit development potential based on a finding that all of the following standards are met:*
 - (1) *The municipal zoning ordinance for the land as it is being appraised must allow additional development, and in the case of residential zoning, at least one additional residential site beyond that which will potentially exist on the premises;*
 - (2) *Where the purported development value of the land depends on the potential to provide access for additional development, the municipal zoning ordinances allowing further subdivision of the land must be verified. If access is only available pursuant to an easement, the easement must specify that further subdivision of the land is possible. To the extent that this potential access is subject to ordinances such as those governing allowable subdivisions, common driveways and shared access, these facts must be confirmed in writing by the municipal zoning officer or planner.*
 - (3) *Land that is less than 25 acres in size shall not contain more than 80 percent soils classified as freshwater or modified agricultural wetlands according to the New Jersey Department of Environmental Protection (DEP) wetlands maps. If the DEP wetlands maps are in dispute, further investigation and onsite analysis may be conducted by a certified licensed engineer or qualified wetlands consultant and/or a letter of interpretation issued by the New Jersey Department of Environmental Protection, may be secured and used to provide a more accurate assessment of the site conditions, provided, however, that nothing herein shall require the Committee to conduct such additional investigation; and*
 - (4) *Land that is less than 25 acres in size shall not contain more than 80 percent soils with slopes in excess of 15 percent as identified on a USDA, Natural Resources Conservation Service SSURGO version 2.2 or newer soils map; or*
- iv. *The land is eligible for allocation of development credits pursuant to a transfer of development potential program authorized and duly adopted by law including development credits authorized pursuant to the Pinelands Comprehensive Management Plan and authorized rules.*
- v. *For evaluation purposes, the term "tillable" means lands that are classified as cropland harvested, cropland pastured and permanent pasture for farmland assessment purposes.*
 - (1) *"Cropland harvested" means land from which a crop was harvested in the current year. Cropland harvested shall include land under structures utilized for agricultural or horticultural production.*
 - (2) *"Cropland pastured" means land which can be and often is used to produce crops, but its maximum income may not be realized in*

a particular year. This includes land that is fallow or in cover crops as part of a rotational program.

- (3) *"Permanent pasture" means land that is not cultivated because its maximum economic potential is realized from grazing or as part of erosion control programs. Animals may or may not be part of the farm operation.*
- (b) *Lands that do not meet the minimum eligibility criteria are not eligible for a State cost share grant for farmland preservation purposes.*
- (c) *No application being reviewed by the Committee for permanent farmland preservation purposes shall be eligible to be considered in more than one program at any time.*
- (d) *If a landowner rejects an offer for an amount equal to or greater than the certified market value, the Committee shall not accept for processing any application for the sale of a development easement, or for sale of land in fee simple, pursuant to the planning incentive grant program or any other farmland preservation program authorized pursuant to NJSA 4:1C-11 et seq., or 13:1C-1 et seq. for two years from the date that the application for a sale of the development easement was originally submitted to the Committee. This provision applies only to an application from the same landowner for the same farm property.*

County Ranking Criteria

Applications for farmland preservation will be accepted on a rolling basis. As adopted by resolution of the PCADB, the County's ranking criteria for the evaluation of such applications mirror those of the SADC, which are outlined at NJAC 2:76-6.16 and provided in unofficial format below:

- (a) *The evaluation shall be based on the merits of the individual application and the application's contribution to its respective project area. The weight factor assigned to each criterion identifies the relative importance of the specific criterion in relation to the other criteria.*
- (b) *The criteria listed in (c), (d), (e), (f), (g), and (h) below shall be combined to demonstrate the degree to which the purchase would encourage the survivability of the municipally approved program in productive agriculture.*
- (c) *The soil quality criterion (weight 15) is as follows:*
1. *Priority will be given to soils which exhibit superior quality, require minimal maintenance and have a greater potential for long term viability for a variety of agricultural purposes.*
 2. *Factors to be considered are as follows:*
 - i. *Prime soils identified by the USDA, Soil Conservation Service;*
 - ii. *Soils of Statewide importance as identified by the New Jersey Department of Agriculture, State Soil Conservation Committee; and*
 - iii. *Other soils which are specifically suited for the production of specialty crops and are being used or intended to be used for that purpose.*

(d) *The tillable acres criterion (weight 15) is as follows:*

1. *Priority will be given to the proportion of the land that is deemed tillable.*
2. *Factors to be considered and deemed to be tillable will be lands devoted to cropland harvested, cropland pastured and permanent pasture. For purposes of evaluating these factors, the following terms shall have the following meanings:*
 - i. *"Cropland harvested" means land from which a crop was harvested in the current year. Cropland harvested shall include the land under structures utilized for agricultural or horticultural production.*
 - ii. *"Cropland pastured" means land which can be and often is used to produce crops, but its maximum income may not be realized in a particular year. This includes land that is fallow or in cover crops as part of a rotational program.*
 - iii. *"Permanent pasture" means land that is not cultivated because its maximum economic potential is realized from grazing or as part of erosion control programs. Animals may or may not be part of the farm operation.*

(e) *The boundaries and buffers criterion (weight 20) is as follows:*

1. *Priority will be given to the greatest proportion of boundaries with buffers which help protect the integrity of the individual application and/or project area from conflicting nonagricultural uses.*
2. *Factors to be considered are as follows:*
 - i. *The type and quality of buffers, including:*
 - (1) *Compatible uses as follows:*
 - (A) *Deed restricted farmland (permanent);*
 - (B) *Deed restricted wildlife areas;*
 - (C) *Eight year programs;*
 - (D) *Farmland (unrestricted);*
 - (E) *Streams (perennial) and wetlands;*
 - (F) *Parks (limited public access);*
 - (G) *Parks (high use);*
 - (H) *Military installations;*
 - (I) *Highways (limited access);*
 - (J) *Golf course (public); and*
 - (K) *Other compatible buffers.*
 - (2) *Conflicting uses as follows:*
 - (A) *Residential; and*
 - (B) *Other;*
 - (3) *Negative consideration:*
 - (A) *Exceptions which adversely affect the applicant's agricultural operation (weight 10); and*
 - i. *Percentage of boundaries buffering the individual application.*

(f) *The local commitment criterion (weight 20) is as follows:*

1. *Priority will be given where municipal and county land use regulations and policies support the long term viability of the agricultural industry.*
2. *Factors to be considered are as follows:*

- i. *Zoning ordinances and densities which discourage conflicting nonagricultural development;*
 - ii. *Absence of sewer or other growth leading infrastructure;*
 - iii. *Consistency with municipal, county, state and regional plans;*
 - iv. *Municipal commitment to actively participate in the Agriculture Retention and Development Program;*
 - v. *Right to farm and other ordinances supporting agriculture; and*
 - vi. *Community financial support for the project area.*
- (g) *The size and density criterion (weight 20) is as follows:*
- 1. *Priority will be given to larger masses with higher density of the lands dedicated to farmland preservation.*
 - 2. *Factors to be considered are as follows:*
 - i. *The size of the individual application;*
 - ii. *The size of the individual application in relation to the average farm size in the respective county; and*
 - iii. *The density of the individual application in relation to the project area. Density shall be recognized as the reasonable contiguity, within one-half mile, of lands encompassed by development easement purchase applications, development easements purchased, other permanently deed restricted farmlands, farmland preservation programs and municipally approved programs.*
- (h) *The board's highest ranked application (weight 10) will be given priority consideration to recognize local factors which encourage the degree to which the purchase would encourage the survivability of the municipally approved program in productive agriculture and degree of imminence of change of the land from productive agriculture to nonagricultural use.*
- (i) *Factors which determine the degree of imminence of change of the land from productive agriculture to nonagricultural use criterion (weight 10) are as follows:*
- 1. *Priority will be given to minimizing the negative impacts caused by the imminent conversion of agricultural land to a nonagricultural use.*
 - 2. *Factors to be considered are as follows:*
 - i. *The degree of imminence of change; and*
 - ii. *The impact of the conversion.*

It is the policy of the PCADB that ranking will be used to prioritize applicants for funding. Further, the PCADB will make every attempt possible to fund preservation through all available funds and programs.

Additionally, it is the policy of the PCADB to encourage applicants from all landowners, even if they feel they will rank low in accordance with the provisions outlined above. The PCADB remains flexible and committed to its goal of preserving as much of the County's farmland as possible. As such, it is noted that it may be possible to fund the preservation of properties with non-SADC funds, which may afford the County's preservation efforts more flexibility.

Application Policies

Applications will be accepted on a rolling basis by the Passaic County Agriculture Development Board. In order to encourage the greatest possible amount of land owner participation in the County farmland preservation program, this Farmland Preservation Plan seeks to provide a high degree of flexibility in the application process.

The County is committed to working with any eligible and willing landowner to preserve farmland within the context of a variety of mechanisms, including, but not necessarily limited to, option agreements, installment purchases, and encouraging donations of permanent development easements. The County policy is to be compatible with State policies when working within the context of State funded programs.

County Policies Related to Preserved Property, Housing and Division of Premises

The County will follow SADC guidelines related to the approval of housing opportunities. The landowner will be responsible for listing any residence as an agricultural labor housing unit in the deed of easement. The Passaic County Agriculture Development Board will review any request for a house replacement request or for a new agricultural labor housing unit. If the Board determines such to be appropriate to the situation and beneficial to the farm operation, it will forward its recommendation to the SADC for approval. The SADC's policy on the approval of new agricultural labor housing units is congruent with that which has been outlined above.

The County will follow SADC guidelines and policy related to Residual Dwelling Site Opportunities (RSDOs). The SADC's policy on RSDOs is that any newly constructed units must be for an agricultural purpose, and that at least one of the occupants of any constructed building must be regularly involved in agricultural activity located onsite. RSDOs are also allocated prior to preservation at a density not to exceed one residential unit per 100 acres, including existing and proposed structures. Additional details are found in SADC Policy P-31²⁵.

The County will follow the SADC guidelines and policy related to the Division of Premises requests. The County will review such requests, and, if approvable, will forward the Division Request to the SADC for approval. It is the policy of the PCADB that division of premises is approvable when: the request is made for agricultural reasons; the resulting parcels will be used for agriculture; the resulting parcel sizes are large enough to continue to support agriculture; the parcels contain useful agricultural soils; and, the extent of wetlands does not significantly preclude agricultural activity on the site. The SADC's stance on the subject is that any division must be for an agricultural purpose and

²⁵ Located at: <http://www.state.nj.us/agriculture/sadc/farmpreserve/postpres/RDSOpolicy.pdf>

the resulting parcels must continue to be agriculturally viable; additional details are found in SADC Policy P-30-A²⁶.

The County has no formal policy regarding exception requests, and will review them on a case-by-case basis. Exceptions are areas of a farm that are delineated so that they are not subject to the majority of restrictions in the deed of easement. They are often classified as severable and non-severable. Severable exception areas may be severed or subdivided from the property. Non-severable exception areas may not be severed or subdivided from the property.

Exception requests may be related to the presence of a non-agricultural uses on the site, future plans for the farm, or whether the project is a joint project with another government agency for trail construction, open space preservation, or other use. The County does not encourage or discourage land owners to take them. However, severable and non-severable exceptions that are found to adversely impact the agricultural operation will be disfavored by the County and SADC ranking systems (described above).

Funding Plan

Key to the funding of the Farmland Preservation Plan is its funding sources, cost projections, and financial policies, all of which are discussed below in the following section:

Funding Sources

The County farmland preservation program is funded by the Passaic County Open Space and Farmland Trust Fund, which is designed to complement funds generated through bonds and other financial sources, including State and Federal funding programs.

The County Trust Fund is funded by an open space tax that, by County resolution, adopted on February 3, 1999 cannot exceed four cents for each one hundred dollars of equalized assessed valuation. Under the same resolution, the County rate has been fixed at one cent per one hundred dollars of equalized assessed valuation. At that rate, the County property tax generates approximately \$5.2 million (\$5,200,000) annually into the Open Space Trust Fund, a total of \$780,000 of which, or fifteen (15) percent, is dedicated to farmland preservation. Trust Fund program funding can be supplemented from other County funding sources in the event that trust program revenues are not sufficient for a particular project

Financial Policies

The financial policies of the Passaic County farmland preservation program follow the rules and regulations of the Passaic County Open Space and Farmland Preservation Trust

²⁶ Located at: <http://www.state.nj.us/agriculture/sadc/farmpreserve/postpres/divisionpolicy.pdf>

Fund Rules and Regulations adopted in 2001. It is noted that while the County does not require municipal contributions on easement purchases, they are highly encouraged.

