
Bergen County Farmland Preservation Plan



June 2014

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TABLE OF CONTENTS

Section	Description	Page
<u>I. AGRICULTURAL LAND BASE</u>		
1.1	Location and Size of Agricultural Land Base	1-1
1.2	Farmland Characteristics	1-10
1.3	Farmland Soil Conditions	1-13
1.4	Irrigated Acres and Available Water Sources	1-17
1.5	Qualified Farmland Breakdown	1-18
1.6	Agricultural Trends.....	1-19
<u>II. AGRICULTURAL INDUSTRY-OVERVIEW</u>		
2.1	Crop/Production Trends.....	2-1
2.2	Market Value of Agricultural Products	2-10
2.3	Agricultural Support Services.....	2-12
2.4	Other Agricultural Related Industries.....	2-12
<u>III. LAND USE PLANNING CONTEXT</u>		
3.1	Compatible Open Space	3-1
3.2	Municipal Zoning	3-1
3.3	State Development and Redevelopment Plan	3-2
3.4	Current Land Use Trends.....	3-7
3.5	County Master Plan	3-9
3.6	Public Water Supply Service Areas.....	3-10
3.7	Sewer Service Areas	3-11
3.8	Municipal Master Plan and Zoning Overview	3-12
<u>IV. COUNTY FARMLAND PRESERVATION PROGRAM-OVERVIEW</u>		
4.1	Farmland Preservation Program.....	4-1
4.2	County Agricultural Development Areas.....	4-2
4.3	Farmland Preserved to Date by Program	4-3
4.4	Consistency with SADC Strategic Targeting Project.....	4-6
4.5	Coordination with County Open Space Initiatives	4-11
4.6	Eight Year Program.....	4-13
4.7	Funding Expended to Date by Program.....	4-13
4.8	Monitoring of Preserved Farmland	4-13
4.9	Coordination with Transfer of Development Rights Programs	4-13

V. FUTURE FARMLAND PRESERVATION

5.1 Preservation Goals..... 5-1

5.2 County Agricultural Development Areas..... 5-2

5.3 Project Areas 5-4

5.4 County Minimum Eligibility Criteria..... 5-12

5.5 Agricultural Resource Value 5-14

5.6 Farmland Preservation Funding Plan 5-18

5.7 Farmland Preservation Program Administration..... 5-21

5.8 Factors Limiting Farmland Preservation Implementation 5-23

5.9 County Policies Related to Farmland Preservation Applications..... 5-25

VI. ECONOMIC DEVELOPMENT

6.1 Consistency with NJDA Economic Development Strategies 6-1

6.2 Agricultural Industry Retention, Expansion & Recruitment Strategies..... 6-8

6.3 Marketing.....6-9

6.4 Businesses..... 6-14

6.5 Anticipated Agricultural Trends..... 6-14

6.6 Agricultural Support Needs..... 6-15

6.7 Agricultural Support Implementation 6-16

VII. NATURAL RESOURCE PROTECTION

7.1 Natural Resource Protection Coordination 7-1

7.2 Natural Resource Protection Programs 7-2

7.3 Water Resources..... 7-6

7.4 Waste Management Planning 7-8

7.5 Energy Conservation Planning 7-9

7.6 Resource Program Information 7-10

VIII. AGRICULTURAL INDUSTRY SUSTAINABILITY, RETENTION, AND PROMOTION

8.1 Sustainability 8-1

8.2 Existing Agricultural Industry Support 8-2

8.3 Farmland Assessment 8-4

8.4 Other Strategies 8-5

APPENDICES

Appendix A: Farmland Assessment Data

Appendix B: Project Area Summary Forms and Maps

Appendix C: Preliminary Target Farm Eligibility Summary (2008)

Appendix D: Garden State Greenways: Bergen County (New Jersey Conservation Foundation)

Appendix E: Agricultural Development Areas, Bergen County, 2014

LIST OF TABLES

Table	Description	Page
Table 1:	General Land Cover: Study Area	1-3
Table 2:	Census of Agriculture Summary Data.....	1-5
Table 3:	Farmland Assessment Applications	1-7
Table 4:	Qualified Farmland Acreage (1984-2007)	1-8
Table 5:	Farm Size Breakdown (Acres).....	1-11
Table 6:	Qualified Farmland	1-12
Table 7:	Important Farmland Soils	1-14
Table 8:	Important Farmland Soils-Qualified Farms	1-14
Table 9:	Farmland Soils Classification	1-16
<u>Table 10:</u>	<u>Qualified Farmland Classification</u>	<u>1-18</u>
Table 11:	Field Crop Acreage Trend (1984-2011)	2-1
Table 12:	Vegetable Crop Acreage Trend (1984-2011).....	2-2
Table 13:	Livestock Data Trend (1984-2011).....	2-5
Table 14:	Fruit/Berry Crop Acreage Trend (1984-2011).....	2-7
<u>Table 15:</u>	<u>Nursery Crop Acreage Trend (1984-2011).....</u>	<u>2-8</u>
Table 16:	Projections of Total Populations Bergen County/New Jersey (2010 to 2030) ...	3-7
Table 17:	Housing Units Authorized (1990-2010).....	3-8
<u>Table 18:</u>	<u>Land Value Data.....</u>	<u>3-15</u>
Table 19:	Agricultural Lands Preserved by County	4-1
Table 20:	Agricultural Lands Preserved by Bergen County Municipality	4-2
Table 21:	Preserved Farmland Bergen County	4-4
<u>Table 22:</u>	<u>Soil Productivity Summary-Project Areas/Target Farms</u>	<u>4-6</u>
Table 23:	Ranking Criteria.....	5-17
<u>Table 24:</u>	<u>Estimated Preservation Costs.....</u>	<u>5-21</u>

LIST OF CHARTS& GRAPHS

	Description	Page
Graph 1-1	Bergen County Farmland Acreage (Census).....	1-9
Graph 1-2	Bergen County Qualified Farmland Acreage	1-9
Chart 1-3	Bergen County Farm Parcel Size (2002-2012)	1-10
Graph 1-4	Bergen County Farm Size (2012)	1-10
Chart 1-5	Qualified Farmland Breakdown Trend (1984-2007).....	1-18
Chart 2-1	Market Value of Agricultural Products Sold	2-15
Graph 3-1	Easement Acquisition Cost (2002-2014)	3-15
Chart 5-1	Bergen County Open Space Trust Fund Tax Collected (1999-2013)	5-19
Chart 5-2	Bergen County Open Space Trust Fund Awards by Category (1999-2013) ...	5-19
Chart 5-3	Acquisition Costs Bergen County Preserved Farms To Date.....	5-20
Chart 6-2	Farms by Industry	6-2

*Bergen County Farmland Preservation Plan
June 2014*

LIST OF MAPS

Figure	Description	Page
Map 1:	Study Area and Special Resource Area Map	After 1-20
Map 2:	Existing Land Cover.....	After 1-20
Map 3:	Agricultural Soils Map.....	After 1-20
Map 4:	Open Space and Conservation Map.....	After 3-12
Map 5:	Existing Composite Zoning Map (2007)	After 3-12
Map 6:	Preliminary State Development and Redevelopment Plan Map	After 3-12
Map 7:	Water Supply Map	After 3-12
Map 8:	Sewer Service Areas Map	After 3-12
Map 9:	Project Area Acquisition Map.....	After 5-27

I. AGRICULTURAL LAND BASE

This section of the Farmland Preservation Plan provides a general overview and description of the agricultural land base over the last 20 years based on available data.

1.1 LOCATION AND SIZE OF AGRICULTURAL LAND BASE

According to historical data, the Bergen County agricultural land base peaked at 123,160 acres in 1860 or 78% of the entire county. By 1940, this agricultural land base had declined to less than 16,000 acres or 10% of the County.

After World War II, land development in Bergen County exploded due to the proximity of the County to New York City and the pent-up housing demand. A significant portion of this land development took place on active farmland.

The land in farms in Bergen County was recorded as encompassing almost 12,000 acres in 1954, about 6,000 acres by the mid-1960s, and about 3,000 acres by the mid-1970s. From 1982 to 1997, the land in farms in Bergen County remained at the same level in the 2,600 - 2,700-acre range. However, after 1997, farmland declined to about 1,280 acres in 2002 and to 1,177 acres in 2007 according to the most recent US Census of Agriculture. (See Graph 1-1: Bergen County Farmland Acreage on page 1-9.) Farmland accounts for about 7 tenths of 1% of the land area of Bergen County.

For the purposes of this discussion, the term “farms” is used to refer to tracts that are qualified under the state of New Jersey’s Farmland Assessment Act. While there may be private open land that could be qualified in the future and there may be undersized tracts that could be combined to meet the minimum acreage standard, the existing qualified farms basically represent the lands that are available for farmland preservation.

According to data available in 2012, 54 tracts of land in the County qualified for farmland assessment. Some of these tracts were used for viable farming operations while others were managed to achieve the minimum qualification standards necessary for farmland assessment.

The remaining farms in Bergen County can be considered an endangered land use regardless of their location as well as a bit of an anachronism. Virtually all of the farms in the County are under extreme land conversion pressures. The only reason that farms continue to exist in Bergen County is due to a conscious decision of the landowners to continue an activity that produces valuable agricultural products.

There are several sources of data regarding the agricultural land base including municipal farmland assessment data and the Census of Agriculture that are discussed in this section. While all of the sources provide a consistent description of the agricultural land base, there are minor differences based on the source of the specific data. In addition, data from Bergen County property tax listings for farmland property classifications was also reviewed. Lastly, data submitted by farmland property owners on municipal Farmland Assessment Applications property owners is inconsistent or incomplete. For these reasons, information from one source should not be combined or compared with data from another source.

1.1.1 Study Area

Bergen County is the largest county in New Jersey and is typified by urban/suburban land development patterns. Since there are no qualified farms south of Paramus, the study area for the County Farmland Preservation Plan is the northern part of the County as shown on **Map 1: Study Area**. The defined study area for this Farmland Preservation Plan encompasses all or portions of 36 municipalities of which 15 municipalities have at least one qualified farmland tract. The study area encompasses about 102,000 acres or roughly two-thirds of the entire County.

Map 1 displays the location and size of the qualified farmland tracts in the County and demonstrates that, with the exception of the Ramapo River Valley, the remaining farms tend to be located in a dispersed pattern throughout the northern part of the County.

Map 1 also indicates that the northwestern part of Bergen County is within both the Highlands Preservation Area and the Highlands Planning Area, which is a Special Resource Area of the state. Land development in this area is regulated by the Highlands Commission.

1.1.2 Existing Land Use/Land Cover Data

Map 2: Existing Land Use/Land Cover Map provides an overview of the existing land use patterns in the study area based on land cover data compiled by the NJDEP. **Map 2** illustrates the following:

- The primary land use in the study area is residential development of varying intensity;
- Commercial and industrial development in the study area follows a linear pattern that is directly related to major highways;
- Extensive woodlands are present along the western part of the County (Ramapo Mountains) and in the extreme eastern part of the County (Palisades);
- Expansive woodlands and wetlands are also located along major stream corridors within the study area.

Table 1 summarizes the generalized land use data for the Study Area based on this land cover mapping and indicates that about 62.5% of the Study Area is committed to developed or disturbed lands; 22.7% of the study area has been categorized as forested/scrub lands; 4.6% is dedicated to recreational lands; 7.4% is listed as potential wetlands; 2.1% is open water; and 0.6% is categorized as agricultural lands.

Table 1 also provides the land cover data for the Highlands and non-Highlands portions of the study area since there are distinct differences. In the Highlands area, the developed or disturbed land categories represent about 31.5% of the total land area, while in the non-Highlands portion of the study area, developed lands constitute 70% of the total land area. Undeveloped forested and scrub lands represent about 56% of the landscape in the Highlands communities compared to only about 13% in the non-Highlands communities. Agricultural land is listed as 0.4 % of the landscape in the Highlands and 0.7% in the non-Highlands area. It should be noted that agriculture, particularly pastureland, is often underestimated in land cover analyses since they are based on aerial photo interpretation.

Table 1
Bergen County
General Land Cover; Study Area

Land Cover Category	Study Area		Highlands		Non-Highlands	
	Acres	Percent	Acres	Percent	Acres	Percent
Residential	51,765.6	50.7%	5,043.9	22.5%	46,721.7	58.6%
Commercial/Services	6,339.1	6.2%	651.6	2.9%	5,687.6	7.1%
Industrial	1,994.5	2.0%	627.5	2.8%	1,367.0	1.7%
Industrial/Commercial Complexes	326.7	0.3%	0.0	0.0%	326.7	0.4%
Other Urban land (cemeteries)	1,946.7	1.9%	584.2	2.6%	1,362.5	1.7%
Transportation/Communications	1,226.4	1.2%	116.3	0.5%	1,110.0	1.4%
Altered/Barren/Mined Lands	187.4	0.2%	70.6	0.3%	116.8	0.1%
Recreational Land	4,729.4	4.6%	455.3	2.0%	4,274.1	5.4%
Forest/Brushland/Scrubland	23,224.4	22.7%	12,519.0	55.9%	10,705.4	13.4%
Wetlands	7,582.8	7.4%	1,728.4	7.7%	5,854.4	7.3%
Lakes/open Water	2,112.0	2.1%	497.7	2.2%	1,614.2	2.0%
<i>Agriculture</i>	<i>651.4</i>	<i>0.6%</i>	<i>98.3</i>	<i>0.4%</i>	<i>553.1</i>	<i>0.7%</i>
Totals	102,086.3	100.0%	22,392.7	100.0%	79,693.6	100.0%

1-1

1.1.3. Census of Agriculture

Table 2 summarizes the data from the Census of Agriculture that is conducted every five years and compares certain key statistics and trends for New Jersey and Bergen County. Pertinent conclusions from the US Census of Agriculture for 2012 data are discussed below.

New Jersey

Land in Farms. New Jersey had 1.67 million acres of land in farms in 1954, but this land area declined to about 715,000 acres by 2012. While the census data indicate that the conversion rate was slower from the late 70s to the early 90s, the acreage loss from 1997 to 2012 in the state was more than 100,000 acres.

Number of Farms. The number of farms in the state has settled to just over 9,000, after having peaked at 10,327 in 2007. The average size farm has continued to decline.

Harvested Cropland. Harvested cropland has steadily declined to about 409,000 acres in 2012 or about 57% of the total land in farms.