The County Advisory Committee for the Open Space and Farmland Preservation Trust reviews, prioritizes, and makes recommendations on the funding of project. Trust Fund revenue, including any interest, is allocated as follows:

- Passaic County Board of Chosen Freeholders: 40 percent (for purposes of park development, rehabilitation, or acquisition as determined by the County Board of Chosen Freeholders)
- Municipal/Qualified Charitable Conservancy Projects: 40 percent (for projects recommended by the County Open Space Advisory Committee, which reviews, prioritizes, recommends, and are ultimately approved by the Passaic County Board of Chosen Freeholders)
- Farmland Preservation Projects: 15 percent (for purposes of acquiring farmland proposed by the Passaic County Agriculture Development Board and approved by the County Board of Chosen Freeholders)
- Discretionary Funding: 5 percent (as recommended by the County Advisory Committee for the Open Space and Farmland Preservation Trust for emergency acquisitions and/or supplement funding for the above categories and approved by the County Board of Chosen Freeholders)

Cost Projections

The total cumulative cost projections associated with the Passaic County Farmland Preservation Plan are presented below. As per NJAC 2:76-6.11, these projections are further divisible into State, County, and municipal shares of approximately sixty (60) percent, twenty-four (24) percent, and sixteen (16) percent, respectively²⁷.

One-Year Cost Projection: \$2,275,600. This total includes a State share of \$1,365,360, a County share of \$546,144 and a municipal share of \$364,096.

Five-Year Cost Projection: \$20,355,232. This total includes a State share of \$12,213,139, a County share of \$4,885,256 and a municipal share of \$3,256,837.

Ten-Year Cost Projection: \$40,494,732. This total includes a State share of \$24,296,839, a County share of \$9,718,736 and a municipal share of \$6,479,157.

PCADB Administrative Resources

As discussed below, the PCADB has significant resources available in order to ensure its viability in implementing the County's future farmland preservation program.

Staff Resources

The principal staff resource of the PCADB is the County Open Space Coordinator, who is a full-time employee of the County of Passaic's Planning Department. In addition to providing a range of administrative services to the Board, the Open Space Coordinator is also able to leverage additional staff resources of the County's Planning Department, as well as other departments, including the Department of Economic Development.

Legal Support

The County Counsel's Office provides legal support on an as-needed basis to the PCADB. An assistant county counsel attends board meetings and contact between the Board and the County Counsel is facilitated by the staff of the PCADB.

Database Development

The staff of the PCADB oversees database development for the Board. This is achieved both internally and as a secondary benefit of the Board's below-described Geographic Information System.

Geographic Information Systems

The administrator of the PCADB assists the Board in leveraging the Geographic Information System (GIS) capabilities of the Passaic County Planning Department. This

²⁷ Please note that as indicated by NJAC 2:76-6.11, the actual cost share will be determined by the price paid for a particular easement. The cost share distribution of 60-27-16 is thus subject to change based upon actual circumstances.

resource has the added benefit of assisting in the development of databases from the digital geographic data contained within the GIS.

Factors Limiting Program Implementation

There are a number of factors that may impede the implementation of the Passaic County Farmland Preservation. These factors are identified below.

County and Municipal Funding

Shortfall in funding may be a factor limiting the implementation of the farmland preservation program. To ensure adequate funding, the allocation of open space trust funds to farmland preservation should be maintained, and—if needed—increased. Naturally, any shortfall of funds may also be relieved by readjusting target acreages from one year to another; if this is done, it is critical that every effort be made to ensure meeting this Farmland Preservation Plan's ten-year target of 1,000 preserved farmland acres.

Projected Costs

As previously discussed, trends in land value are subject to myriad factors²⁸. These factors—many of which are often unforeseeable—may prove to be a major factor limiting the implementation of Passaic County's farmland preservation plan. Changes in land value will impact the projections that are included in this Farmland Preservation Plan. As discussed above, adjustment to the target acreages contained within this plan may be necessary to accommodate changes in land values and other factors; if this is done, it is critical that every effort be made to ensure meeting this Farmland Preservation Plan's ten-year target of 1,000 preserved farmland acres.

Supply of Available Land

The diminishing supply of farmland that is available for preservation is a serious limiting factor of the County's Farmland Preservation Plan. Meeting the target acreage goals that are set within this Farmland Preservation Plan and increasing public interest in farmland preservation will help to minimize the negative impacts associated with the diminishing supply of available land. In addition, the regulations within the Highlands Special Resource Area may help to minimize the impact of the diminishing supply of available land.

Landowner Interest

On a statewide level, landowner interest is one of the most common factors limiting the implementation of farmland preservation plans. Farmers are often unaware of the many benefits of farmland preservation, or reluctant to participate.

In order to increase the potential for meeting the target acreage goals and boost the Passaic County Farmland Preservation Plan's success, landowner interest must be

²⁸ See *Trends in Land Value* for more information.

increased. This should be done through the dissemination of concise and comprehensive information on the various farmland preservation opportunities available to Passaic County farmers.

Potential means of spreading this information could be mailers, the Internet, and public outreach to eligible farmland owners. It is also hoped that the adoption of this Farmland Preservation Plan will spur the preparation of municipal farmland preservation plans and programs, which may help to educate the public and generate interest.

Administrative Resources

Administrative resources are critical to the success of large-scale programs, such as the County's Farmland Preservation Program and its goal of preserving 1,000 farmland acres. They serve a central organizational role and facilitate the completion of the necessary tasks that are often the key to the programs success. To ensure the success of the County's Farmland Preservation Program, its administrative resources must be retained, and—if needed—expanded.

Economic Development

The County of Passaic supports agriculture as a valuable cultural and natural resource, as well as an integral part of its economy. The creation of the PCADB and the preparation of this Farmland Preservation Plan are clear indicators of the County's support for agriculture.

The County of Passaic is committed to providing continued support to the agriculture industry. As such, this Farmland Preservation Plan includes the following discussion on agricultural economic development strategies and their consistency with the objectives of the NJDA.

Strategies for Agricultural Industry Retention, Expansion, and Recruitment

Passaic County seeks to retain and enhance its existing agricultural industry. In support of this goal, the following section includes numerous strategies aimed at retaining and enhancing the County's agricultural industry.

Institutional Strategies

The following institutional strategies are proposed to support the County's agricultural community.

Support for Farmers: There is a wealth of support available to Passaic County's farmers. In addition to the educational and research support of the New Jersey Agricultural Experiment Station that is expanded upon in the following sections of this Farmland Preservation Plan, support for farmers can be leveraged through the SADC, the USDA, and several non-profit organizations.

A principal source of support for farmers is the SADC's Farm Link Program, which is a great resource for new farmers seeking access to farmland and farming opportunities, as well as for landowners seeking farmers. The SADC maintains an extensive website for the Farm Link Program (<http://www.state.nj.us/agriculture/sadc/farmlink>).

In addition, the USDA maintains an office of the Farm Service Agency in Passaic County. The Farm Service Agency is particularly helpful in providing farmers with information on various conservation and loan programs for which they may be eligible. This office is located at 1480 Union Valley Road in West Milford.

Several non-profit organizations provide support to farmers. Some examples of different organizations include the Northeast Organic Farmers Association of New Jersey (<http://www.nofanj.org>), the Growing New Farmers Support Network of the New England Small Farm Institute (<http://www.growingnewfarmers.org>), the Rodale Institute (<http://www.newfarm.org>), and the locally-based Sustainable West Milford (<http://www.sustainablewestmilford.org>).

Of particular relevance to Passaic County’s farmers is the Northeast Organic Farmers Association of New Jersey, which periodically offers workshops on *Exploring the Small Farm Dream* that may prove to be informative given the decreasing average size of the County’s farms²⁹. Additionally, the community group Sustainable West Milford (<http://www.sustainablewestmilford.org>) runs an organic community garden, and organizes many events related to sustainability throughout the community. Some of these events may be of interest to local farmers.

Support with Marketing and Public Relations: One of the best local marketing and public relations campaigns is that of the “Enjoy Four Seasons of Agriculture in the New Jersey Skylands” map and guide that was jointly published by the Counties of Bergen, Hunterdon, Morris, Somerset, Sussex, Warren, and Passaic. This guide gives the public an introduction to agriculture and agriculturally-oriented tourism activities in the Skylands tourist region, as well as a map and directory of farm markets and similar venues. Several Passaic County venues are advertised in this guide. An image of this guide is presented below.

Enjoy the Four Seasons of Agriculture in the New Jersey Skylands



“Enjoy the Four Seasons of Agriculture in the New Jersey Skylands” provides consumers and tourists with an overview of agricultural activities and businesses in the seven-county Skylands tourism region.

Source: Passaic County Planning Department

Marketing/public relations support is also available from the NJDA. One example is the Department’s “Jersey Fresh” promotional campaign (<http://www.jerseyfresh.nj.gov>), which is aimed at increasing awareness of locally-grown produce and food products. The campaign has its own logo which is used by many farmers and venues, and a common sight at farm- and supermarkets. Similarly, the NJDA has a “Jersey Grown” campaign for horticultural products (<http://www.jerseygrown.nj.gov>).

In addition to the above, the NJDA’s “Jersey Fresh” and “Jersey Grown” websites provide directories of roadside stands, farm markets, and similar venues where the agricultural products can be purchased. Also, a “Highlands” branding study that was

²⁹ The *Average and Median Farm Size* section of this Farmland Preservation Plan provides a full discussion on the decreasing average size of Passaic County’s farms.

initiated by Sussex County through a grant from the Highlands Council is also underway. To remain competitive within the region, it is, therefore, recommended that the County of Passaic commission a similar study with the assistance of specialized marketing consultants.

Community Farm Markets: Community farm markets enable farmers to tap the local market by selling their products and value-added items such as baked goods and ciders directly to the public. These markets are held weekly in predetermined locations where farmers and vendors are permitted to sell products from stalls and tables. It is common that community farm markets regulate what can be sold and how much must be locally-grown.

In 2006, a non-profit corporation (Eat Local, Inc.) established a community farm market in the Borough of Ringwood. The Ringwood Farmers' Market is held every Saturday from June through November at the Ringwood Park-and-Ride on Cannici Drive. In addition to holding the weekly farm market, the organization maintains an extensive website (<http://www.ringwoodfarmersmarket.org>) to advertise the event and all it offers. Passaic County would benefit from an increased presence of community farm markets like the Ringwood Farmers' Market. Consequently, this Farmland Preservation Plan recommends the expansion of such opportunities.

Community-Supported Agriculture: Community-Supported Agriculture is the practice in which members of a community group prepay for a weekly share of a farmer's crop. Key benefits to community group members include: ensuring a season-long supply of fresh produce at a pre-determined, fixed price; the positive feeling of supporting agriculture in their local community; and the peace-of-mind associated with knowing where their food comes from. Moreover, this type of program is particularly helpful to farmers. Key benefits to the farmer include: a known customer base; reduction of risk; and minimizing debt associated with the initial planning of the crop. Indeed, this type of program is a potential area of growth in Passaic County.

Agricultural Education and Market Research: The County’s agricultural community would benefit from a full utilization of the following educational and market research-related resources:

- **New Jersey Agricultural Experiment Stations:** There is a wealth of resources that are available through the Rutgers University-affiliated system of off-campus New Jersey Agricultural Experiment Stations. While an Agricultural Experiment Station (AES) is not located in Passaic County, there is one in neighboring Sussex County. The AES in Sussex County is located in Branchville and serves as a camp focused on the important task of youth education. Additional Stations are located throughout New Jersey, as shown in Table 22.

**Table 22:
Off-Campus Agricultural Experiment Stations**

Name of Station	Location	Focus
Snyder Research and Extension Farm	Hunterdon County	Sustainable agriculture
Food Innovation Center	Cumberland County	Business development to the agricultural and food industries
Haskin Shellfish Research Laboratory	Cumberland County	Shellfish industries
4-H Youth Center for Outdoor Education	Sussex County	Youth education
Center for Blueberry and Cranberry Research	Burlington County	Blueberry and cranberry research
Rutgers Agricultural Research and Extension	Cumberland County	Crop protection and integrated pest management
Rutgers EcoComplex	Burlington County	Environmental research
Rutgers Fruit and Ornamental Research Extension Center	Monmouth County	Fruit and ornamental tree research
Rutgers Plant Science Research and Extension Farm	Monmouth County	Turfgrass-related and agronomic crop research

Source: New Jersey Agricultural Experiment Station

Specific examples of the services that are provided by the NJAES include educational programs on the identification of invasive species, reduction of pesticide use, and improving soil fertility, as well as natural resource and energy conservation. The County’s agricultural community would be well-served by utilizing the off-campus resources of the NJAES.

- **Rutgers Cooperative Extension:** The Rutgers Cooperative Extension office in Passaic County is the county-level outreach wing of the New Jersey Agricultural Experiment Station and an invaluable source of information and assistance regarding agriculture, family and community health sciences, natural resources, and the environment. The Rutgers Cooperative Extension’s main office in Passaic County is

located at 1310 Route 23 in Wayne Township. In addition, offices focused on nutritional education are located at 317 Pennsylvania Avenue in Paterson.

- **Rutgers University, School of Environmental and Biological Sciences:** Rutgers University’s School of Environmental and Biological Sciences (formerly known as Cook College) administers the NJAES and extends its reach and focus. The School provides a setting for the central administration of the NJAES and the NJAES-specific and School-related centers and institutes listed in Table 23.

**Table 23:
On-Campus Centers and Institutes
of the NJAES and School of Environmental and Biological Sciences**

Name of Center or Institute
Center for Controlled-Environment Agriculture
Center for Turfgrass Science
Center for Vector Biology
Equine Science Center
Food Policy Institute
IR-4 Project: Center for Minor Crop Pest Management
Rutgers Energy Institute
Wildlife Damage Control Center
Biotechnology Center for Agriculture and the Environment
Center for Advanced Food Technology
Center for Environmental Prediction
Center for Lipid Research
Grant F. Walton Center for Remote Sensing and Spatial Analysis

Source: New Jersey Agricultural Experiment Station and the School of Environmental and Biological Sciences of Rutgers University

The above-listed NJAES- and School of Environmental and Biological Sciences-based centers and institutes should be leveraged to the greatest possible extent for the development of Passaic County’s agricultural industry.

Businesses

Passaic County’s farms rely on a complex, regional network of inputs suppliers and services, and product distributors and processors. The following section presents business-oriented strategies to support the County’s agricultural community.

Input Suppliers and Services: Table 13 presents a sample of agricultural input suppliers and services. As shown in the referenced table, Passaic County and the surrounding areas contain a variety of feed businesses, as well as general farm supply stores, which sell sundry farm equipment and parts. These businesses are a local source of farm supplies and specialized services for the agricultural community in Passaic County.

Though the information provided in Table 13 is a valuable resource to Passaic County’s agricultural community, its reach should be extended to provide increased public

awareness within the County. One possible outreach mechanism could be the creation of a web-based directory of input suppliers and services; if created, this directory should be supplemented with information from the Rutgers Cooperative Extension of Salem County's *Green Pages* (<http://salem.rutgers.edu/greenpages/service.pdf>). Every attempt should be made to increase the business of Passaic County's input suppliers, in addition to convenience for the agricultural community.

Product Distributors and Processors: Getting agricultural products from field-to-market is of critical importance for Passaic County's agricultural industry. In order to increase the efficiency of this task, the agricultural community should work with local food processors and distributors to the greatest possible extent. One principal method of increasing opportunities for closer cooperation with product distributors and processors is targeted marketing by the agricultural community to such businesses.

There is only a limited presence of product distributors and processors in the County. However, by maximizing cooperation among the agricultural community and product distributors and processors, benefits can be maximized. One potential benefit is that the County's agricultural community will be bolstered by reduced transportation costs and higher product quality that would result from reduced transportation time.

Anticipated Agricultural Trends

Product Demand: Upon visiting many farm markets and nurseries, advertisements for organically- and locally-grown products are clearly visible. Indeed, the demand for such products is high. Given the high demand for organic food products, it is anticipated that the demand for these crops will rise. It is also anticipated that demand for locally-grown products will grow. Local organic food co-ops, such as The Purple Dragon³⁰ (<http://www.purpledragon.com>), buy from local growers during the growing season.

In addition to the above, it is anticipated that there will be a growing demand for equine products and services. This segment of the agricultural industry provides a unique opportunity for the County's agricultural community to maximize its tourism potential by offering equine-related recreational activities such as riding lessons and trail riding.

Given the recent downturns in the national real estate market, it is anticipated that there could be some short- to medium-term decline in the demand for nursery products. However, it is anticipated that increased activity in the real estate market will regenerate the need for such products.

Market Location: The market areas of Passaic County's agricultural industry is regional in nature, and primarily includes Passaic County, as well as parts of Bergen, Sussex, Essex, Morris, counties, as well as neighboring counties in the State of New York. Due to

³⁰ The Purple Dragon is based in Glen Ridge (Essex County) and has many affiliates throughout the New York/New Jersey metropolitan region.

the growing population in the State and County, as well as the growing demand for locally-produced goods, it is anticipated that Passaic County's market location will continue to be regional in nature. The recent enactment of the Highlands Water Protection and Planning Act may, however, result in a particular focus on areas located outside of the Highlands Region, which is where the vast majority of the regional growth can be expected to occur. This Farmland Preservation Plan advocates marketing through community farmer's markets and wholesale operations in these areas.

Agricultural Support Needs

Agricultural Facilities and Infrastructure: While Passaic County recognizes the importance of supporting its agricultural industry, the County does not currently intend to play a leading role in the development and location of new agricultural facilities and infrastructure. However, the County is willing to provide constructive input and advice to would-be developers of such projects. In addition, it is noted that the Passaic County Planning Board and PCADB are ready to work in close collaboration with agricultural municipalities to ensure that local land use regulations are reasonable towards agricultural facilities, and that they are adequately protected by right-to-farm ordinances.

Community Farmers' Markets: As previously mentioned, this Farmland Preservation Plan suggests that the development of additional community farmers' markets will benefit Passaic County. It is noted that such venues support agriculture by providing farmers with a means of marketing and selling their goods directly to the general public. In turn, the general public benefits from access to high-quality, fresh products at a reasonable price. Community farmers' markets also facilitate a better understanding of agricultural practices and may foster a better sense of the importance of agriculture among the general public. Accordingly, it is the policy of the Passaic County Planning Board and PCADB to support the development of any additional community farmers' markets to the greatest extent possible.

Regulatory Flexibility: New Jersey's land use regulations are among the strictest in the nation. While the goals of these regulations are venerable, they often impede the efficiency of agricultural operations within the State. Increased regulatory flexibility for the County's agricultural community would act to foster an improved climate for farmland and other agricultural operations within the County.

The need for such flexibility has been made clear by anecdotal information from individual members of the PCADB. Specifically, it was noted that mulching and composting operations are subject to perceivably-onerous regulations, which often create hardships for the farmers. Other issues where increased regulatory flexibility may be prudent are related to agricultural exemptions from the regulations of the Highlands Water Protection and Planning Act and the Freshwater Wetlands Protection Act, among others.

The argument for increased regulatory flexibility may also be expanded to the relaxation of permitting and review fees, which may sometimes be burdensome to farmers given the inherently volatile nature of agricultural markets and prevailing economic conditions. Additionally, increased regulatory flexibility may also be achieved by exempting certain agricultural structures from permitting and other planning requirements.

Economic Development: Passaic County's agricultural industry would benefit from increased industrial representation in economic development organizations. As such, this Farmland Preservation Plan recommends collaboration with the County's Department of Economic Development as a means of establishing this type of representation. Additional opportunities for increased industrial representation in economic development organizations may also be realized with increased collaboration with the NJDA, which advocates for the integration of New Jersey's agricultural industry on regional, national, and international levels in its 2007 Economic Development Strategies (<http://www.nj.gov/agriculture/conventions/2007/strategies.html>). Additional support for the economic development of Passaic County's agricultural industry could also be derived from collaboration with specialized marketing consultants.

Increased Preservation Opportunities: Passaic County's agricultural industry would benefit from increased preservation opportunities. By expanding the current toolkit of preservation opportunities that are available to the County and its farmers, the benefits of farmland preservation could be expanded into more areas of the County. One type of new preservation program that may be helpful to the County of Passaic would be an easement purchase program for property owners in the Highlands. Such a program could be tailored to the unique geography of this region by creating minimum eligibility standards that more properties could meet. This is particularly important considering the extent of large wooded tracts in the Highlands, and the emphasis the County's agricultural industry on woodlot management, which is an agricultural practice worthy of preservation.

Agricultural Support Implementation

Cost: The cost associated with the implementation of the strategies presented within this plan will be funded to the greatest extent possible through administrative budgets and, when possible, cost sharing.

Funding Opportunities: The County of Passaic will pursue all funding opportunities made available through the Federal and State governments, and private organizations.

Timeline: The County will work to implement the strategies presented in this Farmland Preservation Plan after the plan has been adopted and when feasible.

Consistency with NJDA Economic Development Strategies

The NJDA's 2007 Economic Development Strategies strive to increase the competitiveness of New Jersey's agricultural industry within an increasingly competitive environment. To this end, the document provides an inventory of strategies that are broadly focused on the State's produce, ornamental horticulture, seafood, dairy, field and forage crop, livestock and poultry, organic, equine, wine, and agri-tourism industries, as well as general strategies that can be applied to all aspects of the greater agricultural industry. More information on this document can be found on the NJDA's Internet site (<http://www.nj.gov/agriculture/conventions/2007/strategies.html>).

This Farmland Preservation Plan is generally consistent with the NJDA's 2007 Economic Development Strategies. In fact, the Passaic County Farmland Preservation Plan presents a number of strategies that intersect with those of the NJDA. For instance, the NJDA's 2007 Economic Development Strategies include recommendations that community farm market opportunities be promoted to growers and the public³¹, and this Farmland Preservation Plan recommends that opportunities for farm markets, such as the aforementioned Ringwood Farmers' Market, be expanded. Additional examples of the commonalities between the NJDA's 2007 Economic Development Strategies and this Farmland Preservation Plan are seen in this Plan's call for increased access to agricultural education, and the NJDA's call to educate growers and food handlers about regulatory requirements, equine health, and general farm-management-related issues³².

³¹ This is reflected in Strategy 8 and Strategy 9 of the referenced NJDA document. Additional instances may be present in other strategies.

³² This is reflected in Strategy 69, Strategy 71, Strategy 99, Strategy 100, Strategy 101, Strategy 102, Strategy 108, Strategy 109, and Strategy 111 of the referenced NJDA document. Additional instances may be presented in other strategies.

Natural Resource Conservation

Conservation of natural resources is of critical importance to the County's agricultural industry. Accordingly, the following section examines the conservation of natural resources in Passaic County.

Natural Resource Protection Coordination

A number of agencies coordinate diverse natural resources protection and grant programs. A sampling of these agencies is provided below.

Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) of the USDA assists the public with issues related to soil, water, and general natural resources conservation. In particular, the staff provides assistance in preparing conservation plans, and assists in securing funding through Federal programs to implement them. Conservation enhancement cost share opportunities are also available to most landowners.

The agency offers services to the County's agricultural community through its field office, which is located in Franklin Township (Somerset County). Additional NRCS resources are available from the Service's Plant Materials Center, which is located in Middle Township (Cape May County).

Farm Service Agency

The FSA provides cost share and incentive payments for conservation protection installation. It also provides annual rental payments for removing highly-erodible land and environmentally sensitive cropland from production, and for restoring and protecting grasslands. Additionally, the FSA administers several conservation programs, including the Conservation Reserve Enhancement Program.