Market Value. The total estimated market value of agricultural products in New Jersey was approximately \$1.007 billion in 2012 or an average of \$1,408 per acre.

Bergen County

Land in farms. Bergen County had almost 12,000 acres of land in farms in 1954, which declined to 6,000 acres by the mid-1960s, and about 3,000 acres by the mid-1970s. From 1982 to 1997, the land in farms remained at the same level in the 2,600 to 2,700 acre range. After 1997, however, farmland declined to 1,177 acres in 2007. Surprisingly, the 2012 data indicate the County's land in farms *increased* to 1,432 acres. *Graph 1-1* illustrates the long-term trend in farmland acreage in Bergen County based on US Census of Agriculture data.

Farm size. The average farm in Bergen County declined from 22 acres in 1982 to 13 acres in 2007. Surprisingly, the average size of a farm *increased* to 24 acres in 2012. The median size of a farm also ticked up to 7 acres after having been at 6 acres between 1997 and 2007. The probable conversion to non-agricultural use of a number of small-acre farms probably contributed to these statistical attributes.

Market Value. The market value of agricultural products sold was \$6.5 million in 1982 and increased to \$9.0 million in 1997. It then declined to \$7.6 million in 2002, but rose back to \$8.7 million. In 2012, the market value of products sold drastically declined to just under \$5.2 million. The average market value of agricultural products sold is \$3,628 per acre compared to \$7,386 per acre in 2007 – a decline of 50%. As noted above, the average market value of products sold for the entire state was reported to be \$1,408 per acre. Thus, Bergen's per-acre market value of products sold is about 1 ½ times that of the state's.

Table 2						
Bergen County Farmland Preservation Plan						
U.S. Census of Agriculture Summary Data						
	1987	1992	1997	2002	2007	2012
New Jersey						
Number of farms	9,032	9,079	9,101	9,924	10,327	9,071
Change from Prior Census		0.5%	0.2%	9.0%	4.1%	-12.2%
Land in farms, acres	894,426	847,595	832,600	805,682	733,450	715,057
Change from Prior Census		-5.2%	-1.8%	-3.2%	-9.0%	-2.5%
Average Size of Farm, acres	99	93	91	81	71	79
Change from Prior Census		-6.1%	-2.2%	-11.0%	-12.3%	11.3%
Market Value of Products (Millions)	\$496.0	\$533.0	\$697.4	\$749.9	\$986.9	\$1,006.9
Change from Prior Census		7.5%	30.8%	7.5%	31.6%	2.0%
Total Cropland, acres	642,534	623,466	594,928	547,668	488,697	456,751
Change from Prior Census		-3.0%	-4.6%	-7.9%	-10.8%	-6.5%
Harvested Cropland, acres	484,805	491,518	485,187	444,670	415,542	408,993
Change from Prior Census		1.4%	-1.3%	-8.4%	-6.6%	-1.6%
Irrigated Land, acres	91,208	80,409	92,965	96,893	95,277	88,376
Change from Prior Census		-11.8%	15.6%	4.2%	-1.7%	-7.2%
Bergen County						
Number of farms	126	127	121	91	89	60
Change from Prior Census		0.8%	-4.7%	-24.8%	-2.2%	-32.6%
Land in farms, acres	2,596	2,636	2,633	1,283	1,177	1,432
Change from Prior Census		1.5%	-0.1%	-51.3%	-8.3%	21.7%
Average Size of Farm, acres	21	21	22	14	13	24
Change from Prior Census		0.0%	4.8%	-36.4%	-7.1%	84.6%
Median Farm Size, acres			6	6	6	7
Change from Prior Census			0.0%	0.0%	0.0%	16.7%
Market Value of Products (Millions)	\$6.1	\$6.6	\$9.0	\$7.6	\$8.7	\$5.2
Change from Prior Census		8.2%	36.4%	-15.6%	14.5%	-40.2%
Total Cropland, acres	1,058	1,097	1,379	660	561	494
Change from Prior Census		3.7%	25.7%	-52.1%	-15.0%	-11.9%
Harvested Cropland, acres	709	606	1,192	415	326	422
Change from Prior Census		-14.5%	96.7%	-65.2%	-21.4%	29.4%
Irrigated Land, acres	339	256	252	170	196	94
Change from Prior Census		-24.5%	-1.6%	-32.5%	15.3%	-52.0%

Source: USDA, 2012 Census of Agriculture

1.1.4. Qualified Farmland Data

1.1.4.1 Qualified Farmland Trend

The following text relies on data contained in the state of New Jersey's Division of Taxation's *49th Report of Data from FA-1 Forms for 2012 Tax Year*, published in November 2012.

Table 3, on the next page, indicates the recent trend in land tracts qualified under the Farmland Assessment Act in Bergen County. In 2001, there were 73 tracts in 22 municipalities that were qualified under this Act. Eleven years later in 2012, the overall number of qualified tracts had declined to 58, but this is actually 5 more than the low of 53 reported in 2006. Located in only 15 towns, this is 1/5th less from 2001. (Several of these tracts are under common ownership but cross over municipal boundaries.) Overall, 15 farmland owners that qualified in 2001 no longer existed in 2012 due to conversion to other land uses. However, 5 "new" properties qualified as farmland off the County's low of 53 reported in 2006.

Currently, there are qualified farms in only 15 of the County's 70 municipalities, which is equivalent to a bit more than 21%. Four of these municipalities have only one qualified farm remaining. In other words, only 11 municipalities in the County have multiple qualified farms and more than 70% of the qualified farms (41) are located in only five of the County's municipalities (Closter, Franklin Lakes, Mahwah, Oakland, and Saddle River). Collectively, these five towns also contain 83% of the farmland acreage. In some cases, there is a slight difference on the number reported by the SADC and the data received from the New Jersey Farmland Assessment data.

Table 3 also summarizes the acreage of qualified farmland in each municipality in 2012 and indicates that the acreage by community is relatively low. Two of the 15 municipalities with qualified farmland have less than 10 acres of farmland. Eight municipalities have more than 10 acres but less than 50 acres. Four municipalities have between 50 and 100 acres and three have more than 100 acres of qualified farmland. In fact, at 464 acres, 43% of the qualified farmland in the County is located in the Township of Mahwah.

1.1.4.1 Qualified Farmland Acreage

Table 4, on the second page following, indicates the trend in the acreage committed to agricultural use in Bergen County over the last 27 years. According to farmland assessment data, the total land committed to agricultural use in 1984 was 3,194 acres. This acreage declined to 2,338 by 1991 and to its low of 807 acres by 2006 – a loss in farmland of almost 75%. However, since 2006, farmland acreage has actually increased by over 200 acres, or 25%!

It should be noted that certain corrections were made such as the prior misallocation of farmland in Wyckoff Township to Franklin Lakes due to the fact that one major farm crosses the municipal boundary. The difference in acreage between Tables 3 and 4 in 2012 is that **Table 4** indicates the land committed to agricultural use and **Table 3** indicates the total land under farmland assessment.

Table 4 also indicates changes in specific municipalities. In general, municipalities have experienced decreases in farmland. Surprisingly, though, several have shown an increase. For example, Mahwah Township has added 89 acres of farmland since 2006, an increase of 25%. Most dramatically over time, Oakland Borough's farmland has increased by more than 253% to 173 acres from its historic low of 49 acres in 1991. Recently, Saddle River Borough's farmland exploded by more than 400% from 18 acres in 2009 to 93 acres in 2012. Major declines were experienced in

Franklin Lakes, Old Tappan, Saddle River, and Woodcliff Lake Boroughs, and Wyckoff Township. The farmland acreage in a few communities such as Dumont, Emerson, and Hillsdale Boroughs has been steady due to the influence of a single farm.

Municipality	2001 Tax Year	2004 Tax Year	2005 Tax Year	2006 Tax Year	2007 Tax Year	2009 Tax Year	2012 Tax Year	2012 Acres
Allendale Borough	1	1	1	1	1	0	0	0
Carlstadt Borough	1	0	0	0	0	0	0	0
Closter Borough	5	5	6	4	5	6	6	47
Dumont Borough	1	1	1	1	1	1	1	7
Emerson Borough	1	1	1	1	1	1	1	6
Franklin Lakes Borough	9	8	8	7	7	7	7	89
Hillsdale Borough	2	2	2	2	2	2	2	23
Mahwah Township	13	14	15	12	14	16	16	464
Montvale Borough	6	6	5	4	3	3	3	38
Norwood Borough	1	1	1	1	1	1	1	14
Oakland Borough	6	7	7	6	5	5	6	179
Old Tappan Borough	3	2	2	2	2	2	2	22
Paramus Borough	3	3	3	3	3	3	3	31
Ramsey Borough	1	1	0	0	0	0	0	0
Ridgewood Village	1	1	0	0	0	0	0	0
River Vale Township	1	1	1	0	1	0	0	0
Saddle River Borough	6	5	5	5	5	3	6	106
Upper Saddle River Borough	1	0	0	0	0	0	0	0
Waldwick Borough	1	0	0	0	0	0	0	0
Washington Township	1	0	0	0	0	0	0	0
Woodcliff Lake Borough	7	5	4	3	3	3	3	18
Wyckoff Township	2	1	1	1	1	1	1	28
Totals	73	65	63	53	55	54	58	1072

Note: Acres are total acres under farmland assessment (rounded) as listed on FA-1 Forms.
Source: 49th Report of Data from FA-1 Forms for 2012 Tax Year, State of NJ, November 2012

Table 4

Qualified Farmland Acreage (1984-2012)

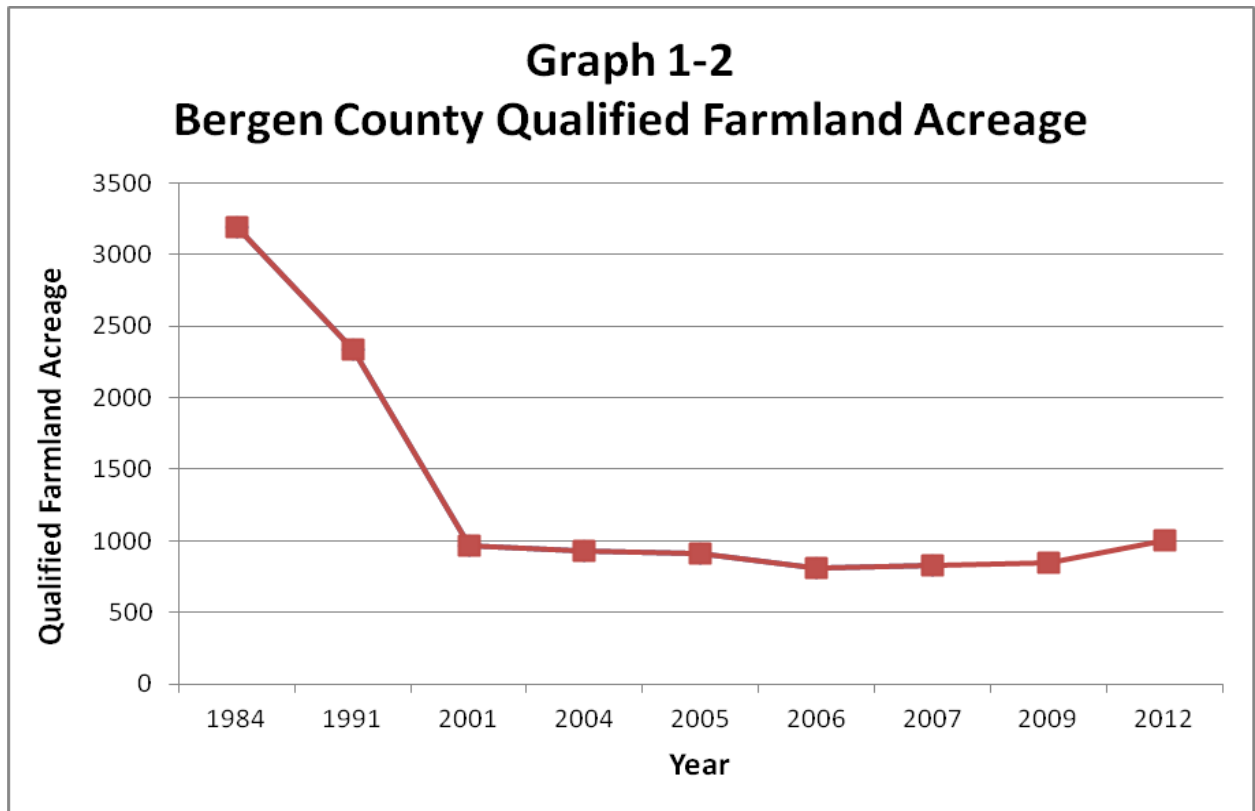
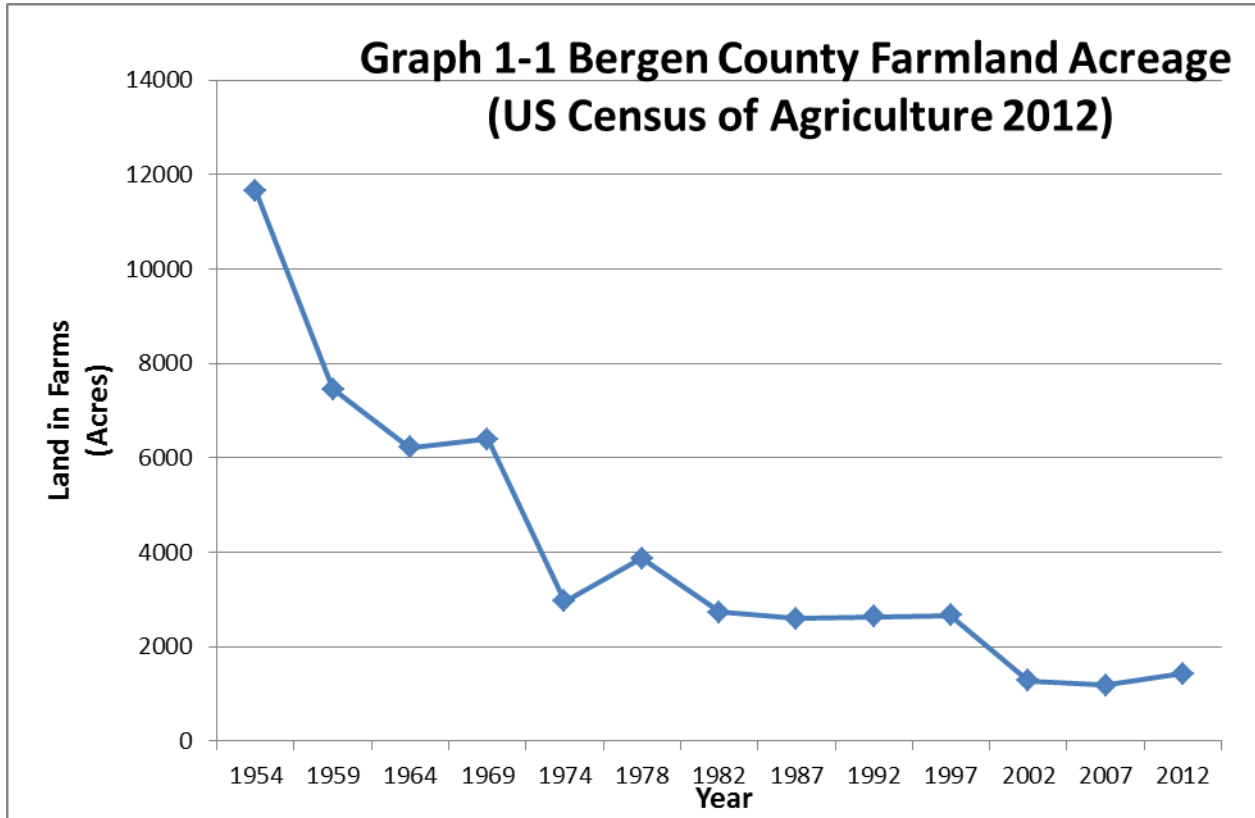
Municipality	1984 Tax Year	1991 Tax Year	2001 Tax Year	2004 Tax Year	2005 Tax Year	2006 Tax Year	2007 Tax Year	2009 Tax Year	2012 Tax Year
Allendale Borough	50	39	7	9	9	9	8	0	0
Carlstadt Borough	5	5	5	0	0	0	0	0	0
Closter Borough	21	37	40	31	45	35	39	46	45
Dumont Borough	7	6	6	6	6	6	6	6	6
Emerson Borough	5	5	5	5	5	5	5	5	5
Fair Lawn Borough	21	21	0	0	0	0	0	0	0
Franklin Lakes Borough	321	162	108	92	91	82	44	74	79
Garfield City	8	0	0	0	0	0	0	0	0
Hillsdale Borough	24	26	21	21	21	18	20	23	23
Mahwah Township	1973	1385	357	410	413	353	408	447	442
Montvale Borough	59	72	61	61	52	47	35	35	35
Norwood Borough	7	14	14	14	14	14	14	14	14
Oakland Borough	65	49	90	97	92	85	82	85	173
Old Tappan Borough	72	41	34	22	21	23	22	22	22
Paramus Borough	38	37	29	29	29	29	29	29	29
Ramsey Borough	21	23	7	6	0	0	0	0	0
Ridgewood Village	0	12	7	7	0	0	0	0	0
River Vale Township	10	5	5	5	5	0	5	0	0
Saddle River Borough	163	165	67	67	66	66	67	18	93
Upper Saddle River Borough	63	26	5	0	0	0	0	0	0
Waldwick Borough	4	5	6	0	0	0	0	0	0
Washington Township	3	3	3	0	0	0	0	0	0
Woodcliff Lake Borough	111	90	76	39	36	30	16	17	16
Wyckoff Township	143	110	11	5	5	5	26	26	26
Totals:	3194	2338	964	926	910	807	825	847	1008

Note: Table indicates agricultural use acreage only as reported on FA-1 Forms, Nov 2012.

Note: Montvale farmland assessment applications are under common ownership.

Note: Wyckoff Township farm acreage was reported under Franklin Lakes prior to 2007.

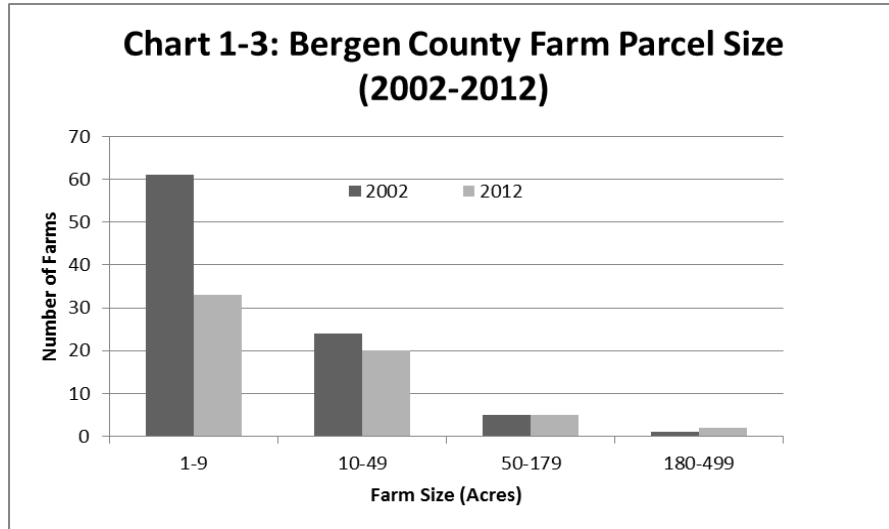
Bergen County Farmland Preservation Plan



1.2 FARMLAND CHARACTERISTICS

1.2.1 Average Farm Size

Chart 1-3 compares the historical breakdown in farm size in 2002 and 2012 as per the US Census of Agriculture.



Graph 1-4, below, indicates the current size of the existing farms as of 2012 via Farmland Assessment data.

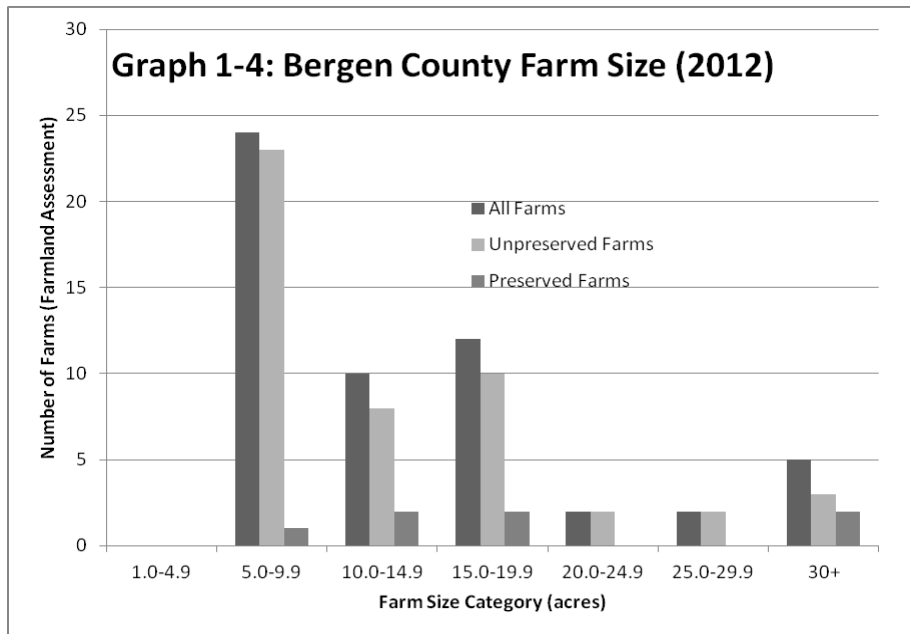


Table 5, below, using 2012 Farmland Assessment data, provides a detailed breakdown of the qualified farmland and compares the number of preserved and unpreserved farms.

Table 5: Breakdown – Number of Farms by Size

Farm Size (Acres)	All Farms	Unpreserved Farms	Preserved Farms
1-5	0	0	0
5-9.9	24	23	1
10-14.9	10	8	2
15-19.9	12	10	2
20-24.9	2	2	0
25-29.9	2	2	0
30-49.9	4	3	1
50+	1	0	1
Totals	55	48	7
Average size	17.8	13.4	47.3

The average size of a qualified farm in Bergen County is 17.8 acres. The average size of the preserved farmland in Bergen County is 47.3 acres due to two large farms. The average size of qualified unpreserved farmland is 13.4 acres. As *Table 5*, above, and *Graph 1-4*, below, indicate, 23 of the qualified farms are in the 5-10 acre range and 41 of the separate farms are less than 20 acres in size. There are only three unpreserved farms in excess of 30 acres remaining in Bergen County.

1.2.2 List of Qualified Farms

Table 6, on the next page, lists the qualified farms that were studied in this planning analysis. For simplicity purposes, numbers were assigned to the qualified tracts at the beginning of the planning process in 2007. Since then, several of the tracts are no longer qualified, so their farm identification numbers were retired without re-numbering the entire group. In certain municipalities, more than one Farmland Assessment application was filed by the same farmer for different tracts. For example, the DePiero farm in Montvale consists of three qualified farmland assessment applications of proximate but not contiguous land. In addition, any newly-listed farm properties were added at the end of the list regardless of geographic location.

Of the 54 qualified farms in 2012, a total of seven (7) farms have already been preserved leaving 47 farm properties available for future preservation. Four (4) of these farms are located on tracts that cross municipal boundaries, thus generating separate identification numbers. Not all of these farm properties may be eligible for farmland preservation under current grant programs.

Unlike most other counties, the farmers in Bergen County are farm location specific and, in general, do not own holdings in other parts of the county.

Table 6
Bergen County Farmland Preservation Plan
Qualified Farmland

Map No	Blocks	Lots	Municipality	Owner	Location	Acreage
1	1; 19	145,146,147;12,16,17,19	Mahwah	Greene, Carol Wehran	800 Ramapo Valley Road	231.5
2	18		Mahwah	Cipriano Farms LLC	795 Darlington Avenue	9.8
3	139		Mahwah	Sidorski, Henry E.	Myrtle Avenue	7
4	19		Mahwah	Surgent, George F.	888 Ramapo Valley Road	11.3
5	25		Mahwah	Weidner, Robin	1010 Ramapo Valley Road	9.5
6	25		Mahwah	Vas, Adrienne	1056 Ramapo Valley Road	7.6
7	25	14	Mahwah	McDonnell, George & Elizabeth	1174 Ramapo Valley Rd	10.4
8	126	129,130	Mahwah	Chestnut Trees LLC	22 Masonicus Road	9
9	147	23,01	Mahwah	Kohout, Joseph & Lottie	560 Campgaw Road	46
10	154	54	Mahwah	Wanamaker, Charles Jr.	Vanderbeck Lane	12
11	154	44	Mahwah	Bolkema, John & Theodore	40 Old Oak Drive	15.9
12	17	11	Mahwah	Dator, Raymond James	350 Ramapo Valley Road	17
13	25	18,02	Mahwah	Amberfields Associates	1122 Ramapo Valley Road	16.7
14	120,01	1, 133	Mahwah	Secor, Darryl G. & Jacqueline L.	168 Airmont Avenue	21
15A	1002	5	Montvale	De Piero, Edward, Terry & Glen	159 Summit Avenue	1.8
15B	1903	2,3,4,5,6	Montvale	De Piero, Edward, Elaine, Inez, Dante	Summit Ave/Craig Rd	10.7
15C	2802	2, 3	Montvale	De Piero, Edward & Elaine	Grand Avenue	25
16	4004	4, 5	Oakland	RI-Arm Corp	127 McCoy Road	11
17	4202	1, 2, 3	Oakland	Fanale, Salvatore J.	127A & 127 B McCoy Rd	39
18	2302	1	Oakland	Bartholme, Michael & Katherine	Sandy Beach	15.2
19	901	10	Oakland	Mottola, Gary F. & Irene	35 Glen Gray Road	17.7
20	3102	1	Oakland	Holland, Robert, Norma, Julie & Noel	21A Breakneck Road	9.6
21	1510; 1515	7,8,9; 1,04	Franklin Lakes	Meeks, John A. & Katherine M.	370 Pulis Avenue	7.5
23	2513,01	5	Franklin Lakes	Abma & Sons Inc.	Old Mill Road	
29	202	2,4	Wyckoff	Abma & Sons Inc.	700 Lawlins Road	27.5
24	1424,01	3	Franklin Lakes	Twinbrook Nurseries	706-712 Franklin Ave	6.3
25	2408	1,03, 1,04	Franklin Lakes	Schwartz, Bernard A. & Alessantrina	615 Franklin Avenue	23.7
26	1104	1	Franklin Lakes	Mortimer, Doris J.	1150 Franklin Lake Road	8.9
27	2205	1	Franklin Lakes	Hovey, James & Karen	735 Franklin Lake Road	11
28	2702	1	Franklin Lakes	Palminteri, Anthony & Gail	200 Woodside Avenue	6.1
31	2004	20,02, 20,10, 20,11, 21,33,34,36	Allendale	Rohsler Nursery Partners LP	100 Franklin Turnpike	9.2
33	1805; 1806	5, 5,01, 6	Saddle River	Rohsler Nursery Partners LP	100 Franklin Turnpike	7.3
32	1801; 1902	4,01; 41, 42	Saddle River	Saddle River Enterprises	98, 103, 104 E. Saddle River Rd	12.512
34	1801	21,01	Saddle River	Hofer, Elizabeth Milyadis & Alan	9 Lower Cross Road	7.6
35	1607	20, 21	Saddle River	Zimmer, Stuart/ Lucas, Craig	131/135 E. Saddle River Rd	15.7
36	2101	13	Saddle River	George H. Demarest LLC	Glenwood Drive	18
37	202	1	Hillsdale	Demarest, Elizabeth	215 Wierimus Road	15.4
38	909	7	Hillsdale	Volek, Alfred & Mary	Morris Drive	6.7
39	605	6, 16	Woodcliff Lake	JP Decandido/Dec. Fam Partnership	285 Glen Road	6.1
40	908	2	Woodcliff Lake	Jensen, Finn Kenneth	88 Overlook Drive	5.5
41	2005,01	13	Woodcliff Lake	Sacchieri, Paul V. & Linda M.	107 Woodcliff Avenue	5.9
43	701;702	11; 3	Old Tappan	Binaghi Family Limited Partnership	23 Dewolf Road	16
44	2001	2	Old Tappan	Sunden, Richard & Barbara	1004 Westwood Avenue	5.9
45	81	3	Norwood	Lupardi Realty Associates LP	Blanch Avenue	14.004
53	1401	5	Closter	Lupardi Realty Associates LP	75 Blanch Avenue	4.93
46	7002/7003, 7701	1; 2, 3	Paramus	Joy, Joseph & Bertha	Pascack Road	19
47	7101	4	Paramus	Eisele Properties LLC	232 Oradell Avenue	7.4
48	4808	6	Paramus	Tori Brett LLC	578 Paramus Road	5.2
49	1201	1	Emerson	Marek Corporation	650 Old Hook Road	6.4
50	2102	55	Closter	Metropolitan Farm LLC	119 Hickory Lane	10.9
51	2401	51	Closter	Schaller, Marianne (Trust)	681 Closter Dock Road	7.5
52	202	1	Closter	Abram Demaree Homestead, Inc.	Schraalenburgh Road	14
54	1703	2,01	Closter	Miele, Josphe & Gloria	639 Piermont Road	8.9
55	215	1	Dumont	D'Angelo, Jack & Marylou	546 Washington Avenue	7.2
56	1	185	Mahwah	Statile, Chistopher	11 Fox River Crossing	10.5
57	12	24	Mahwah	Shalhoub, Jacqueline	18 Split Rock Road	7.3
58	24	1	Mahwah	Pride Rock LLC	200 Stabled Way	37.39
59	1607	3	Saddle River	Meeks, Katherine M.	74 E. Allendale Road	5
60	2102	21, 22	Saddle River	157 Mill Road LLC	Chestnut Ridge Road	25.6
61	1402	24	Closter	Watkins, Beverly A.	102 Blanch Avenue	10.9
Total Qualified Farmland						979.6

Note: As of May 2013, Target Farms 15A, 15B, 15C, are the subject for some/all to be converted into non-agricultural use as per zoning change approved by the Borough of Montvale. Recently, Target Farm 55 in Borough of Dumont is the subject to possibly be converted into non-agricultural use. See various articles published at northjersey.com for details. Their farmland data will continue in this Plan at this time. As of June 2014, Target Farm 36 is presently completing farmland preservation.