Hudson, Essex and Passaic Soil Conservation District

Passaic County is within the jurisdiction of the Hudson, Essex and Passaic Soil Conservation District (HEP-SCD). The charge of the HEP-SCD is to implement New Jersey's Soil Erosion and Sediment Control Act. One of the key measures the HEP-SCD takes in meeting its charge is reviewing various projects that disturb more than 5,000 square feet of land surface area. While the cultivation of farmland for food, fiber, or animals is generally exempt from HEP-SCD oversight, commercial farms may be required to prepare—and seek HEP-SCD approval for—soil erosion and sediment control plans for projects such as the creation of parking areas, grading, and the erection of structures used for agricultural purposes. The district must review and approve all farm conservation plans prior to implementation or farmer reimbursement.

Natural Resource Protection Programs

Both the State and Federal governments offer a range of programs aimed at the protection of natural resources. It is the policy of the Passaic County Planning Board and the PCADB to encourage participation in natural resource protection programs. To date, however, the use of these programs in the County has not been maximized. As such, this plan recommends the creation an informational brochure on the availability of such programs, which could be distributed at the time of yearly monitoring visits, as well as on the County's Internet site.

The following sections provide a brief overview of various natural resource protection programs.

SADC Soil and Water Conservation Grant Program

This program provides private landowners grants of up to fifty (50) percent of approved soil or water conservation project's cost. Applicable projects may include those related to: irrigation; erosion control; and stream corridor protection and enhancement, among others.

The SADC's Soil and Water Conservation Grant Program is available to both permanently preserved farms, as well as those enrolled in eight-year preservation easement programs. To seek funds under this program, landowners first apply to the Hudson, Essex, and Passaic Soil Conservation District, which assists in developing farm conservation plans, and ensures that projects are necessary and feasible. Applications are then forwarded to the NJ Soil Conservation Committee, which then recommends projects to the SADC for funding approval.

Federal Conservation Programs

There are several farming-related programs that are administered at the Federal-level by the NRCS and the Farm Service Agency of the USDA. Among these are the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP), and the Conservation Reserve Enhancement Program (CREP).

These programs have a broad spectrum of applications. For instance, EQIP promotes agricultural production and environmental quality by funding up to seventy-five (75) percent^{33, 34} of projects aimed at increasing the efficiency of irrigation systems, properly managing manure, and converting gas engines to diesel, among other examples.

WHIP funds are intended to assist private landowners in developing or improving fish and wildlife habitat on their property. The program provides free technical assistance and

³³ This program may fund up to ninety (90) percent of project costs for beginning or limited-resource farmers and ranchers.

³⁴ Funds are capped at \$450,000 on a cumulative basis for the term of the Farm Security and Rural Investment Act of 2002.

funding for up to seventy-five (75) percent of the cost of approved projects aimed at implementing wildlife habitat improvement practices. Participation in the WHIP program also has the potential to further the cause of farmland preservation, because participating landowners are required to enter into an agreement with the NRCS that all practices installed as a result of the project will be maintained for a term of five (5) to ten (10) years. However, a caveat of the WHIP program is that only projects pertaining to certain types of habitats are eligible; these include bog turtle, early successional, and wetland habitats.

CREP is aimed at improving agricultural water runoff and general water quality by paying farmers to remove highly erodable pasture and cropland from production for a period of ten (10) to fifteen (15) years. Its goal is to protect environmentally sensitive land, decrease erosion, restore wildlife habitat, and safeguard ground and surface water.

While participation in CREP may not immediately seem to advance the cause of farmland preservation, it must not be overlooked as a valuable piece in the County's farmland preservation toolkit. It is noted that by participating in the CREP program, farmers and agricultural landholders may be able to temporarily cease operations during times of economic trouble and market uncertainty.

NJDEP Landowner Incentive Program

The NJDEP Landowner Incentive Program provides technical and financial assistance to private landowners interested in preserving and protecting threatened or endangered plant and animal special that may be present on their properties. Nearly \$775,000 is budgeted for the program in 2009.

Examples of projects that the Program may assist with include: restoring vernal pools; controlled burning of vegetation as a means of increasing soil productivity with natural plant nutrients; and stream fencing to limit disturbance and siltation of a stream corridor, among others. Additional information is available from the NJDEP.

Water Resources

Passaic County's water resources are needed to support the agricultural community. This section expands the previous discussion of the County's chief water sources (included in *Irrigated Acres and Available Water Sources*; see page 5) with information on their supply characteristics, agricultural demand and supply limitations, and conservation and allocation strategies.

Supply Characteristics

The NJDEP has divided the State into twenty (20) watershed management areas for the purposes of environmental planning and management. Passaic County is included in three watershed management areas, namely: the Walkill River Watershed Management Area; the Watershed Management Area of the Pompton, Pequannock, Wanaque, and Ramapo Rivers; and the Watershed Management Area of the Lower Passaic and Saddle Rivers.

The majority of the County is located in the Watershed Management Area of the Pompton, Pequannock, Wanaque, and Ramapo Rivers (Watershed Management Area No. 3). This management area contains numerous smaller sub-watersheds. These areas are determined based upon given topography and the overall drainage characteristics of an area. Subwatersheds in WMA 3 include the Wanaque Reservoir, Crystal Lake, Belcher Creek, Meadow Brook, and the Clinton Reservoir. In addition to the above, it is also important to consider that the County of Passaic receives an average of over 46 inches³⁵ of rainfall annually.

Agricultural Demand and Supply Limitations

As discussed above in Irrigated Acres, there are only 45 irrigated acres within the County of Passaic, which is only a small portion of the County's agricultural land. Additionally, because most of the County's agricultural activities are related to woodlot management operations and tree farms, and are not crop-intensive, the agricultural demand for water resources in Passaic County is comparatively low.

In consideration of the above, it appears that rainfall is sufficient enough to support the bulk of the County's agricultural activities. However, though precipitation is a key agricultural source of water within the County, there is still a need to conserve water. Water conservation and allocation strategies are discussed below.

Conservation and Allocation Strategies

Water conservation is both a sound environmental practice and a necessity to ensure the viability of the County's agricultural industry in the future. It is also important with regard to the general difficulty and great expense of securing water allocation permits, which, given the recent enactment of the Highlands Water Protection and Planning Act and changing environmental conditions, can only be expected to intensify in the future.

There are numerous methods of water conservation and allocation, including:

- Improving soil's water-holding abilities by increasing its organic content;
- Selecting native and/or drought-tolerant plants; and
- Improving the efficiency and quality of water deliver systems.

Additional strategies are plentiful. A good resource for additional strategies is the Sustainable Agriculture Network, which is an affiliate of the USDA. The Highlands Regional Master Plan will also address this critical issue.

Waste Management Planning

Waste management planning is of critical importance to the County's agricultural community. Waste management planning efforts are led by the Passaic County Office of Recycling and Natural Resources, which emphasizes recycling, litter abatement, and hazardous waste.

³⁵ Office of the New Jersey State Climatologist at Rutgers University

The Office of Recycling and Natural Resources also publishes a significant amount of information regarding waste reduction on its extensive and thoughtful website (<http://www.passaiccountynj.org/Departments/naturalresources/index.htm>). In particular, this information includes a Guide to Recycled Products, and well as a Guide to Recycling.

It is noted that some agriculture-related products are not accepted by the County's recycling program. These include nursery plastics and containers, plastic mulch, tires, and other similar items, which would need to be privately removed from the site for recycling. This stresses the need for the agricultural community to reuse such items to the greatest extent possible in order to reduce the amount of waste they generate.

In addition to the above, it is important that the County's farmers plan for the proper management of animal waste on their operations. This issue is of particular concern with regard to mitigating the contamination of the County's waterways with fecal chloroform resulting from animal waste. Currently, the NJDEP oversees this issue by regulation with the rules of NJAC 7:14A. However, the NJDA has also proposed standards for animal waste management, which were published in the New Jersey Register on March 8, 2008 (<http://nj.gov/agriculture/rule/animalwasterule.pdf>). There are a total of five (5) general requirements of the NJDA requirements³⁶:

- No agricultural animal operation shall allow animals in confined areas to have uncontrolled access to State waters
- Manure storage areas shall be located at least 100 linear feet from State waters
- The land application of animal waste shall be performed in accordance with the principles of NJDA best practices
- No dead animals and related animal waste resulting from a reportable contagious disease or an act of bio-terrorism shall be disposed of without first contacting the State Veterinarian.
- Any person entering a farm to conduct official business related to the proposed rules shall follow bio-security protocol.

If passed, the animal waste management standards of the NJDA will be published at NJAC 2:91. It is noted that while these are an important set of rules, their applicability to Passaic County's agricultural operations is limited due to the woodlot management- and tree farm-focus of the County's agricultural industry.

Energy Conservation Planning

New technologies in wind and solar energy collection systems, combined with financial incentive programs from the State and other sources, have brought these alternative energy systems within the reach of many local farmers.

³⁶ Outlined at: <http://nj.gov/agriculture/divisions/anr/agriassist/animalwaste.html>

Passaic County recognizes the importance of these systems and the range of benefits they provide. This is evident in the County's Energy and Sustainability Committee, which strives to increase the level of energy conservation awareness and planning within the County. In addition, this Farmland Preservation Plan directs readers to the Rutgers Energy Institute, which offers a wealth of information on sustainable energy options to the public. The County Office of Recycling and Natural Resources also provides significant information on energy conservation planning-related topics.

With regard to the SADC's position on solar and wind energy, it is noted that while no formal policy exists, the SADC encourages the use and development of solar and wind energy systems on preserved farms. This support is typically conditioned upon the finding that the solar and wind energy systems support and do not impede upon the agricultural operation. Additionally, it is noted that the primary purpose should not be to sell energy back to the power grid.

Outreach and Incentives

The County of Passaic—through its various boards, committees, and departments—regularly distributes literature and information on conservation-oriented programs to the public. This information is highly accessible and typically on the Internet. For instance, the Passaic County Office of Natural Resource Programs maintains a website (<http://www.passaiccountynj.org/Departments/naturalresources/index.htm>) that has a wealth of information on recycling, litter abatement, and other conservation-minded programs.

Similar information is also disseminated at the State-level through such entities as the NJDEP's Division of Water Supply and the Board of Public Utilities, which may be able to provide information on various energy-saver rebate and similar financial programs, including the New Jersey CleanPower Choice Program. In addition, individual electric and water utility companies frequently distribute information on such rebate programs.

Agricultural Industry Sustainability, Retention and Promotion

The following topics are critical to the sustainability, retention, and promotion of the agricultural industry in Passaic County.

Right-to-Farm

Right-to-farm laws protect agricultural operations from nearby residents who may feel disturbed by normal farming operations such as noise, traffic, pesticide spraying, and dust. Right-to-farm laws also provide agricultural operations with a high level of protection against unnecessary ordinances and regulations that may conflict with or impede normal farming operations. Right-to-farm disputes are the jurisdiction of the local CADB, as stipulated in the Right-to-Farm Act at NJSA 4:1C-10.1, as well as in the SADC's regulations at NJAC 2:76-2.3.

The PCADB process of reviewing disputes and the issuance of site-specific agricultural management practices mirrors that of the SADC and has, over the years, received several requests for threshold determinations and the reviewing of management practices. In such cases, the concerned municipality or affected farmer will contact the County, at which point the concerned parties are invited to attend the next regular meeting of the PCADB. An application is then submitted by the farmer, reviewed by the PCADB and its attorney before a formal hearing is publicly announced and held. In most cases, a resolution on the matter is passed by the PCADB.

In order to provide increased support for the County's agricultural industry, this Farmland Preservation Plan encourages the adoption of right-to-farm ordinances within the County. Currently, none of the municipalities in Passaic County have adopted right-to-farm ordinances.

Farmland Assessment

In order to reduce the burden of property taxes for New Jersey's agricultural community, this Farmland Preservation Plan encourages support for—and the maximum implementation of—New Jersey's Farmland Assessment Program. Farmland assessment saves the County's agricultural community tremendous sums of money every year, and provides a strong incentive for the County's agricultural community to continue their operations in Passaic County.