1.3 FARMLAND SOIL CONDITIONS

The Natural Resources Conservation Service (NRCS) of New Jersey has established the Important New Jersey Soils Classification System to define soils identified as Prime, Statewide Importance, Local, or Unique Farmland Soils. New Jersey's important farmland inventory, according to United States Department of Agriculture for NRCS New Jersey, which can be found at (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/nj/soils/surveys/>) describes the following:

Prime Farmlands include all those soils in Land Capability Class I and selected soils from Land Capability Class II. Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods. Prime Farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.

Farmlands soils of **Statewide Importance** include those soils in land capability Class II and III that do not meet the criteria as Prime Farmland. These soils are nearly Prime Farmland and economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce yields as high as Prime Farmland if conditions are favorable

Farmland of Local Importance includes those soils that are not prime or statewide importance and are used for the production of high value food, fiber or horticultural crops.

Unique Farmland soils are used for special crops. Unique farmlands are defined as lands that cannot be classified as prime farmland but are used for the production of specific high value food and crops. The soil quality, location, growing season and moisture supply of unique farmlands are capable of producing sustained high quality and/or high yields of a specific crop when treated and managed following acceptable methods.

Soil Capability

The NRCS *land capability classification system* (LCCS) can be used to understand the production potential and erodibility of farmland. *Capability classes* are the broadest groupings of land and are designated by Roman numerals I through VIII. Limitations on land use increase with higher numbers.

Definitions of Selected Relevant LCCS classes:

- LCCS Class I has Few limitations
- LCCS Class II has Moderate limitations that require limited conservation practices
- LCCS Class III has Severe limitations that require special conservation practices

Map 3: Important Farmland Soils Map indicates the farmland soil conditions in Bergen County. As **Map 3** illustrates, the majority of the soils in the County are considered non-important farmland soils. This “Other” soils classification generally means that the soils need considerable amendment and management to produce high crop yields. The location and pattern of the prime agricultural soils, soils of statewide importance, and soils of unique value in the County are also shown on **Map 3** with distinctive coloration. **Table 7** summarizes the important farmland soils in Bergen County and indicates that about 88% of the soils in the County are not important farmland soils. However, the remaining 12.1% of the County constitutes 19,159 acres of important farmland soils or almost 30 square miles.

Table 7
Important Farmland Soils

Classification	Acres	Percent
Prime farmland soils	7,322.3	4.6%
Farmland soils of statewide importance	7,690.0	4.9%
Farmland soils of unique importance	4,146.6	2.6%
Not important farmland soils (Other)	138,997.0	87.9%
Totals	158,155.9	100.0%

Source: NRCS SSURGO soils data

Map 3 also indicates the location of hydric soils which soils are soils that support hydrophytic (wetlands) vegetation. In most cases, the important agricultural soils in Bergen County are not considered hydric soils. However, where existing farms are located on hydric soils, specific soil management techniques may be necessary, such as subsurface drainage (tile drains).

Map 3 also indicates the qualified farmland tracts in Bergen County. The general soil characteristics of each farm are indicated by this map. While many of the farms have important farmland soils, there are also a number of qualified farms located entirely on the “Other” farmland soils category. The key issue for these tracts is whether there are soil conditions on these farms that severely constrain agricultural activities, such as very steep slopes, frequent flooding, or very poorly drained soils. **Table 8** indicates the important farmland soils breakdown for the qualified farmland and indicates that approximately 294 acres or 32% of the qualified farmland is classified as important farmland soils.

Table 8
Important Farmland Soils-Qualified Farms

Classification	Acres	Percent
Prime farmland soils	164.2	17.7%
Farmland soils of statewide importance	130.5	14.1%
Farmland soils of unique importance	0.0	0.0%
Not important farmland soils (Other)	633.3	68.3%
Totals	927.5	100.0%

Table 9, on the next page, lists all of the soil types in the entire County, the acreage of each soil class, and their farmland classification. These soil types correspond with the soils shown in **Map 3**.

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Table 9
Bergen County Farmland Preservation Plan
Farmland Soils Classification

Map Unit	Name	Rating	Hydic Soils	Acres	Percent
AdrAt	Adrian Muck	Farmland of Unique Importance	Yes	680.5	0.4%
BohB	Boonton moderately well drained gravelly loam; 3-8 percent slope	Prime farmland	No	898.9	0.6%
BohBb	Boonton moderately well drained gravelly loam; 0-8 percent slope; very stony	Not prime farmland	No	277.1	0.2%
BohC	Boonton moderately well drained gravelly loam; 8-15 percent slope	Farmland of Statewide Importance	No	1,356.1	0.9%
BohCb	Boonton moderately well drained gravelly loam; 8-15 percent slope; very stony	Not prime farmland	No	504.0	0.3%
BohD	Boonton moderately well drained gravelly loam; 15-25 percent slope	Not prime farmland	No	500.9	0.3%
BohDb	Boonton moderately well drained gravelly loam; 15-25 percent slope; very stony	Not prime farmland	No	321.6	0.2%
BohE	Boonton moderately well drained gravelly loam; 25-45 percent slope	Not prime farmland	No	496.3	0.3%
BorB	Boonton moderately well drained-rock outcrop complex; 3-8 percent slope	Not prime farmland	No	556.9	0.4%
BorC	Boonton moderately well drained-rock outcrop complex; 8-15 percent slope	Not prime farmland	No	953.7	0.6%
BorD	Boonton moderately well drained-rock outcrop complex; 15-25 percent slope	Not prime farmland	No	590.4	0.4%
BorE	Boonton moderately well drained-rock outcrop complex; 25-45 percent slope	Not prime farmland	No	1,179.4	0.7%
BouB	Boonton-urban land complex; 0-8 percent slope	Not prime farmland	No	4,643.4	2.9%
BouC	Boonton-urban land complex; 8-15 percent slope	Not prime farmland	No	7,503.4	4.7%
BouD	Boonton-urban land complex; 15-25 percent slope	Not prime farmland	No	4,410.1	2.8%
BouE	Boonton-urban land complex; 25-45 percent slope	Not prime farmland	No	580.1	0.4%
CarAt	Carlisle Muck.0-2 percent slope; frequently flooded	Farmland of Unique Importance	Yes	265.6	0.2%
DuoB	Dunellen loam, 3-8 percent slope	Prime farmland	No	1,083.0	0.7%
DuoC	Dunellen loam, 8-15 percent slope	Farmland of Statewide Importance	No	1,440.4	0.9%
DuoD	Dunellen loam, 15-25 percent slope	Not prime farmland	No	249.9	0.2%
DuuA	Dunellen-urban land complex, 0-3 percent slope	Not prime farmland	No	4,231.0	2.7%
DuuB	Dunellen-urban land complex, 3-8 percent slope	Not prime farmland	No	15,140.0	9.6%
DuuC	Dunellen-urban land complex, 8-15 percent slope	Not prime farmland	No	13,167.0	8.3%
DuuD	Dunellen-urban land complex, 15-25 percent slope	Not prime farmland	No	1,615.3	1.0%
FmhAt	Fluvaquents, loamy; 0-3 percent slope; frequently flooded	Not prime farmland	Yes	2,006.0	1.3%
HamB	Haledon gravelly loam; 3-8 percent slope	Prime farmland	Yes	496.0	0.3%
HamBb	Haledon gravelly loam; 0-8 percent slope; very stony	Not prime farmland	Yes	984.0	0.6%
HasB	Haledon-urban land complex, 3-8 percent slope	Not prime farmland	No	2,055.9	1.3%
HcsAb	Hasbrouck loam; 0-3 percent slope; very stony	Not prime farmland	Yes	923.6	0.6%
HhmBb	Hibernia loam; 0-8 percent slope; very stony	Not prime farmland	Yes	578.6	0.4%
OtsD	Otisville gravelly loamy sand; 15-25 percent slope;	Not prime farmland	No	362.8	0.2%
OtsE	Otisville gravelly loamy sand; 25-35 percent slope;	Not prime farmland	No	344.7	0.2%
PbuA	Pascack silt loam; 0-3 percent slope	Prime farmland	Yes	1,217.6	0.8%
PHG	Pits, sand and gravel	Not prime farmland	No	420.5	0.3%
PmAt	Preakness silt loam; 0-3 percent slope; frequently flooded	Not prime farmland	Yes	1,651.7	1.0%
RkrA	Riverhead sandy loam; 0-3 percent slope	Prime farmland	No	280.8	0.2%
RkrB	Riverhead sandy loam; 3-8 percent slope	Prime farmland	No	1,720.1	1.1%
RkrC	Riverhead sandy loam; 8-15 percent slope	Farmland of Statewide Importance	No	1,794.3	1.1%
RofCb	Rockaway gravelly loam; 8-15 percent slope; very stony	Farmland of Statewide Importance	No	726.2	0.5%
RofDb	Rockaway gravelly loam; 15-25 percent slope; very stony	Not prime farmland	No	404.1	0.3%
RofEb	Rockaway gravelly loam; 25-35 percent slope; very stony	Not prime farmland	No	690.0	0.4%
RomC	Rockaway-rock outcrop complex; 8-15 percent slope;	Not prime farmland	No	2,136.1	1.4%
RomD	Rockaway-rock outcrop complex; 15-25 percent slope;	Not prime farmland	No	1,299.2	0.8%
RomE	Rockaway-rock outcrop complex; 25-45 percent slope;	Not prime farmland	No	3,233.0	2.0%
TrkAv	Transquaking mucky peat; 0-1 percent slope; very frequently flooded	Farmland of Unique Importance	No	3,200.5	2.0%
UdktB	Udorthents, loamy; 0-8 percent slope; frequently flooded	Not prime farmland	Yes	1,128.1	0.7%
UdoB	Udorthents, organic substratum 0-8 percent slope;	Not prime farmland	No	980.1	0.6%
UdouB	Udorthents, organic substratum-Urban land complex; 0-8 percent slope;	Not prime farmland	No	638.5	0.4%
UdrB	Udorthents, refuse substratum; 0-8 percent slope;	Not prime farmland	No	1,351.1	0.9%
UdwB	Udorthents, wet substratum; 0-8 percent slope;	Not prime farmland	Yes	4,105.0	2.6%
UdwuB	Udorthents, wet substratum-urban land complex;	Not prime farmland	Yes	9,685.6	6.1%
UR	Urban land	Not prime farmland	No	23,503.3	14.9%
WATER	Water	Not prime farmland	No	9,026.1	5.7%
WemB	Wethersfield gravelly loam; 3-8 percent slope	Prime farmland	No	1,625.9	1.0%
WemC	Wethersfield gravelly loam; 8-15 percent slope	Farmland of Statewide Importance	No	2,373.0	1.5%
WemD	Wethersfield gravelly loam; 15-25 percent slope	Not prime farmland	No	906.2	0.6%
WemDb	Wethersfield gravelly loam; 15-25 percent slope; very stony	Not prime farmland	No	290.8	0.2%
WemE	Wethersfield gravelly loam; 25-35 percent slope;	Not prime farmland	No	1,092.1	0.7%
WerB	Wethersfield-rock outcrop; 3-8 percent slope;	Not prime farmland	No	625.1	0.4%
WerC	Wethersfield-rock outcrop; 8-15 percent slope;	Not prime farmland	No	971.9	0.6%
WerD	Wethersfield-rock outcrop; 15-25 percent slope;	Not prime farmland	No	368.9	0.2%
WerE	Wethersfield-rock outcrop; 25-45 percent slope;	Not prime farmland	No	433.9	0.3%
WeuB	Wethersfield-Urban land complex; 3-8 percent slope	Not prime farmland	No	2,424.4	1.5%
WeuC	Wethersfield-Urban land complex; 8-15 percent slope	Not prime farmland	No	4,304.4	2.7%
WeuD	Wethersfield-Urban land complex; 15-25 percent slope	Not prime farmland	No	3,150.8	2.0%
Total				158,155.9	100.0%

1.4 IRRIGATED ACRES AND AVAILABLE WATER SOURCES

The information in the chart below comes from the United States Department of Agriculture’s Census of Agriculture. It indicates that the overall number of farms in Bergen County has decreased a bit more than 50% from 126 in 1987 to 60 in 2012. The trend in the number of farms using irrigation has fluctuated between 40 and 56% during that time period.