To be eligible for farmland assessment, a landowner must hold a minimum of five acres that generates an annual minimum of \$500 in agricultural income. In addition, the land must have been actively farmed during the current and prior two tax years.

Permit Streamlining

With the adoption of this Farmland Preservation Plan, the County of Passaic notes its support for permit streamlining. The County of Passaic supports the streamlining of permitting and licensing for agricultural processes, on the basis that such streamlining creates a more favorable business climate for the agricultural industry and promotes its retention.

Agricultural Vehicle Movement

The New Jersey Division of Motor Vehicles issues license plates for use on agricultural machinery. These plates enable farm machinery to use public roadways in order to travel from farm-to-farm, provided that the vehicles travel only during daylight hours and are not driven for more than fifteen miles between farms. Agricultural vehicles that are unable to travel more than twenty miles per hour are exempt from all such provisions and do not require a license plate. While these provisions are effective support for the County's agricultural industry, it is recommended that individual municipalities include a specific provision describing the rights of agricultural vehicle movement in any right-to-farm ordinances that may be adopted.

Agricultural Labor Housing and Training

Housing for Passaic County's agricultural laborers is important to the health and growth of the industry. It is noted that anonymous surveys distributed at the November 13, 2007 meeting of the PCADB indicate that some of the County's farms include housing for agricultural laborers. This is positive news, as it facilitates the retention of laborers and the sustainability of the industry as a whole.

The survey results confirm that the laborer housing consists of individual units with separate kitchen and bathroom, as well as units with shared bathroom and kitchen facilities. Other types of housing, such as dormitories, may also exist within the County.

Training is also of critical importance to the County's agricultural industry. It is noted that the resources of the NJAES and the other organizations discussed within this Farmland Preservation Plan provide training or materials that may be used to develop training-related materials. When possible, training and train-related materials should be in the preferred language of the laborers, which is often not English.

Wildlife Management Strategies

Wildlife management is of particular importance to the retention of the County's agricultural industry. The loss of crops to deer and other species is often significant; the NJAES estimates the deer alone cause a loss of between five and ten million dollars (\$5,000,000 to \$10,000,000). Fencing, controlled hunting and air cannons are often effective wildlife management strategies.

Agricultural Education and Promotion

This section of the County's Farmland Preservation Plan reiterates the high value of the NJAES and other organizations focused on agricultural education. These organizations all have potential to be of service to the County and this Farmland Preservation Plan encourages their maximum use within the County.

In addition to the above, it is noted that the County's agricultural industry is promoted internally within the County by means of the PCADB and the separate Passaic County Agriculture Board. These organizations hold regular, advertised public meetings—often with the participation of an NJAES liaison—where the participation of the public is both welcomed and appreciated.

Coordination of Regulating Agencies

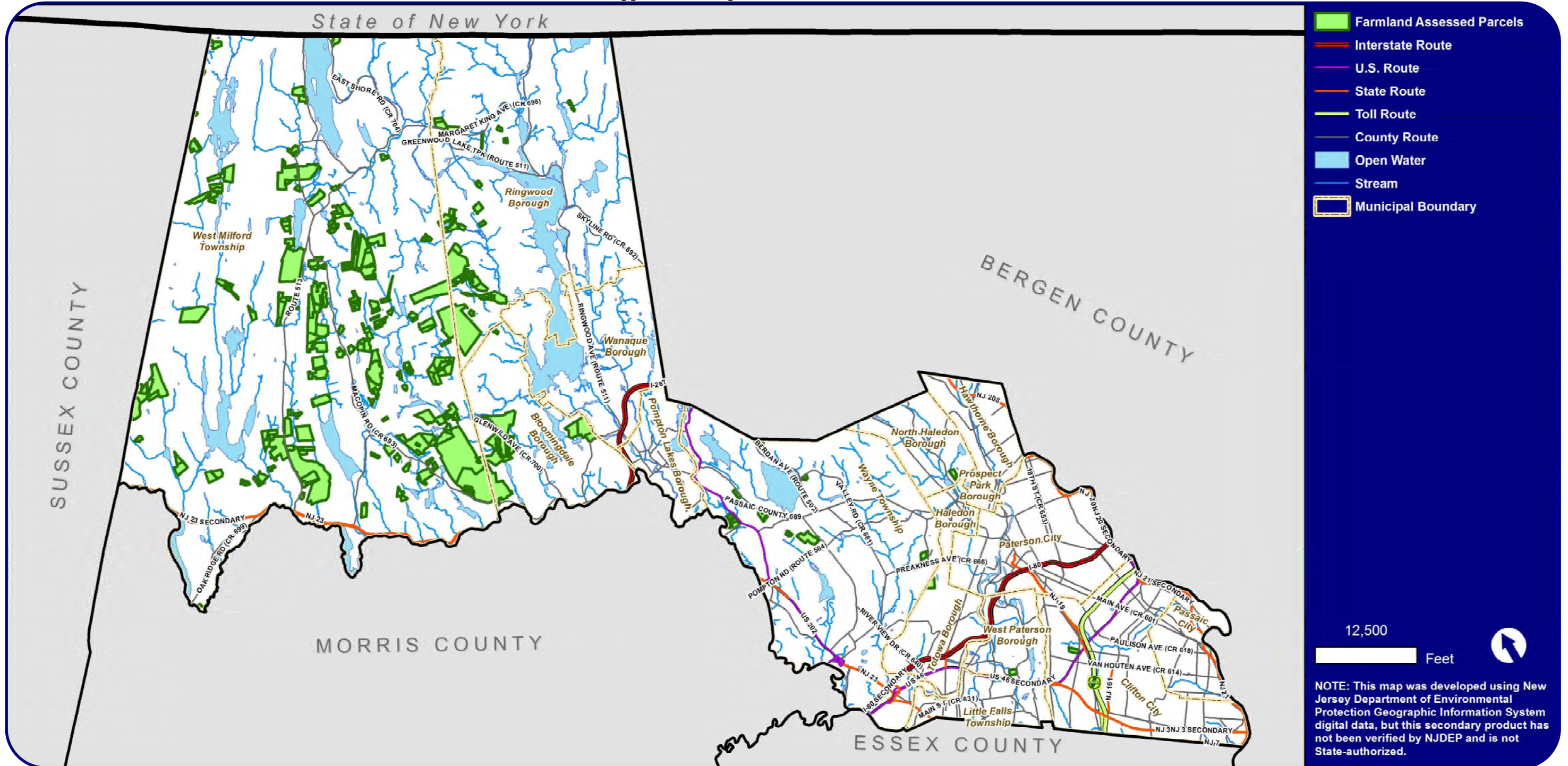
In order to improve the regulatory environment in which Passaic County's farmers operate, this Farmland Preservation Plan recommends increased coordination of regulating agencies with the PCADB and the separate Passaic County Agriculture Board. The goal of such coordination is multifaceted and is targeted primarily at:

- Increasing dialogue between regulating agencies and the farming community;
- Facilitating an improved understanding of the complexities of agribusiness in Passaic County and agricultural best management practices for the regulating agencies;
- Increasing the operational efficiency of the regulating agencies with regard to their oversight of regulated agricultural activities; and
- Providing a means of multilateral knowledge transfer between the individual regulating agencies and the County's farming community.

The intended result of such coordination is increasing the efficiency of Passaic County's farming operations. The County's agricultural community has indicated that improved coordination may create better operational conditions for Passaic County's farmers when composting and mulching operations are concerned, among other issues.

**Appendix A:
Map of Farmland Assessed Parcels**

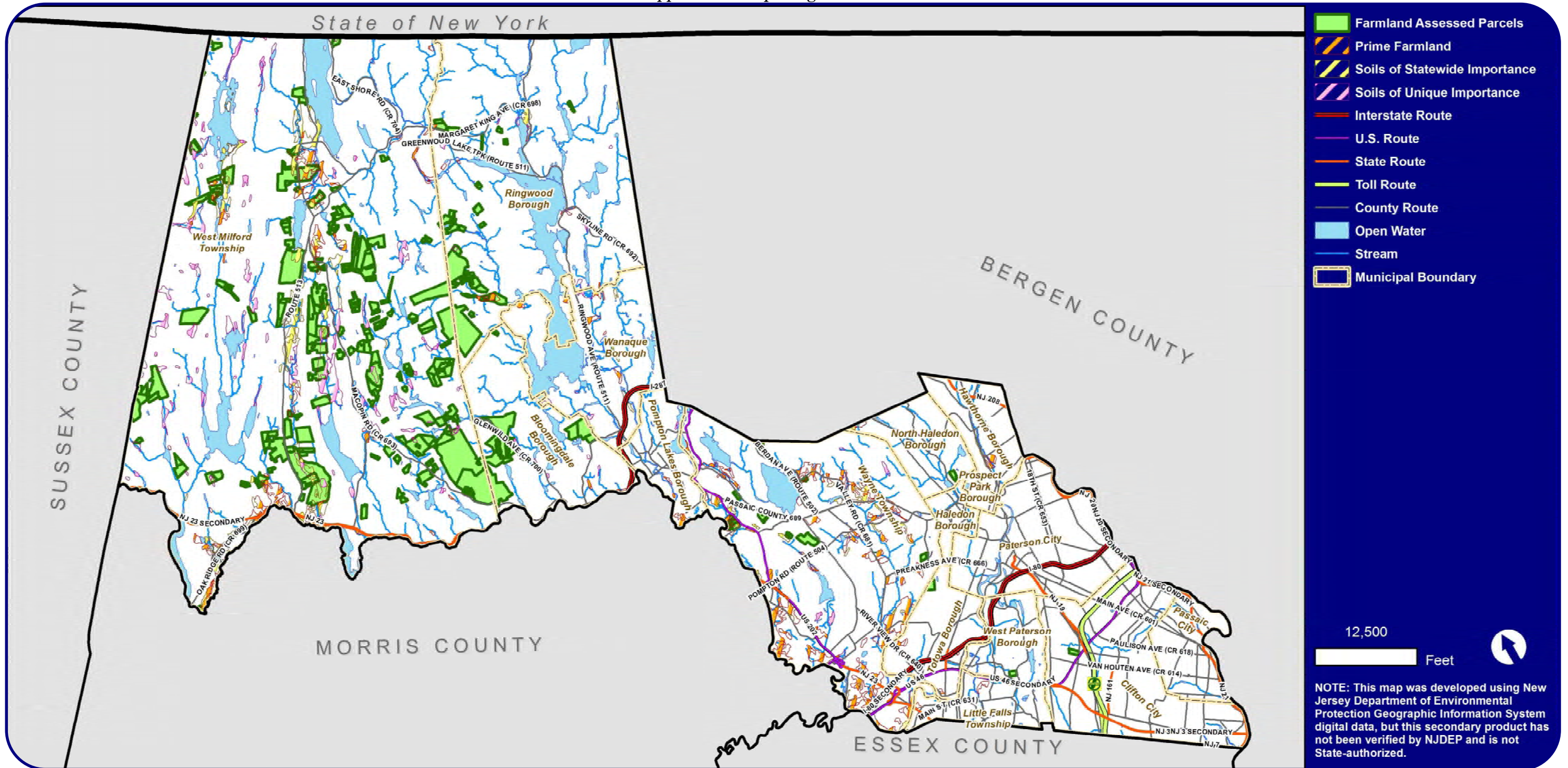
Appendix A: Map of Farmland Assessed Parcels



Source: NJDEP, MOD-IV (Accessed on November 1, 2007), Passaic County Planning Department, NJDOT

**Appendix B:
Map of Agricultural Soils**

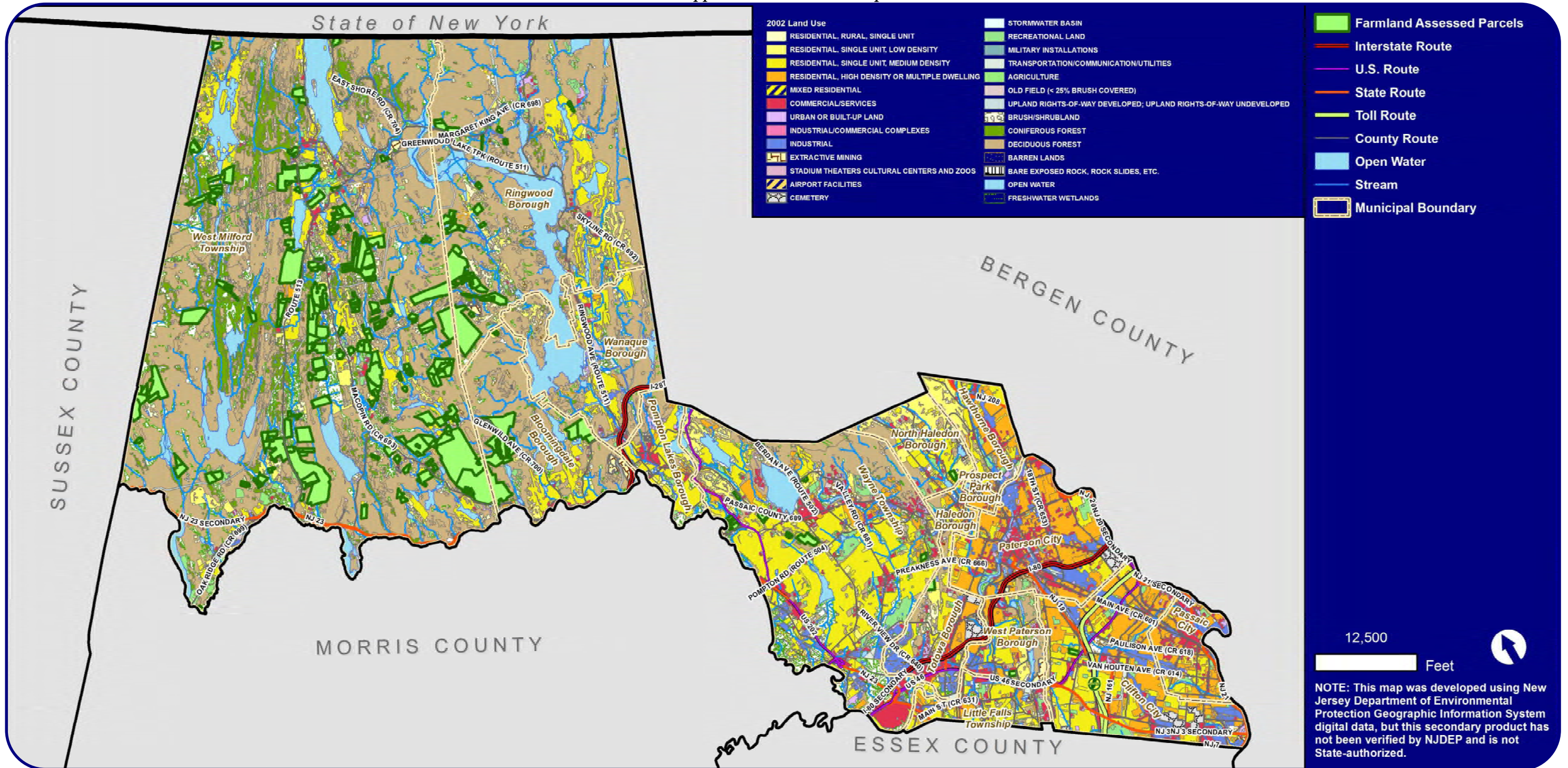
Appendix B: Map of Agricultural Soils



Source: NJDEP, MOD-IV (Accessed on November 1, 2007), Passaic County Planning Department, NJDOT

Appendix C: Land Use Map

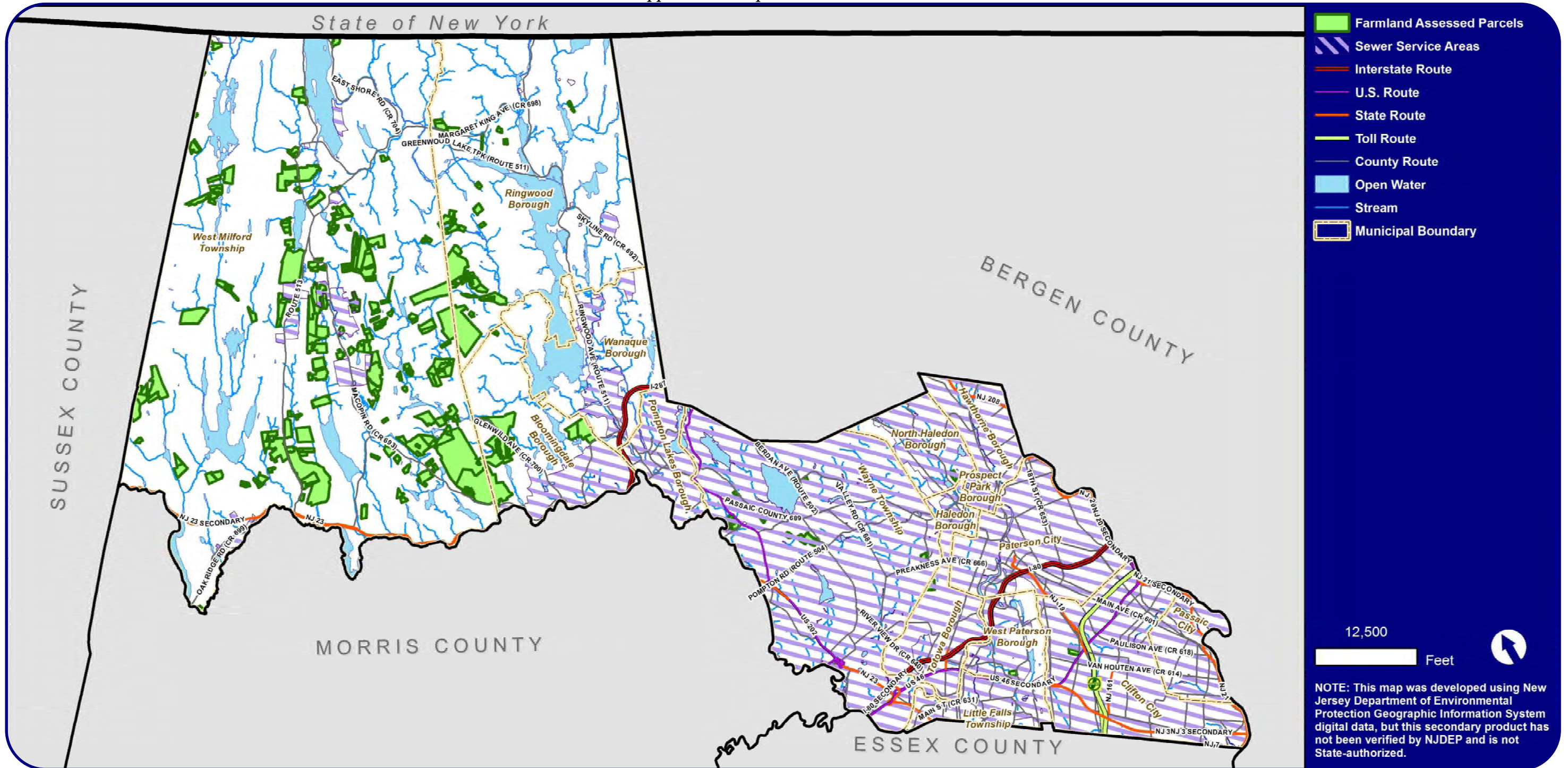
Appendix C: Land Use Map



Source: NJDEP, MOD-IV (Accessed on November 1, 2007), Passaic County Planning Department, NJDOT

**Appendix D:
Map of Sewer Service Areas**

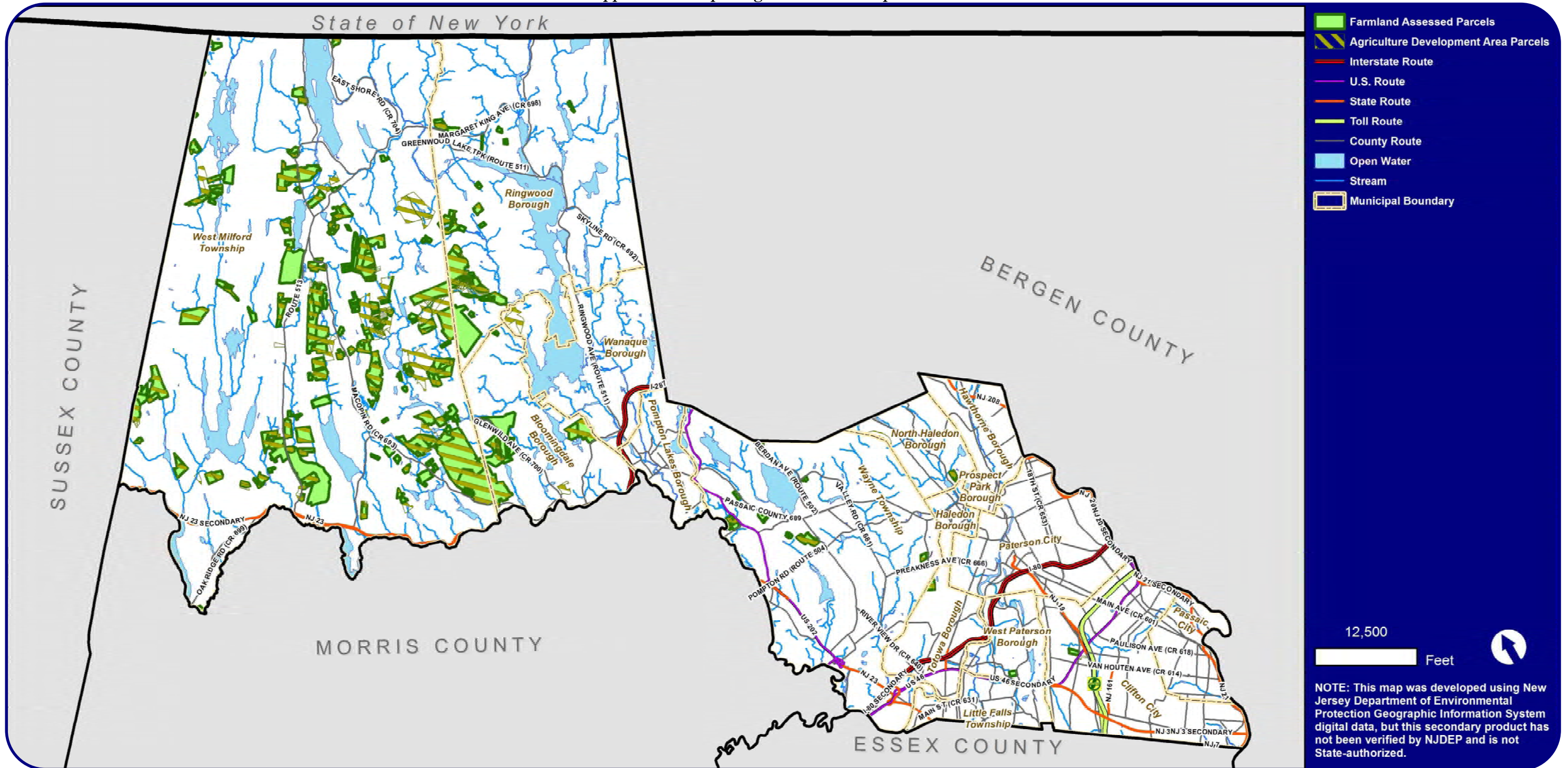
Appendix D: Map of Sewer Service Areas



Source: NJDEP, MOD-IV (Accessed on November 1, 2007), Passaic County Planning Department, NJDOT