The acreage of irrigated land was trending downward until it increased by 15% from 2002 to 2007. However, irrigated land declined by about 52% from 2007 to 2012.

	1987	1992	1997	2002	2007	2012
Number of Farms	126	127	121	91	89	60
Number of Farms w/ Irrigated Land	56	65	48	43	50	27
Percentage of Farms w/ Irrigated Land	44%	51%	40%	47%	56%	45%
Acres of Irrigated Land	339	256	252	170	196	94

The New Jersey Department of Environmental Protection’s Division of Water Supply coordinates agricultural water registrations/certifications for agricultural, aquacultural and horticultural purposes pursuant to the Water Supply Management Act with the Department of Environmental Protection’s Bureau of Water Allocation. An Agricultural Water Usage Certification or Agricultural Water Use Registration must be obtained from the County agricultural agent if a person has the capability to divert ground and/or surface water in excess of 100,000 gallons per day for agricultural, aquacultural or horticultural purposes.

An Agricultural Water Use Registration is required for any person with the capability to divert in excess of 100,000 gallons of water per day, but who diverts less than this quantity.

The County Extension Office is not aware of any water diversion applications for agriculture in Bergen County.

To date, Bergen County’s agricultural community has not indicated any issues pertaining to availability of sufficient water.

The following table indicates the irrigated acreage for agricultural production as determined from a review of New Jersey Farmland Assessment data. No discernable pattern is present.

Irrigated Acres	2004	2007	2009	2012
Field Crops	0	0	0	0
Fruit	2	12	10	10
Ornamental	13	9	9	8
Vegetable	8	18	9	7
Total	23	39	28	25

Source: NJ Farmland Assessment Data

1.4.1 HIGHLANDS BREAKDOWN

The Highlands Act, signed in August 2004, divides the 800,000-acre Highlands region into two areas: a preservation area, where development is strictly regulated and a planning area, where development is monitored. The Highlands Water Protection and Planning Council was charged to implement a regional master plan for the region.

The Highlands Act includes a special review process for agricultural and horticultural activities and related development in the Highlands Preservation Area and required the Department of Agriculture to promulgate rules for that purpose. The rules are designed to implement the process established by the Highlands Act for review of new agricultural or horticultural development within the Highlands Preservation Area. Additional information can be found at: <http://www.state.nj.us/agriculture/divisions/anr/agriassist/highlands.html>.

Only two municipalities – Township of Mahwah and Borough of Oakland – are located within the Highlands region. Each municipality prepared an environmental resource inventory, which assessed the availability of water. The Township of Mahwah concluded the following: nine of its 10 different subwatersheds are calculated to be in deficit according to its report dated 2010. The Borough of Oakland concluded the following: each of its three (3) different subwatersheds was all calculated to be in deficit according to its report dated March 2014.

1.5 QUALIFIED FARMLAND BREAKDOWN

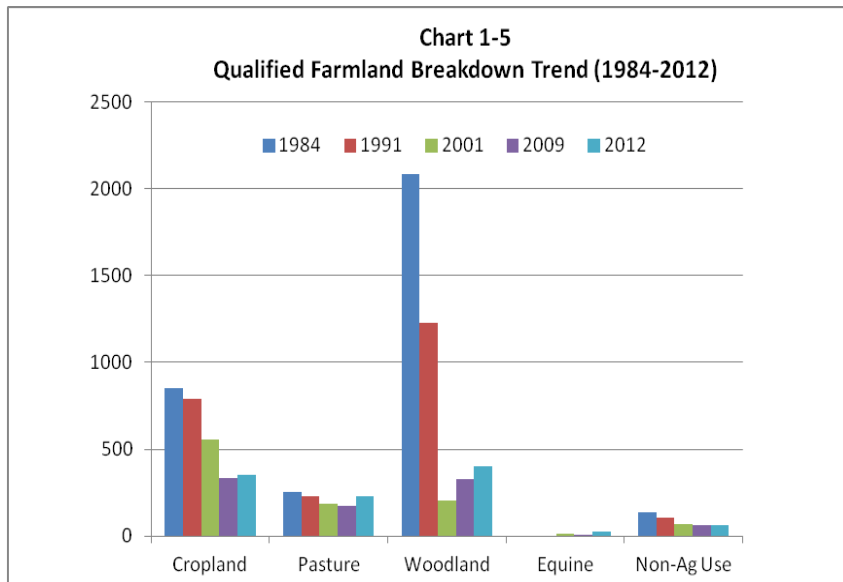
Table 10 summarizes the breakdown of the qualified farmland by major land commitment from 1984 to 2012 based on published data in New Jersey’s 49th *Report of Data from FA-1 Forms for 2012 Tax Year*.

Table 10
Qualified Farmland Breakdown (Acres)

Classification	1984	1991	2001	2004	2005	2006	2007	2009	2012	Change 1984- 2012
Cropland Harvested	740	745	487	420	426	337	319	307	351	-389
Cropland Pastured	114	46	72	81	38	12	24	25	42	-72
Permanent Pasture	254	227	189	175	160	164	160	175	188	-66
Woodland	2,085	1,230	202	236	267	278	316	331	404	-1,681
Equine	0	0	14	14	19	16	11	9	23	23
Non-Ag use	139	109	71	69	70	65	81	61	64	-75
Totals	3,332	2,447	1,035	995	980	872	912	908	1,072	-2,260

Table 10 indicates that qualified farmland is at its highest total since 2001, reversing a trend beginning more than a decade ago. However, the County has experienced the following historical declines in qualified farmland acreage in the past 29 years: 53% in cropland, 38% in pasture land, and 81% in woodland. So while the County has experienced a 2,260-acre decline in qualified farmland since 1984 (68%), three-quarters (75%) of that decline has been in woodland. Conversely, qualified farmland devoted to equine is at its highest amount.

Chart 1-5 illustrates the change in qualified farmland classifications over the last 29 years.



As shown via the 2012 data, 393 acres or 37% of the qualified farmland is devoted to cropland. Permanent pasture land at 188 acres represents 17.5% and woodland at 404 acres is at 38%. It should be pointed out that all agricultural property classifications experienced an increase in acreage from previously reported data in 2009. Non-agricultural land use has generally been holding steady.

It should be noted that none of Bergen County’s qualified

farmland acreage has been reported to be devoted to renewable energy, which is a relatively recent category for qualified farmland breakdown.

1.6 AGRICULTURAL TRENDS

The United States Department of Agriculture’s Census of Agriculture is the source for the following, unless otherwise noted.

1.6.1 National

In the early 1950s, there were approximately 5 million farms in the United States encompassing 1.2 billion acres of land. The average farm size was slightly less than 250 acres. (Source: The University of Georgia College of Agricultural & Environmental Sciences Cooperative Extension Service.) By the year 2012, the number of farms in the United States had declined to 2.1 million or about 40% of that recorded 60 years earlier. The land devoted to farmland had declined to 914 million acres or about 21% less than recorded in 1950s.

1.6.2 New Jersey

The pressures on the agricultural industry have been particularly evident in New Jersey which is the most urbanized state in the nation, yet one blessed with productive soils and growing conditions. The trends in the state agricultural industry are typified by the following:

- Number of Farms. In 1950, there were just under 25,000 farms in New Jersey. In 2012, the number of farms in the state is a little more than 9,000, which represents a decline of about 63% in the number of operating farms.
- Farmland. The land devoted to agriculture in 1950 was about 1.75 million acres or 37% of the entire state. Agricultural land in 2012 is reported to represent about 715,000 acres or around 15% of the state land area.

- Farm Size. The average size of a farm in New Jersey in 2012 is now down to 79 acres, which is less than the 124-acre average size in 1970. 90% of the farms in New Jersey are less than 180 acres, about 8% are in the 180-500 acre range, and only about 1% of the farms in the state encompass more than 1,000 acres.

The agricultural land base continues to evolve throughout the state in terms of land commitment, agricultural activity, and farm characteristics in a continuing attempt to create an economically viable industry.

1.6.3 Bergen County

Because of its location in the northeastern corner of the state in close proximity to New York City, Bergen County has been directly impacted by strong land conversion pressures over the last 70 or more years. Therefore, agriculture in Bergen County has drastically changed to the point where farming is a rare activity in an urbanizing county.

The agricultural industry in Bergen County has been described as a “scarce resource” since only 7 tenths of 1% of the land area is devoted to this activity and about 50 entities own qualified farmland. A lesser number operate viable agricultural operations devoted to food or horticultural production. For these reasons, agriculture in Bergen County is a land use that is threatened by strong conversion pressures and will require further public investment and involvement to continue to survive.

Agriculture is considered a resource in Bergen County since it is an activity that provides locally grown products. While metropolitan areas in the United States are becoming increasingly dependent on major corporations for all of their food and plant products, local alternatives are increasingly valued since the quality of the product is fresher and in many cases, better than the mass produced. An increasing percentage of the agricultural products sold in this country are being produced in other countries, which may not have sufficient quality control as demonstrated by several recent food contamination problems.

The agricultural industry in Bergen County has been under strong conversion pressures for an extended period of time due to the stringent regulatory climate in this state, the extraordinary residential land values in the County until the recent economic down turn, and the limited agricultural support industries. The remaining farms have evolved in this climate and have taken advantage of the exceptional local market. A small number of farms have developed a strong geographic market with a direct connection to the local community. Unlike more rural agricultural counties, agriculture in Bergen County tends to be dispersed due to this community relationship rather than concentrated. In many cases, there is only one surviving farm within a short drive of densely developed communities. Other farms have also taken advantage of the proximity of the county to New York City.

While market forces have ensured a strong cash flow for agricultural operations, the conversion value of many of the remaining farms is extraordinary. While the net operating revenue for local farms may be strong, the remaining farmland has exceptional value throughout Bergen County. In some cases, privately owned farmland represents the largest tract of vacant, developable land remaining in a particular municipality. When the housing market is strong (as it was until recently) or when there is a change in the composition of the farmland owner’s family, there will be strong consideration for the sale and liquidation of the land asset. Farmland preservation programs offer an opportunity for the farmland owner to monetize the land asset without selling the land to a developer through the purchase of development rights.

**Bergen County Farmland Preservation Plan
June 2014**

II. AGRICULTURAL INDUSTRY OVERVIEW

This Chapter provides an overview of the agricultural industry in Bergen County.

2.1 CROP/PRODUCTION TRENDS OVER THE LAST 25 YEARS

An analysis was conducted of the farmland assessment data (Tax Year 2012 – Bergen County) to ascertain recent crop production trends. **Tables 11 to 15** summarize the relevant production data for field crops, vegetable crops, livestock, fruit/berry crops, and nursery crops, which are the primary forms of agricultural production in Bergen County. The trends that are evident from this analysis are summarized below.

Bergen County continues to have a unique and diverse agricultural industry with significant acreage in field and vegetable crops, a diversity of livestock, and an emerging nursery industry.

2.1.1 Field Crops.

According to the farmland assessment data, the total acreage devoted to field crops in Bergen County has declined 50%, from 143 acres in 1991 to 71 acres in 2011 as seen in **Table 11**, below. Virtually all of the field crop acreage in the County has been in hay production.

<i>Table 11</i>												
<i>Bergen County Field Crop Acreage Trend (1984-2011)</i>												
for Grain Barley	Corn for Grain	Corn for Silage	Grass for Silage	Alfalfa Hay	Other Hay	Oats for Grain	Rye for Grain	Sorghum	Soybeans	Wheat	Other Fields	Total Field Crops
1984												
3	1	0	16	53	37	9	0	0	0	1	17	138
1991												
0	13	4	1	0	125	0	0	0	0	0	0	143
2001												
0	1	0	13	0	95	0	1	0	0	0	4	114
2005												
0	1	0	8	0	86	0	1	0	0	0	0	96
2011												
0	1	0	0	0	81	0	6	0	2	0	0	71
Change 1991-2011												
0	-12	-4	-1	0	-44	0	6	0	2	0	0	-72

2.1.2 Vegetable Crops

Table 12 indicates the trend in vegetable crop acreage from 1984-2011. The Table indicates that the total acreage devoted to vegetable crops has declined from 376 acres in 1984 to about 97 acres in 2011 – a decline of almost 75%. While the decline in vegetable crop acreage has generally been experienced in all types of vegetables, *Table 12*, below, indicates that certain crops remain components of the agricultural industry while others are not.

Table 12: Vegetable Crop Acreage Trend (1984-2011)

Source: Farmland Assessment Data

Asparagus	Lima Beans	Snap Beans	Cabbage	Carrots	Sweet Corn	Cucumbers	Eggplant	Lettuce	Onions	Peas	Sweet Peppers
1984											
1	1	19	12	3	60	7	14	85	0	3	23
1991											
1	1	15	10	3	71	8	6	8	0	0	14
2001											
0	0	8	4	4	26	4	10	6	0	2	13
2005											
0	0	4	4	0	10	7	9	5	1	1	10
2011											
0	0	6	1	1	12	2	4	0	1	2	7
Change 1991-2001											
-1	-1	-9	-9	-2	-59	-6	-2	-8	1	2	-7
Sweet/White Potatos	Pumpkins	Spinach	Squash	Tomatoes	Melons Watermelons	Parsley/Radishes	Beets, Celery	Broccoli	Brussel Sprouts	Mixed Vegetables	Total Vegetables
1984											
1	41	2	26	52	4	n/a	n/a	n/a	n/a	24	376
1991											
1	31	2	25	33	4	0	0	3	0	24	260
2001											
0	25	0	13	15	2	0	0	2	0	26	160
2005											
0	21	1	6	17	1	0	0	2	1	22	122
2011											
4	13	1	6	15	1	0	0	0	2	19	97
Change 1991-2001											
3	-18	-1	-19	-18	-3	0	0	-3	2	-5	-163

The specific trends are summarized below by crop:

- Pumpkins. In 1984, a total of 41 acres was committed to the growing of pumpkins. The farmland assessment data indicates that this acreage declined to 13 acres in 2011. Nevertheless, this data indicates that pumpkin production, at 13% of the total acreage devoted to vegetables, continues to be one of four significant vegetable crops grown in the County. (Sweet corn, tomatoes, and mixed vegetables are the others. These four crops comprise approximately 61% of the vegetable crops grown in the County.)
- Tomatoes. In 1984, a total of 52 acres was committed to tomato production. This acreage declined to 15 acres in 2011. Tomatoes represent the second-largest vegetable crop in Bergen County from an acreage standpoint.
- Snap beans. In 1984, a total of 19 acres was committed to snap beans. The farmland assessment data indicates this acreage has declined to six (6) acres in 2011.
- Cabbage. In 1984, a total of 12 acres was committed to cabbage production. The farmland assessment data indicates that only one (1) acre is devoted to it in 2011.
- Sweet Corn. In 1984, a total of 60 acres was committed to sweet corn production. The farmland assessment data indicates this acreage declined to 12 acres in 2011. Nevertheless, this acreage indicates that sweet corn continues to be grown locally in significant quantities, representing Bergen County's fourth-largest vegetable crop.
- Cucumbers. A total of seven (7) acres was committed to cucumber production in 1984. The farmland assessment data indicates that this acreage declined to two (2) acres in 2011.
- Eggplant. A total of 14 acres was committed to eggplant production in 1984. The farmland assessment data indicates that this acreage declined to four (4) acres in 2011.
- Lettuce. A total of 85 acres was committed to lettuce production in 1984. The farmland assessment data indicates that no acreage is devoted to it in 2011.
- Sweet Peppers. In 1984, a total of 23 acres was committed to sweet peppers in the County. The farmland assessment data indicates that this acreage declined to seven (7) acres in 2011.
- Onions. In 1984, there wasn't any acreage reported for the production of onions. The farmland assessment data indicates that now one (1) acre was devoted to onion production in 2011, which may be indicative of a relative new product trend.
- Peas. In 1984, 3 acres was reported committed to pea production. According to the data, two (2) acres were committed to pea production in 2011. Thus, peas struggle to be an important local crop.
- Spinach. A total of 2 acres was reported committed to spinach production in 1984. The farmland assessment data indicates that one (1) acre is now devoted to growing it in 2011, reversing a trend from the mid-2000s.

- Melons. A total of 4 acres was reported committed to melon production in 1984. The farmland assessment data indicates that this acreage declined to only one (1) acre in 2011.
- Broccoli. There wasn't any acreage devoted to broccoli production in 1984, but as much as two (2) acres were reported in 2005. However, again zero (0) acres were reported in 2011. Based on this data, it appears that the production of broccoli has come and gone as an important component of the County's agricultural industry – even though it's good for you.
- Brussels Sprouts. There wasn't any acreage reported to its production in 1991. However, two (2) acres were reported committed to this crop in 2011. Based on this data, brussels sprout production has somehow become a component of the County's agricultural industry.
- Asparagus. Only one (1) acre was devoted to its production in 1984. However, there wasn't any acreage reported in 2011.
- Lima beans. Only one (1) acre was devoted to its production in 1984. However, there wasn't any acreage reported in 2011.
- Potatoes. Only one (1) acre was devoted to its production in 1984. Its production now encompasses four (4) acres as reported in 2011.
- Mixed Vegetables. The acreage devoted to mixed vegetables has remained fairly consistent since 1984, decreasing from 24 acres to 19 acres. Collectively, they represent the County's largest vegetable crop production.

In summary, the decline in the vegetable crop acreage in Bergen County has been significant since 1984. In 2011, one-fourth of the acreage devoted to vegetable crop production in 1984 was committed to these crops in 2011. In other words, there has been a drop of 75% in acreage devoted to vegetable production.

However, the acreage in vegetable crop production appears to have stabilized and diversified in recent years since the production of fresh vegetables remains an important component to Bergen County agriculture. In fact, the change in the acreage devoted to specific crops is indicative of a shift to the production of crops to meet certain specialized markets with increases in acreage committed to potatoes, onions, and brussels sprouts. The acreage devoted to pumpkins and tomatoes is particularly noteworthy. Tomatoes continue to be an important fresh product in the state that developed and perfected this crop and pumpkins are becoming an increasing important agricultural product of the autumn season.

2.1.3 Livestock

Table 13, below, indicates the trend in the number of livestock in Bergen County over the last 27 years based on the farmland assessment application data for Tax Year 2012. While the overall number of livestock declined from 8,552 units to 4,468 units during this period (a loss of about 48%), it actually represents an increase to its highest reported total since 1991!

Overall, the total number of chicken units represents 90% of the livestock currently in Bergen County. Equine represents only 4% of the total livestock.

Table 13: Livestock Data Trend (1984-2011)

Beef Cattle	Dairy	Equine	Sheep	Swine	Ducks, Turkeys	Fur Animals	Goats	Meat Chickens	Egg Chickens	Other Livestock	Totals
<i>1984</i>											
4	8	304	33	10	8	0	5	1,919	5,374	887	8,552
<i>1991</i>											
3	43	259	71	30	2	6	2	906	3,008	22	4,352
<i>2001</i>											
13	9	166	96	0	50	9	9	520	3,238	52	4,162
<i>2005</i>											
0	1	198	86	0	52	16	12	500	2,274	58	3,197
<i>2011</i>											
22	0	177	62	15	75	1	44	900	3,114	58	4,468
<i>Change 1991 to 2011</i>											
19	-43	-82	-9	-15	73	-5	42	-6	106	36	116

Source: Farmland Assessment Data

The trends by livestock type are described below.

- Meat chickens. A total of 1,919 meat chickens was recorded in 1984. This number declined to 900 meat chickens in 2011. However, it is noteworthy that the number of meat chickens is almost at the same level as reported in 1991.
- Egg chickens. A total of 5,374 egg chickens was recorded in 1984. This number declined to 3,114 egg chickens in 2011. However, it is noteworthy that the number of egg chickens reported in 2011 has fluctuated over the time reported since 1991.
- Beef cattle. Only 4 beef cattle were reported in the County in 1984. This number is at 22 in 2011, a whopping 450% increase! Beef cattle production is now at its peak in the County according to the reported data.

- Dairy cattle. While only 8 dairy cattle were reported in Bergen County in 1984, this number increased to 43 cattle in 1991, but subsequently declined to zero (0) dairy cows in 2011.
- Sheep. A total of 33 sheep was reported in the County in 1984. A total of 62 sheep was reported in the County in 2011. Sheep production reached its high-water mark in 2001 data.
- Goats. Five (5) goats were reported in the County in 1984. This number increased to a total of 44 goats in 2011 - a whopping 780% increase! Thus, goats remain a small, but increasing component of livestock production in the County.
- Fur animals. No fur animals were reported in the County in 1984. Only one (1) fur animal was reported in 2011. Fur animals reached its high-water mark in 2005 data.
- Swine. Ten (10) pigs were reported in the County in 1984. A total of 15 swine was recorded in 2011, reversing a trend by showing an increase over the previous 10 years.
- Equine. A total of 304 horses were reported on farms in 1984. This number declined to 177 horses in 2011. Overall, the equine industry represents 4% of the County's livestock total.
- Other livestock. A total of 887 units of "other livestock" was reported on farms in 1984. This number has substantially declined to just 58 in 2011. Because of the unspecified nature of this category, it is not clear what types of livestock are listed in this category.
- Ducks, turkeys. A total of 8 ducks/turkeys was reported in 1984. This number increased to 75 in 2011, all of which are ducks.

The production of meat and egg chickens was an important component of the County's agricultural industry in 1984 – and remains so in 2011. While the number of meat and egg chickens has declined significantly, the farmland assessment data indicates that the number of chickens in the County has been relatively consistent since 1991. Total number of chicken units is actually trending upward since 2001. It can be surmised that the number of egg chickens remains high due to the strong demand for fresh eggs.

Farmers in the County maintain a small number of livestock for meat production. In particular, the increase in the number of beef cattle, swine, and goats may be indicative of a small but significant trend. The continued production of livestock in a suburban context remains a unique and interesting component of the County's agricultural industry.

2.1.4 Fruit/Berry Crops

Table 14, below, indicates the trend in fruit/berry crop acreage in Bergen County over the last 25 years. While the overall acreage devoted to fruit and berry production has declined, by more than 84%!, certain types of fresh fruit production remain key components of the County’s agricultural industry.

Table 14: Fruit/Berry Crop Acreage Trend (1984-2011)

Apples	Peaches Nectarines	Cherries	Pears	Other Fruit	Total Fruit Crop	Blueberries	Strawberries	Blackberries Cranberries	Grapes	Other Berries	Total Grapes/Berries
1984											
95	69	0	0	14	178	0	11	6	1	0	18
1991											
63	67	0	0	1	131	1	7	0	2	0	10
2001											
44	35	0	0	2	81	0	1	0	2	1	4
2005											
35	23	0	0	0	58	0	1	0	2	0	3
2011											
21	18	0	0	0	39	0	1	0	2	2	5
Change 1991-2011											
-42	-49	0	0	-1	-92	-1	-6	0	0	2	-5

Source: Farmland Assessment Data

The trends in fruit and berry crop acreage are described below:

Fruit

- Apples. A total of 95 acres was committed to apple orchards in 1984. A total of 21 acres remain in 2011. The acreage devoted to the production of this crop represents 64% of Total Fruit Crop acreage.
- Peaches/Nectarines. A total of 69 acres was committed to the production of this crop in 1984. This acreage declined to 18 acres in 2011. The acreage devoted to the production of this crop represents 46% of Total Fruit Crop acreage.
- Other fruit. A total of 14 acres was committed to other fruit types in 1984. There wasn’t any acreage reported as being committed to this unspecified category in 2011.

Berries

- Strawberries. In 1984, a total of 11 acres was reportedly committed to the production of strawberries. Only one (1) acre was committed to strawberry production in 2011.

Bergen County Farmland Preservation Plan

- Blueberries. In 1984, there wasn't any acreage reported as being committed to blueberry production. While one (1) acre was reported committed to blueberry production in 1991, there hasn't been any blueberry acreage reported since then.
- Black/Cranberries. In 1984, six (6) acres were reported as being committed to these types of berry production. No such berry production has been reported since then.
- Grapes. In 1984, one (1) acre was reported as being committed to grape production. Two acres are reported as devoted to its production in 2011.

In summary, the acreage devoted to fruit production has declined from 178 acres in 1984 to 39 acres in 2011, or a loss of 78%. Only apple and peach production remain a component of the County's agricultural industry, which are grown on only a few farms in the County.

The acreage devoted to berry/grape production has declined from 18 acres in 1984 to five (5) acres in 2011. While berry production is minimal in the County, it is possible that there could be a small rebound in the future due to the strong demand for certain berries that are difficult to package (i.e., blackberries, raspberries).

2.1.5 Nursery Crops

Table 15, following, indicates the trend in nursery crop acreage from 1984 to 2011. In 1984, over 300 acres were committed to nursery crops. While this acreage declined to 118 acres in 2011, the nursery crop industry remains a strong sector of the County's agricultural industry and accounts for about 1/12th of the farmland acreage in the county.

Table 15: Nursery Crop Acreage Trend: 1984-2011

Bedding Plants	Cut Flowers	Trees/Shrubs	Cultivated Sod	Christmas Trees	Ornamental Other	Total Nursery
1984						
27	20	191	12	39	18	306
1991						
29	9	139	1	16	5	199
2001						
28	7	102	1	14	3	155
2005						
32	21	63	0	9	1	126
2011						
25	14	67	0	11	1	118
Change 1991-2011						
-4	5	-72	-1	-5	-4	-81

Source: Farmland Assessment Data

Bergen County Farmland Preservation Plan

The specific trends in nursery crops are described below:

- Bedding plants. The acreage devoted to bedding plants has decreased slightly from 27 acres in 1984 to 25 acres in 2011. Due to the size and growth of Bergen County, the demand for bedding plants is very strong. In addition, the efficiency of the bedding plant production has greatly increased with major greenhouse expansions.
- Cut Flowers. A total of 20 acres was reported as being committed to cut flowers in 1984. This acreage reached its lowest at 7 acres in 2001, but has subsequently rebounded to 14 acres in 2011. Evidence suggests that there has been a change to cut flower production due to the strong demand for local production.
- Trees/Shrubs. A total of 191 acres was reported as being committed to tree/shrub production in 1984. While this acreage has declined to 67 acres in 2011, the production of landscaping material remains the largest nursery crop in the County, representing approximately 57% of the acreage devoted to nursery production.
- Cultivated Sod. In 1984, it was reported that 12 acres were committed to sod production. There wasn't any sod acreage reported in 2011, which is to be expected due to the land intensive nature of this nursery crop.
- Christmas Trees. A total of 39 acres was set aside for Christmas tree production in 1984. This acreage declined to 9 acres in 2005, but has since increased 11 acres in 2011. While the demand for fresh Christmas trees is undoubtedly strong, it's possible farmers have determined that the commitment of land to this seasonal crop is warranted.
- Other Ornamentals. A total of 18 acres was devoted to this unspecified category in 1984. Only one (1) acre was reported under this category in 2011.

The nursery crop sector remains a key component of the County's agricultural industry. In particular, the demand for bedding plants, cut flowers, trees, and shrubs has warranted the continued commitment of significant acreage to these crops, 90% of the Total Nursery Acreage. It is likely that these sectors will remain strong in the foreseeable future to the strong demand for local landscaping products. While the major chain stores have made a major commitment to plant nurseries, the diversity of the local products, the short life of certain products (cut flowers) and the permanency of locally grown products will undoubtedly support a strong nursery industry.

2.1.6 Summary of Agricultural/Horticultural Crop Trend

The most important conclusions that should be drawn from this analysis of crop trends in Bergen County are as follows:

- The acreage devoted to particular crops is quite small and often limited to a small number of farms. In other words, the continued conversion of farms could result in the virtual elimination of the production of certain crops anywhere in the County.
- There are small but important trends in both crops and livestock that are indicative of an evolving local agricultural industry directed toward specialized or niche markets.

Bergen County Farmland Preservation Plan

- The local industry is also directed toward meeting the demand for locally grown, fresh products.

Consequently, the remaining farms are important not only because they are part of a scarce resource of farmland in Bergen County, but also because of the unique nature of many of the remaining farms. The County still retains a considerable diversity of agricultural products which is exemplified by 97 acres committed to a wide variety of vegetable crops, a significant number of chickens, and 118 acres committed to various types of horticultural production. While the acreage committed to fruit and berry crops is low, the County retains significant local production of these products for direct sale in local markets.