**Appendix E:
Map of
Agricultural Development Areas**

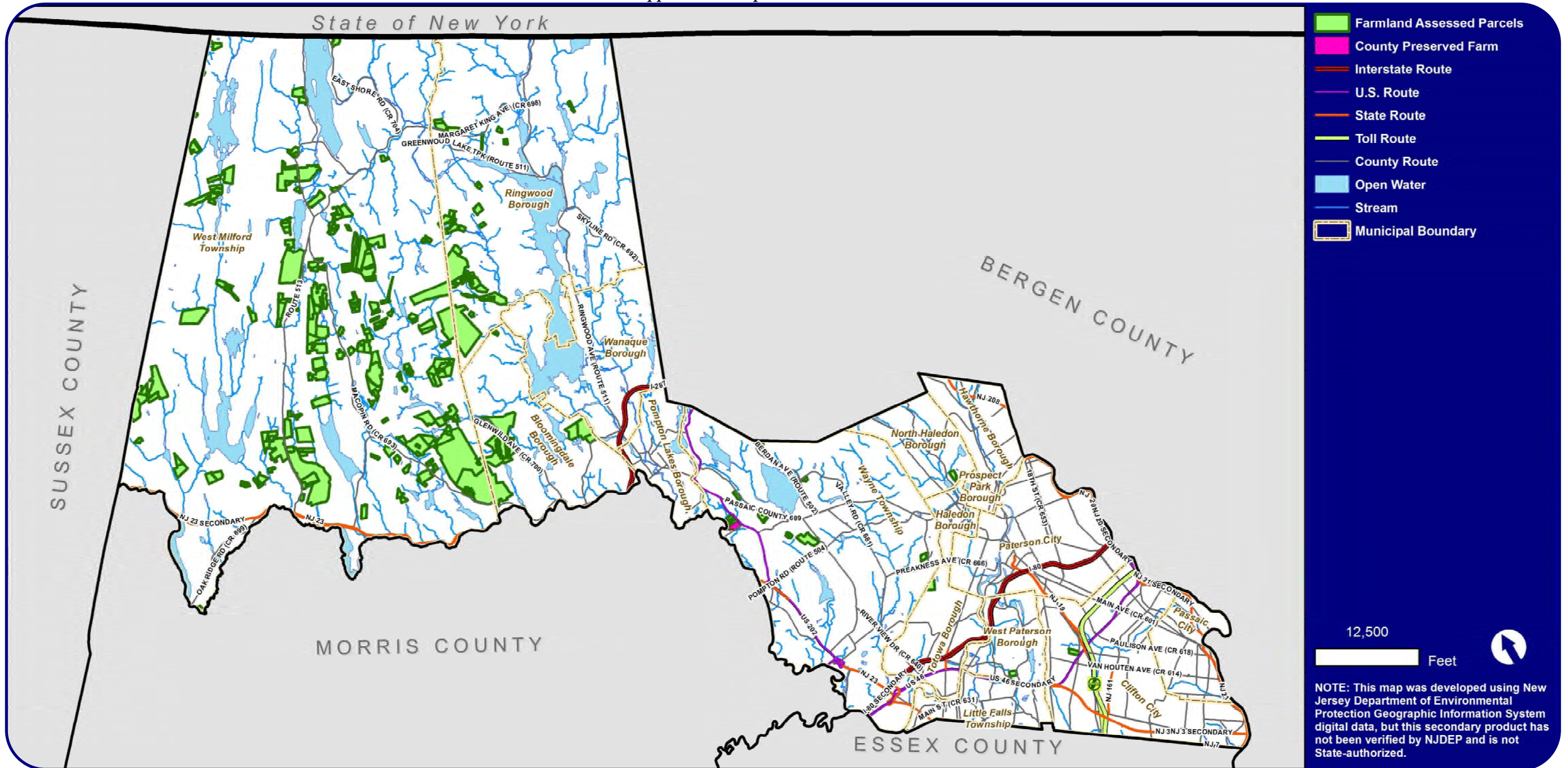
Appendix E: Map of Agricultural Development Areas



Source: NJDEP, MOD-IV (Accessed on November 1, 2007), Passaic County Planning Department, NJDOT

**Appendix F:
Map of Preserved Farmland**

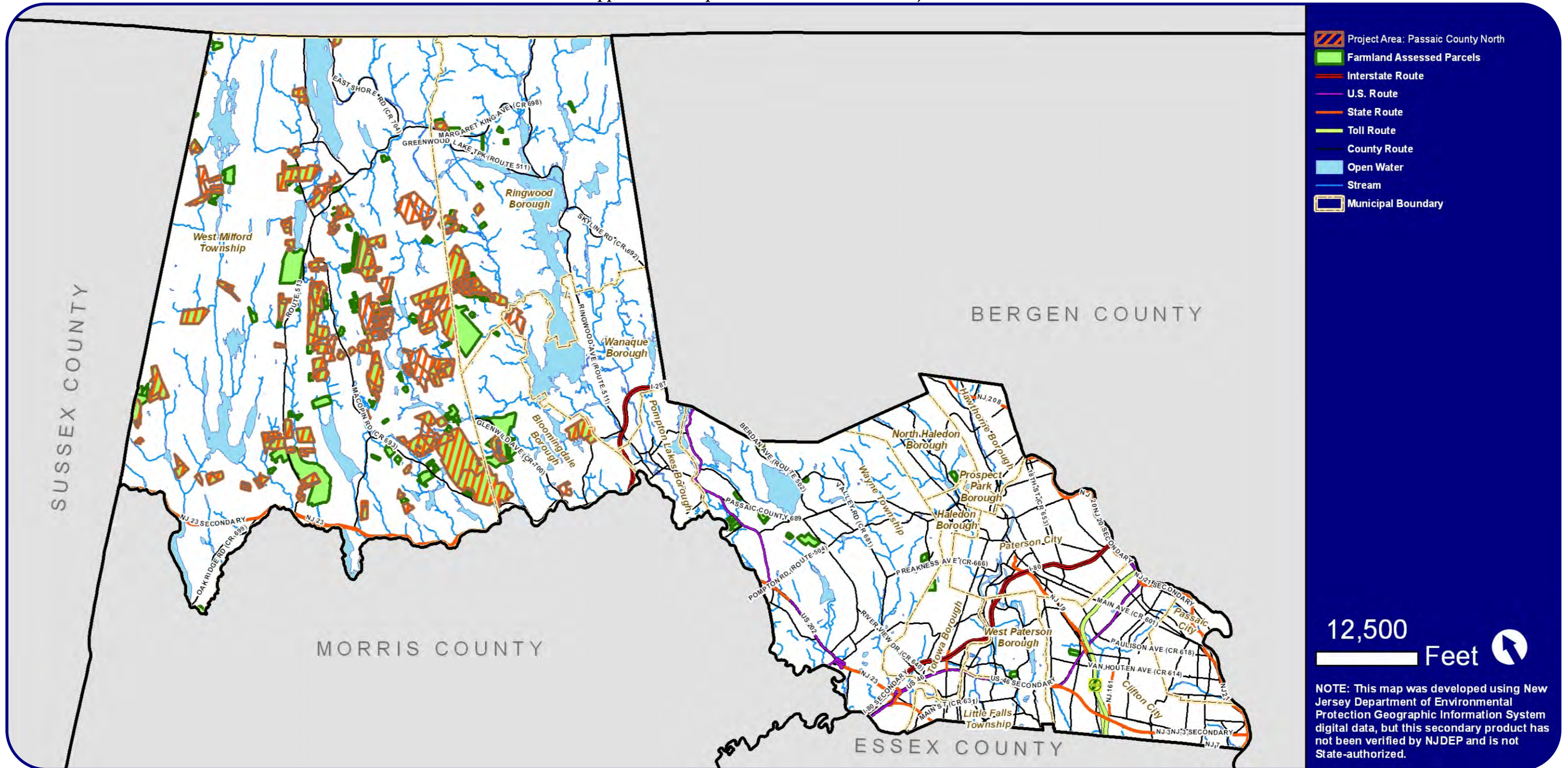
Appendix F: Map of Preserved Farmland



Source: NJDEP, MOD-IV (Accessed on November 1, 2007), Passaic County Planning Department, NJDOT

**Appendix G:
Map of Passaic County North
Project Area**

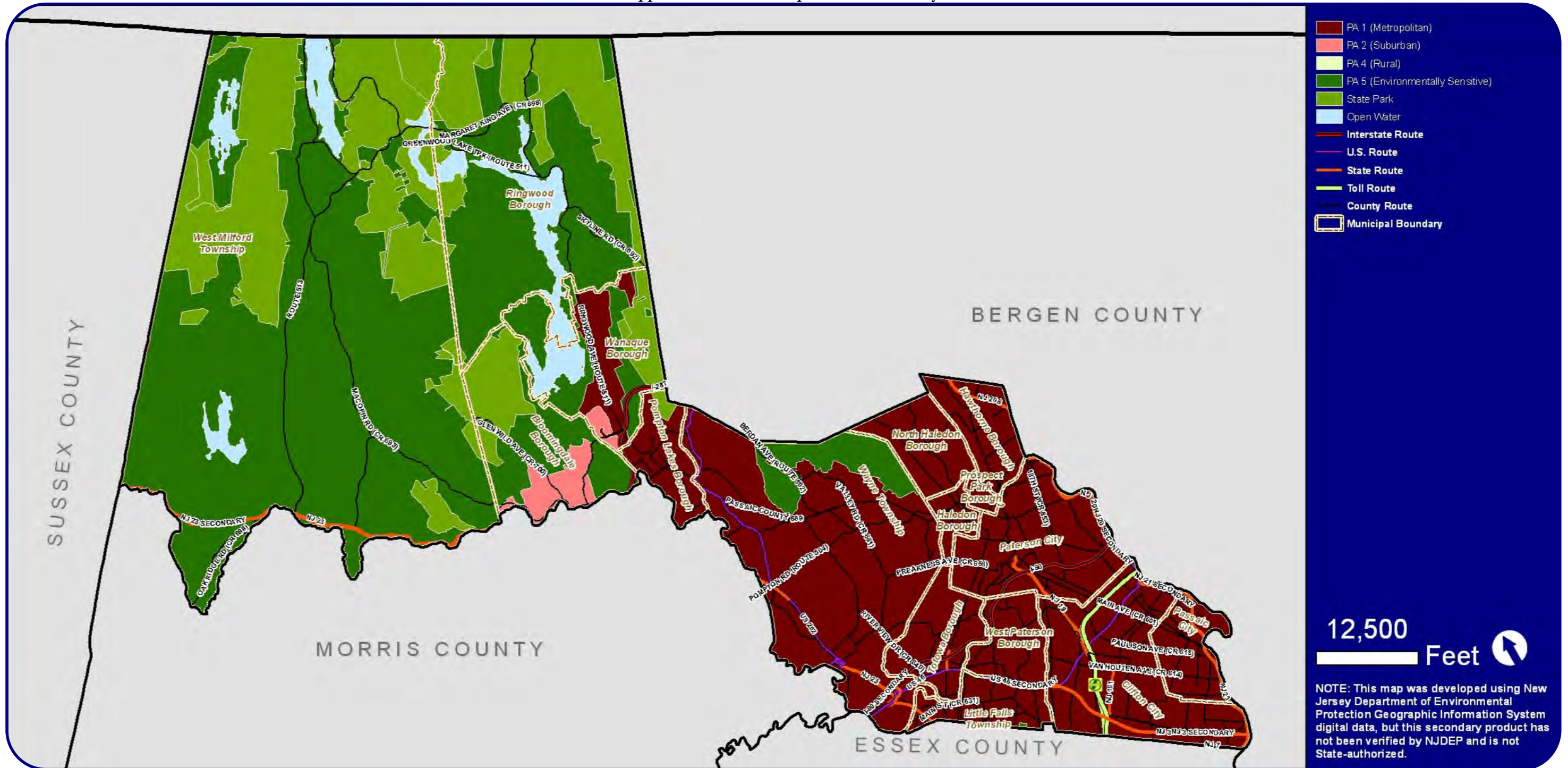
Appendix G: Map of Passaic County North Project Area



Source: NJDEP, MOD-IV (Accessed on November 1, 2007), Passaic County Planning Department, NJDOT

**Appendix H:
SDRP Map of Passaic County**

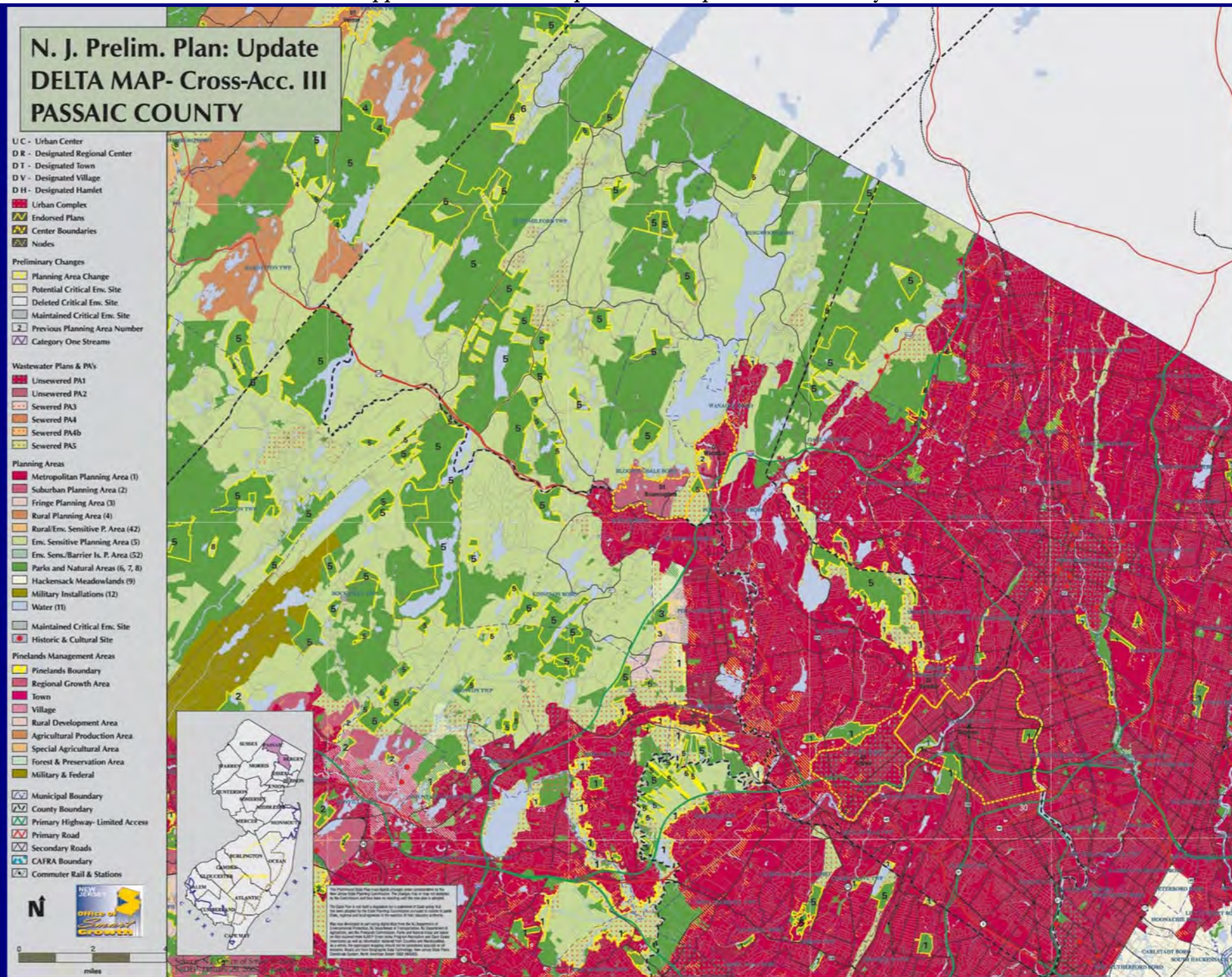
Appendix H: SDRP Map of Passaic County



Source: NJDEP, NJ Office of Smart Growth, Passaic County Planning Department, NJDOT

**Appendix I:
Cross Acceptance III
Map of Passaic County**

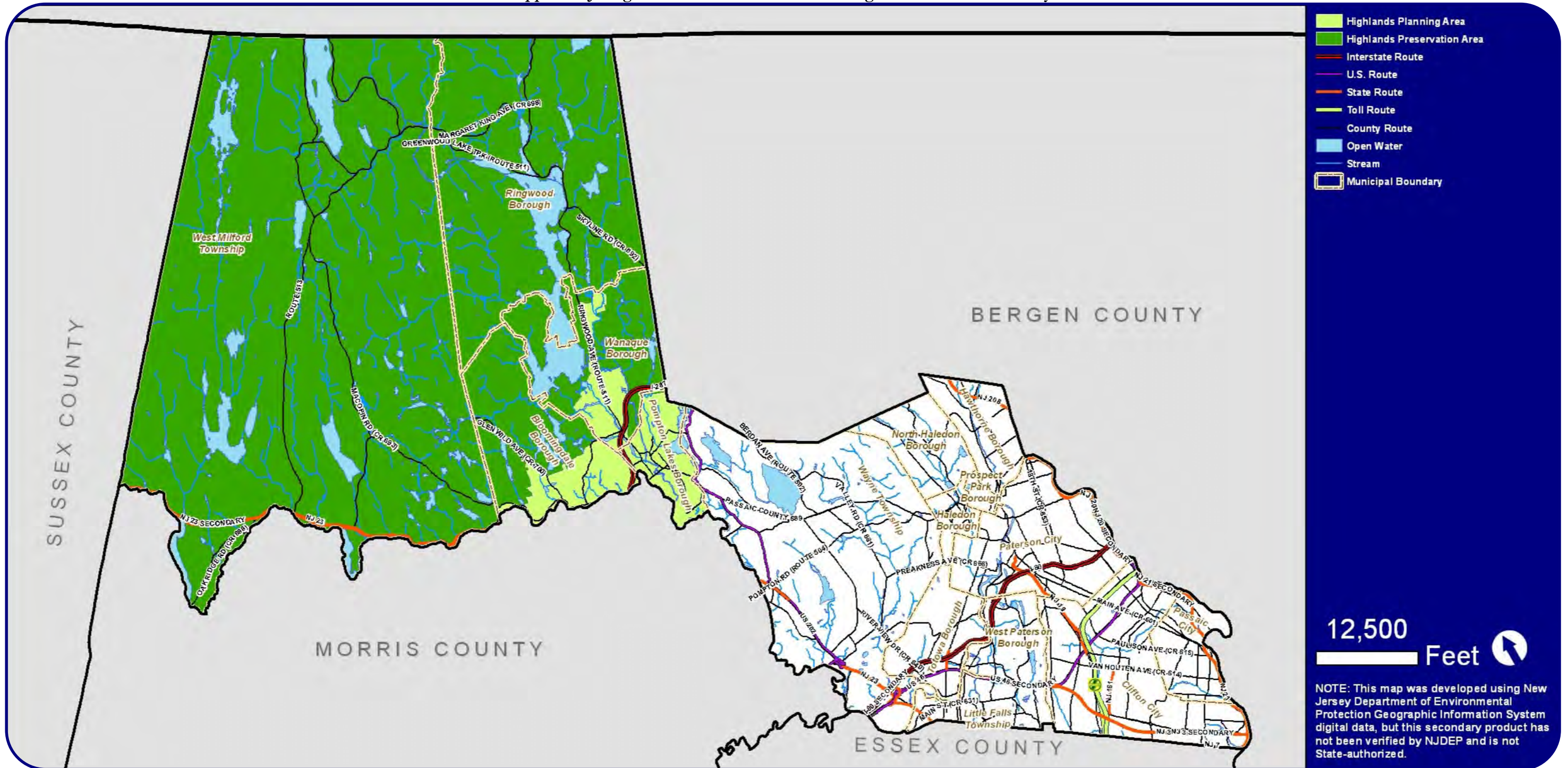
Appendix I: Cross Acceptance III Map of Passaic County



Source: NJ Office of Smart Growth

**Appendix J:
Highlands Preservation and Planning
Areas in Passaic County**

Appendix J: Highlands Preservation and Planning Areas in Passaic County

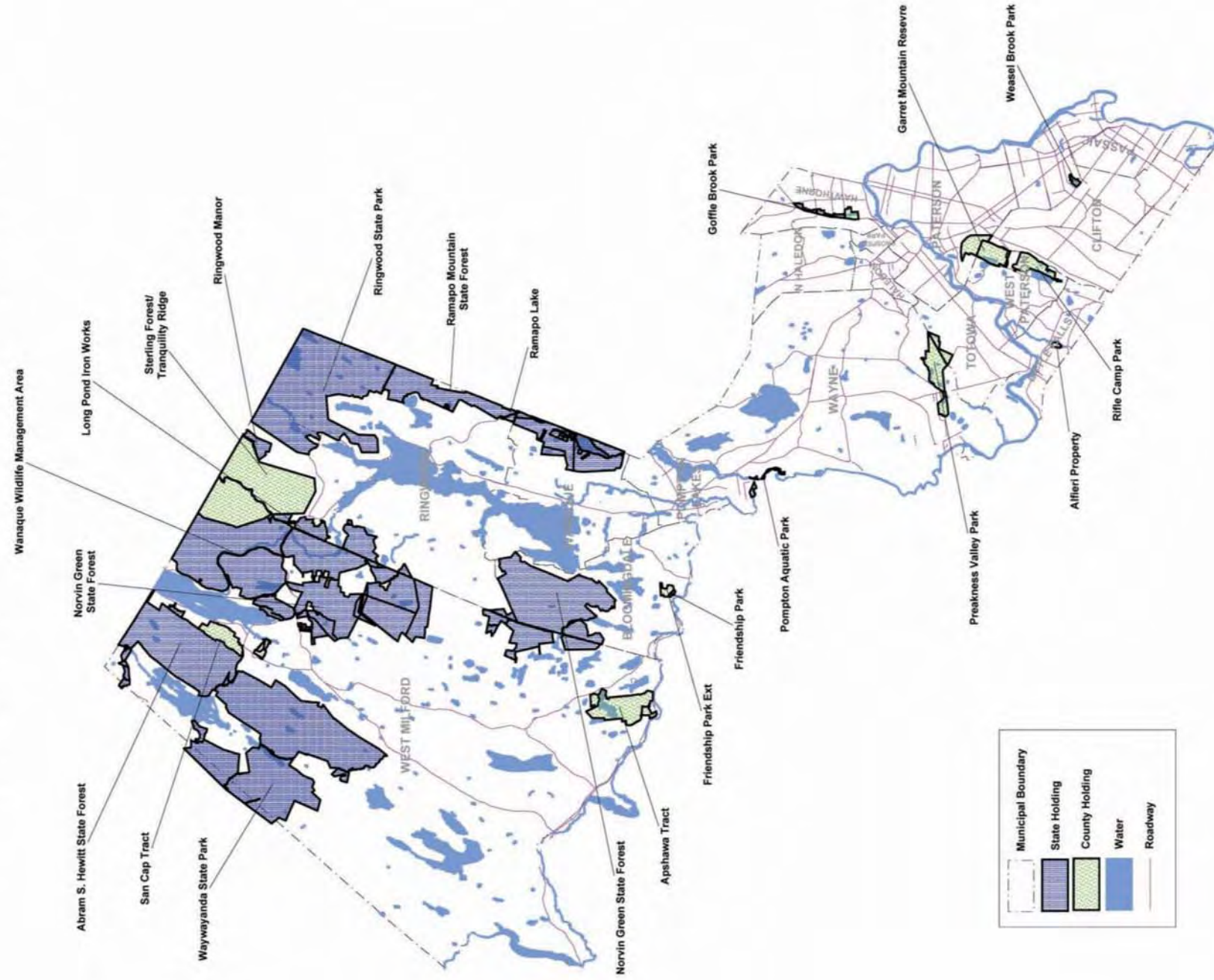


Source: NJDEP, New Jersey Highlands Council, Passaic County Planning Department, NJDOT

**Appendix K:
Passaic County Green Acres and Open
Space Inventory**

Appendix K: Passaic County Green Acres and Open Space Inventory

PASSAIC COUNTY NJ
Green Acres Open Space Inventory (ROSI)



COUNTY OF PASSAIC
Passaic County Planning Department 2007
P:\PROJECTS\Open_Space_Trust\Fund\ROSI\PC_ROSI_0406.wor

Open Space Inventory

Source: Passaic County Planning Department

Prepared by:



ASSOCIATES

11 Tindall Road

Middletown, NJ 07748

Phone: 732-671-6400

Fax: 732-671-7365

www.tandmassociates.com