2.2 MARKET VALUE OF AGRICULTURAL PRODUCTS

2.2.1 Farms by Value of Sales

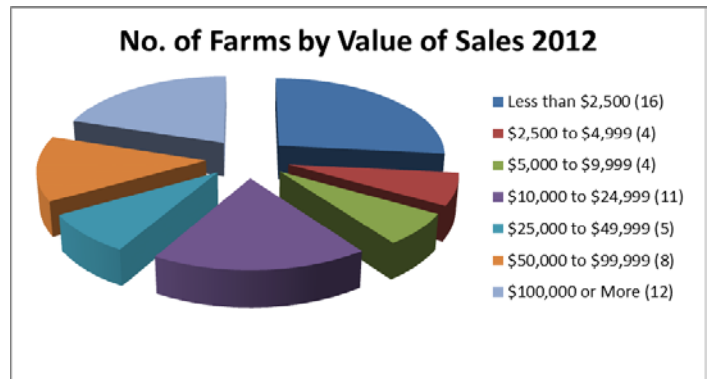
The following chart presents the number of Farms by Value of Sales, for 1982 to 2012, based on US Census of Agriculture data in Bergen County.

No. of Farms by Value of Sales (1982-2012)														
	2012		2007		2002		1997		1992		1987		1982	
Less than \$2,500	16	18.0%	26	29.2%	32	35.2%	29	24.0%	38	29.9%	24	19.0%	25	19.8%
\$2,500 to \$4,999	4	4.5%	6	6.7%	9	9.9%	9	7.4%	9	7.1%	20	15.9%	17	13.5%
\$5,000 to \$9,999	4	4.5%	11	12.4%	2	2.2%	14	11.6%	15	11.8%	18	14.3%	15	11.9%
\$10,000 to \$24,999	11	12.4%	19	21.3%	18	19.8%	29	24.0%	21	16.5%	21	16.7%	26	20.6%
\$25,000 to \$49,999	5	5.6%	4	4.5%	7	7.7%	15	12.4%	13	10.2%	11	8.7%	9	7.1%
\$50,000 to \$99,999	8	9.0%	2	2.2%	6	6.6%	6	5.0%	10	7.9%	16	12.7%	13	10.3%
\$100,000 or More	12	13.5%	21	23.6%	17	18.7%	19	15.7%	21	16.5%	16	12.7%	21	16.7%
Total No. of Farms	60		89		91		121		127		126		126	

Source: US Census of Agriculture

Over time, while the total number of farms has decreased, the percentage of the majority of sales has fluctuated in the identified ranges for Bergen’s farms. Since 2007 data, there have been dramatic decreases in farms by value of sales in four of the ranges, however, farms by value of sales of \$50,000 to \$99,999 has increased by more than 300%!

The pie chart presents the number of Bergen County’s Farms by Value of Sales for 2012.



Bergen County Farmland Preservation Plan

2.2.2 Market Value of Agricultural Products Sold

The following chart presents the Market Value of Agricultural Products Sold for certain product categories, for 1997 to 2012, based on US Census of Agriculture data in Bergen County.

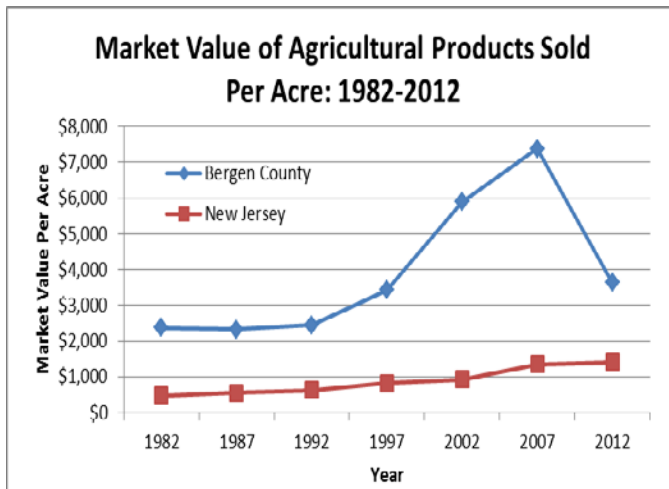
Market Value of Products Sold: Crops vs. Livestock (1997-2012)									
(in \$1,000)									
	2012		2007		2002		1997		
Crops	\$5,003	96%	\$8,385	96%	\$7,293	96%	\$8,647	96%	
Livestock	\$193	4%	\$309	4%	\$271	4%	\$360	4%	
Totals:	\$5,196		\$8,694		\$7,564		\$9,007		

Source: US Census of Agriculture

As seen in the above data, while the total market value of products sold has fluctuated over the time period, the percentage of the market value of sales of crops vs. livestock has stayed the same, with crops clearly being the dominant agricultural product sold by Bergen County farms. Crops are more easily produced on Bergen County farmland as more farmland is required to raise livestock, which is challenging considering the value of real estate in the County.

According to the 2012 US Census of Agriculture for Bergen County, its agricultural crops were ranked in the lower half of the state by acreage. Conversely, the County’s units of livestock production related to chickens, pigeons, or squab, ranked it in the top third.

The following graph compares the average Market Value of Products Sold Per Acre, from 1982 to 2012, for Bergen County and the state of New Jersey, using US Census of Agriculture data.



In 2012, Bergen County’s market value of agricultural products sold per acre dramatically decreased by more than 40%. However, Bergen County’s market value of agricultural products sold per acre far exceeds the state’s by more than 157%. Thus, clearly demonstrating how valuable Bergen County’s agriculture is to the economic activity of the state on a per-acre basis.

The total market value of agricultural products sold in Bergen County is only 0.5% of the statewide total as of 2012 (\$5.2 million in Bergen vs. \$1.006 billion statewide.)

Bergen County Farmland Preservation Plan

2.3 Agricultural Support Services

The use of agricultural support services, as with any industry-related support service, is dependent upon several factors: price, selection, location, service, and reliability. Today's electronically-connected world and its Internet-based economy, along with worldwide delivery services, provide access to a wealth of agricultural support services, regardless of whether physically located in Bergen County.

For example, when asked, one Bergen County farmer indicated seeds were purchased from various states like Maine, New York, and Pennsylvania. In addition, seeds come from as far away as Canada.

When asked, Bergen County farmers have indicated making specific farm-related purchases as far away as Pennsylvania because of price and reliable service. Further, as necessary, farm equipment parts are purchased through various companies in NJ and PA. "We also use the internet to locate parts or equipment we can't find elsewhere. We then service and/or repair our equipment ourselves," they said.

As Bergen is in the far northeastern corner of the state, it can make it quite far from any type of farm service. While it may be doubtful that a Bergen County-based farmer would travel to southern Jersey for a farm-related service, nevertheless, Rutgers Cooperative Extension of Salem County maintains a website listing for area farmers to find suppliers, services and many other resources. It can be found at: <http://saalem.rutgers.edu/greenpages/index.html>.

2.4 Other Agricultural Related Industries

There may not be any other agricultural-related industries in Bergen County, however, there are various local businesses which make use of various agricultural products. Such businesses include landscapers, restaurants, supermarkets, and the many municipally-located farmers markets. Chapter 6 provides information on Bergen County-based farmers markets.

Within the County's Parks Department is the Bergen Equestrian Center, which is a full service boarding and training facility located within Overpeck Park in Leonia. In addition to lessons, it offers an after-school program, a full-time summer camp for children, and availability at both local and rated shows. Information can be found at: <http://bergenequestrian.com/>.

The Saddle Ridge Riding Center is set on over 28 acres of mountains, fields, and trails in Franklin Lakes. It, too, provides opportunities for boarding, training, lessons, and showing. Information can be found at: <http://www.saddleridgeridingcenter.com/>.

Lastly, there is the New York City Greenmarket, which maintains open air farmers markets since inception in 1976.

Bergen County Farmland Preservation Plan

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III. LAND USE PLANNING CONTEXT

This Chapter of the Farmland Preservation Plan discusses the relationship of farmland preservation with other land use planning policies.

3.1 COMPATIBLE OPEN SPACE

Map 4: Open Space and Conservation Map indicates the relationship of the qualified farms with public or quasi-public open space within the northern Bergen County study area. As shown in *Map 4*, there are three areas of the study area with expansive open space. These areas are the Ramapo Mountains in the western part of the County; the Palisades in the eastern part of the County; and the expansive reservoirs and related water company property along the Hackensack River and its tributaries in the east-central part of the study area

In general, the most compatible open space is state, county, or municipal passive recreation, reservation, or conservation areas. In addition, quasi-public open space such as water purveyor land holdings and golf courses are compatible provided that they are limited by a development easement and are not subject to future land conversion. Active recreational facilities for schools and municipalities are generally considered less compatible with farmland than the major regional parklands.

Map 4 indicates that most of the remaining qualified farmland in the northern Bergen County study area and the compatible open space are located along or near major stream corridors. Therefore, the Project Areas for farmland and for open space preservation have been oriented based on stream or river corridors. Thus, the preservation of qualified farmland would contribute to the protection of stream corridors in the County.

3.2 MUNICIPAL ZONING

Map 5: Composite Zoning Map provides an overview of the municipal zoning in the northern Bergen County study area. While each local zoning ordinance has unique provisions, local zoning was grouped into the following major categories:

- Single family residential development grouped based on minimum lot size;
- Multi-family residential development based on gross density;
- Commercial;
- Industrial,
- Office,
- Open Space and public property.

As shown in *Map 5*, residential zoning is the primary land use regulatory category in Bergen County. Most of the residential zoning permits single-family detached units on various minimum lot sizes. Minimum lot sizes tend to vary by community. Several suburban communities have minimum lot sizes of less than 20,000 square feet but most are in the ½ to 2 acre categories. Oakland and Mahwah are the only communities with conservation district zoning having minimum lot sizes in excess of 2 acres.

Map 5 illustrates the general pattern of residential densities in the County. A comparative review of the relationship of qualified farmland with local zoning has resulted in the following conclusions:

- Relatively few qualified farmland tracts are located in residential zoning districts with small lot sizes. Of the 54 qualified farmland tracts, only eight (8) are located in zoning districts with lot sizes of 20,000 square feet or less. Three (3) additional farms have a portion of their tract in this zoning category.
- Most of the qualified farmland is located in residential zoning districts with a minimum lot size that is in the ½ to 1 acre category. In fact, 27 qualified farmland tracts are within this zoning category and three (3) additional tracts are partially within this category.
- Four (4) farms are located in the low density (1-2 acre minimum lot size) category.
- Three (3) farms are located within the conservation or very low-density residential zoning (2-acre lot size).
- Two (2) farms are located entirely or partially within multi-family residential zones that may be designated for affordable housing.
- Four (4) farms are located entirely or partially in areas zoned for non-residential (office or industrial) development.
- Two (2) farms are located in areas zoned for open space or for quasi-public use (i.e., reservoir related land holdings).
- None of the farms are zoned for commercial development since these zones tend to be located along the major highways.

There are no agricultural zoning districts in Bergen County. Farms are not listed as a permitted use in all but one of the zoning ordinances reviewed for this Plan. There are not any local right-to-farm ordinances in the County study area.

3.3 STATE DEVELOPMENT AND REDEVELOPMENT PLAN

3.3.1 Designated Centers and Endorsed Plans

There are no designated centers or endorsed plans in Bergen County.

3.3.2 State Plan Policy

Map 5: Preliminary State Development and Redevelopment Plan Cross-Acceptance III Map is the Preliminary Plan Map that was the subject and result of the cross-acceptance process. The primary planning areas within the northern Bergen County study area are the Metropolitan Planning Area (PA 1), the Environmentally Sensitive Planning Area (PA 5), and the Parks and Natural Areas Planning Area (PA 6, 7, 8). The planning policies for these planning areas are discussed below.

Planning Area 1

Most of the Northern Bergen County study area is included within the Metropolitan Planning Area (PA-1) that encompasses the developed areas of the County. The objective in the PA 1 Planning Area is to create viable and desirable communities and to support redevelopment, where warranted. Because of the densely developed nature of Bergen County, most of the qualified farms are located within Planning Area 1. As shown on **Map 5**, a total of 35 qualified farms are located within this Planning Area of which four (4) have been preserved. The farms that are within the PA 1 areas that are zoned for land development are islands used for agricultural purposes within an expansive metropolitan planning area.

Planning Area 5

The Environmentally Sensitive Planning Areas (PA-5) have been delineated to include important river corridors in Bergen County including the Ramapo river corridor in the western part of the study area, the Saddle River corridor in the central part of the study area, and the Hackensack River in the eastern part of the study area. The Hackensack River has several tributaries, lakes, and reservoirs associated with it.

The objective in the PA5 Planning Areas is to protect the environmentally sensitive nature of the areas. Infrastructure extensions that support growth are not permitted within PA5. A total of twenty (20) qualified farms are located entirely or partially within the Environmentally Sensitive Planning Area of which three (3) have been preserved. An additional five (5) farms are located immediately adjacent to these Planning Areas. A total of 11 farms are within or adjacent to the Ramapo River corridor; three (3) qualified farms are within or adjacent to the Saddle River corridor, and six (6) farms are within or adjacent to the Hackensack River corridor. The farms that are within or adjacent to the PA 5 areas would enhance and contribute to the protection of the resources in those important areas.

Planning Areas 6,7,8: Parks and Natural Areas

The Parks and Natural Areas Planning Area includes the major state and county park facilities including the Palisades Park along the Hudson River in the eastern part of the Study area and the state and County parks in the western part of the study area primarily in Mahwah Township and Oakland Borough. Other important parklands and natural areas are interspersed throughout the northern Bergen County study area. Several of the qualified farms are immediately adjacent to the defined Parks and Natural Areas.

3.3.3 Farmland Preservation Considerations

While emphasis should be placed on the preservation of farmland that is within or adjacent to the Environmentally Sensitive Planning Area, the farms within the Metropolitan Planning Area are also important since they are the last vestiges of an important and historic land use and because they are immediately proximate to a vast local market. Some of the most productive farms and farms with the strongest connection to the local consumer are located in the Metropolitan Planning Area.

3.3.4 Special Resource Area – Highlands Region

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 small portion of the Highlands Special Resource Area is located only in the northwestern corner of Bergen 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, also known as the Highlands Development Credit Bank.

The Act established the New Jersey Highlands Council, which required that a Regional Master Plan be prepared and adopted so that the preservation goals of the Act can be achieved. A draft 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. The Plan was adopted by the Highlands Council on July 17, 2008 and became effective on September 8, 2008.

The 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.”

The Highlands Regional Master Plan establishes a framework for future land use which guides development away from environmentally sensitive lands and agricultural lands. This framework also promotes compact development and redevelopment in or adjacent to existing developed areas where adequate public facilities are available to serve new growth and development, provided that such development and redevelopment is compatible with existing land uses and community character. The Goals, Policies and Objectives for Future Land Use address the basis for Land Use Capability Zones and Sub-Zones, methods for modifying Plan data layers and maps through Plan Updates, applicable standards for Plan Adjustments, local build out analyses, and general guidelines for new land uses in the Zones and Sub-Zones.

The Land Use Capability Map Series provides the basis for defining the six zones of the Highlands Region, which are found in both the Preservation and Planning Areas. These six zones include three major zones (the Protection Zone, the Conservation Zone, and the Existing Community Zone) and three sub-zones (the Lake Community Zone, and the Environmentally-Constrained Sub-Zone within both the Conservation Zone, and the Existing Community Zone). These Zones and Sub-Zones are then related to a series of additional information layers, using both tabular results and maps, to help define the land use capability of the various parts of the Highlands Region. Details on the delineation of the Land Use Capability Zones are provided within the *Land Use Capability Zone Map*

Technical Report, which can be found on the website of the New Jersey Highlands Council at: <http://www.highlands.state.nj.us/njhighlands/master/>.

The Conservation Zone includes lands of significant agricultural importance and associated natural resource lands that are adjacent to, or in common ownership with, land used for agricultural purposes. Development potential in the Conservation Zone is limited in location and intensity because of agricultural and natural resource protection requirements and infrastructure constraints.

The New Jersey Highland Region consists of 859,358 acres (or 1,343 square miles) and lies within portions of seven counties (Hunterdon, Somerset, Sussex, Warren, Morris, Passaic, and Bergen) and includes 88 municipalities. It is comprised of two areas: the Preservation Area and the Planning Area. A total of 22,398 acres of the Highlands Region is located in Bergen County, which comprises only approximately 2.6% of the Highlands Region and only about 15% of the County’s total land area. The Bergen County Highland Region includes only the municipalities of Mahwah Township and Oakland Borough. The adjacent table provides a breakdown of Bergen County’s Highland’s agricultural and total land area acreages.

	<i>Highlands Resource Area Acreage</i>		
	Planning	Preservation	Totals
Agricultural	204	369	572
Total Acreage	10,089	12,309	22,398

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 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.

With regard to specific policies of the 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.

3.3.4.1 Transfer of Development Rights Program

Transfer of Development Rights (TDR) is a land use tool that allows a community to use market forces to encourage the transfer of development potential from areas that the community wants to preserve (called sending zones) to areas that are more appropriate to accommodate increased growth (called receiving zones). Landowners in the sending zones receive compensation for restricting development on their property. As a market-based system, payment for this lost development potential comes from purchasers who buy credits representing the lost development potential in the sending zones. The credits then entitle the purchaser to build in a receiving zone at a density greater than that permitted in the underlying zoning.

The State Transfer of Development Rights Bank is located within, but not of, the SADC. It promotes the use of TDR and other density transfer tools for land preservation and to assist municipalities in the establishment of these programs. It provides Planning Assistance Grants to aid municipalities in conducting the extensive research and proactive planning work required under the TDR enabling statute.

TDR has become an increasingly important tool in the preservation of lands with sensitive resources, whether those resources are environmental, agricultural, or historical. In New Jersey, TDR programs have been established to preserve large contiguous parcels of farmland to maintain agricultural viability, such as the programs in Chesterfield and Lumberton Townships in Burlington County, while in the New Jersey Pinelands TDR is used to preserve tracts of ecologically important lands to maintain ecosystem health and high water quality.

The Governor in August 2013 signed into law legislation that amended the Municipal Land Use Law to provide municipalities with enhanced ability to use contiguous and noncontiguous clustering and lot-size averaging for farmland, open space, and historic preservation. The legislation requires municipalities to use an agricultural restriction template to cluster for farmland preservation that is prepared by SADC or to obtain SADC approval of their deed restrictions. Model deed restrictions were being drafted by SADC as of end of 2013.

3.3.4.2 Highlands Development Credits (HDCs) & HDC Bank

The Highlands TDR Program allocates TDR credits called Highlands Development Credits or HDCs to sending zone property owners. HDCs may be sold to developers for use in appropriate voluntary receiving zones. Use of HDCs by developers in established receiving zones will permit

developers to increase the density or intensity of proposed projects in those zones. Under the Highlands Act, participation as a receiving zone is voluntary.

The HDC Bank performs several functions including recording and tracking all HDC activities and serving as a buyer and seller of HDCs. The HDC Bank is lead by a nine-member board of directors, and works in conjunction with the Highlands Council to implement the Highlands Transfer of Development Rights (TDR) Program.

3.4 CURRENT LAND USE AND TRENDS

3.4.1 Population Growth

According to the U.S. Census, Bergen County had a population of 905,116 persons in 2010, which represented a 9.6% increase from 1990 (825,380) and a 2.4% increase from 2000 (884,118).

The projections in the table below were developed by the New Jersey Department of Labor and Workforce Development, Division of Labor Market & Demographic Research as part of the Department's

economic and demographic projection series. The projections are neither predictions nor forecasts.

	<u>Census on April 1</u>		<u>Projections to July 1</u>			
	2000	2010	2015	2020	2025	2030
New Jersey	8,414,350	8,791,894	9,024,000	9,241,900	9,446,200	9,648,100
Bergen	884,118	905,116	927,600	949,600	969,700	991,400
	11%	10%	10%	10%	10%	10%

According to the state data, Bergen County will continue to remain the largest County by population with approximately 10% of the state's population, all situated on only 1/33rd of the state's land mass.

3.4.2 Housing Units

Despite its suburban land use context, Bergen County remains a fast-growing county in the state, although the rate of its increase in housing units in the Study Area has slowed between 1990 and 2010. Between 1990 and 2000, the rate of increase in housing units in the Study Area was approximately 7%. However, this rate dipped to only about a 4% increase between 2000 and 2010. Overall, the County's total number of housing units in the Study Area increased by more than 12,000, or about a 10% increase.

3.4.3 Study Area

The historical trend in housing units within the northern Bergen County study area is depicted in Table 17, Housing Units Authorized (1990-2010) on the next page. The data for the 16 municipalities with qualified farmland is shown separate from the remainder of the study area. The percent increase from 1990-2010 is almost 3 times greater in the Study Area compared to the Remainder of the Study Area. This suggests that most of the increase in housing units occurred in those communities where farmland remained, which is generally the only source of vacant, large tracts of land.

It is evident that housing growth is being constrained by the limited amount of land that is available for residential development in Bergen County. Because many communities in the County are approaching buildout, there is an increasing focus on redevelopment as well as land conversion pressure on the remaining farmland.

Table 17: Housing Units Authorized (1990-2010)

Bergen County Study Area	Total Housing Units			Percent Change
	1990	2000	2010	1990-2010
Allendale borough	1,915	2,143	2,388	24.70%
Closter borough	2,767	2,865	2,860	3.36%
Dumont borough	6,328	6,465	6,542	3.38%
Emerson borough	2,257	2,398	2,552	13.07%
Franklin Lakes borough	3,171	3,395	3,692	16.43%
Hillsdale borough	3,422	3,547	3,567	4.24%
Mahwah township	7,249	9,577	9,868	36.13%
Montvale borough	2,439	2,590	2,872	17.75%
Norwood borough	1,608	1,888	2,007	24.81%
Oakland borough	4,019	4,345	4,470	11.22%
Old Tappan borough	1,355	1,804	1,995	47.23%
Paramus borough	7,892	8,209	8,915	12.96%
River Vale township	3,208	3,312	3,521	9.76%
Saddle River borough	1,072	1,183	1,341	25.09%
Woodcliff Lake borough	1,703	1,842	1,980	16.27%
Wyckoff township	5,248	5,638	5,827	11.03%
	57,643	63,201	66,407	15.20%
Remainder of Study Area	1990	2000	2010	Percent Change 1990-2010
Alpine borough	582	730	670	15.12%
Cresskill borough	2,600	2,702	3,114	19.77%
Demarest borough	1,610	1,634	1,659	3.04%
Glen Rock borough	3,963	4,024	4,016	1.34%
Harrington Park borough	1,511	1,583	1,624	7.48%
Haworth borough	1,142	1,146	1,136	-0.53%
Ho-Ho-Kus borough	1,448	1,465	1,462	0.97%
Midland Park borough	2,615	2,650	2,861	9.41%
New Milford borough	6,353	6,437	6,362	0.14%
Northvale borough	1,556	1,596	1,635	5.08%
Oradell borough	2,836	2,833	2,831	-0.18%
Park Ridge borough	3,063	3,258	3,428	11.92%
Ramsey borough	4,960	5,400	5,550	11.90%
Ridgewood village	8,666	8,802	8,743	0.89%
Rockleigh borough	68	80	86	26.47%
Upper Saddle River borough	2,410	2,560	2,776	15.19%
Waldwick borough	3,391	3,495	3,537	4.31%
Washington township	3,190	3,245	3,341	4.73%
Westwood borough	4,260	4,610	4,636	8.83%
Source: NJSA w/ US Census	58,214	60,250	61,477	5.61%

3.5 COUNTY MASTER PLAN

Bergen County continues to undertake a major update of its County Master Plan for the first time in over 30 years. The Master Plan's Chapter entitled, "Open Space, Agriculture, and Parks & Recreation," incorporates many of the planning objectives and farmland preservation objectives of this Comprehensive Farmland Preservation Plan.

A stated goal in this Master Plan Chapter is as follows: Protect and Support Agriculture and Preserve Agricultural Areas. There are five objectives in support of this goal are: 1. Create new and expand existing farming activities; 2. Increase awareness of agriculture and its importance; 3. Preserve remaining farmland; 4. Develop and improve the relationship with the agricultural community; and, 5. Ensure farm owners are financially able to continue farming.

This Master Plan Chapter's Action Items in pursuit of these objectives included the following:

- Use some open space for sustainable agricultural activities
- Study potential areas for urban agricultural activities, like roof and community gardens
- Better advertise and market Jersey Fresh and other existing agricultural organizations
- Create and promote agricultural and eco-tourism events and activities
- Connect agricultural and eco-tourism activities
- Inventory remaining farmland and adopt a prioritized Agricultural Land Acquisition Plan, i.e., Comprehensive County Farmland Preservation Plan
- Have the Bergen County Agriculture Development Board advise on agricultural issues, similar to the County Trust Fund's open space and historic advisory boards
- Research and compile all available funding sources for agriculture
- Provide financial incentives for farm owners to keep farming

Presently, the Preliminary Draft of the County Master Plan is undergoing review by the County Administration. While final approval and adoption of the full County Master Plan may be many months away, the individual chapter addressing Agriculture, or at the very least, this Plan will be finalized and approved sooner.

Additional information about the Preliminary Draft County Master Plan can be found on the Department of Planning & Economic Development's website.

In general, regarding land-use planning and competing land uses on a scarce land base, the County of Bergen recognizes that there is a limited amount of time in which to preserve its remaining agricultural lands. It acknowledges that there may be some sense of urgency to preserve its remaining agricultural lands and that to do so would require discouraging their conversion into non-agricultural uses.

3.6 PUBLIC WATER SUPPLY SERVICE AREAS

Map 7: Public Water Supply Map indicates the service areas of the various water authorities and departments in Bergen County. The primary water purveyor in the County is United Water New Jersey, which was formerly known as the Hackensack Water Company.

United Water NJ operates a water supply and distribution system consisting of four interconnected reservoirs, three of which are located in Bergen County and one of which is located in Rockland County, New York. The reservoirs are located on the fresh water portion of the Hackensack River, encompass nearly 6,000 acres, and have a storage capacity of about 14 billion gallons. All of the surface water from the United Water NJ system is treated at a state-of-the-art ozone water treatment system located in Haworth Borough that has a design capacity of 200 million gallons per day. United Water NJ supplies water for approximately 750,000 persons, primarily in Bergen County.

As **Map 7** illustrates, all but the extreme western part of the northern Bergen County study area is included within the service area of a regional or municipal public water supply and distribution system. Portions of Mahwah Township and Oakland Borough are outside of the public water distribution system and must rely on onsite water supply sources. Therefore, most of the qualified farmland is located within a public water supply service area, except for the farms along the Ramapo River.

Below is the public water system deficit or surplus of selected Bergen County water systems servicing the agricultural communities of the Study Area. All but one of these public water systems indicates having water surplus.

NJDEP Division of Water Supply and Geoscience	
Public Water System Deficit/Surplus	
May 19, 2014	
Public Water System	FIRM Capacity Deficit/Surplus (MGD)
Allendale Water Department	-0.584
United Water NJ - Franklin Lakes	1.826
Mahwah Water Department	0.401
United Water NJ - Montvale	2.487
United Water NJ - Haworth	37.357
Oakland Water Department	0.424
Park Ridge Water Department	1.619
Ridgewood Water Department	1.256
Saddle River Water Utility	0.371
Firm Capacity Deficit or Surplus =	
= (Firm Capacity - Total Peak Daily Demand)	

To date, Bergen County’s agricultural community has not indicated any issues pertaining to availability of sufficient water.

3.7 SEWER SERVICE AREAS

Map 8: Sewer Service Area Map indicates the sewer service areas of the various sewerage authorities and sewer departments in Bergen County. The primary wastewater utilities authorities serving Bergen County are the Bergen County Utilities Authority (BCUA) and the Northwest Bergen County Utilities Authority. The only portions of Bergen County that are outside of the sewer service areas are the extreme eastern and the extreme western parts of Bergen County.

Most of the qualified farmland in Bergen County is within an approved sewer service area. The presence of regional sewer systems with adequate capacity increases the land conversion pressures on the remaining farms and increases the value of the farmland. The only farms that are outside of sewer service areas are the qualified farms along the Ramapo River Valley in Mahwah Township.

Below is the most-recent reported municipal flow data summary of Bergen County wastewater treatment systems servicing the agricultural communities of the Study Area for the years 2008-2010. All but one of these wastewater systems indicates having surplus permitted flow.

NJDEP Division of Water Quality									
New Jersey Pollutant Discharge Elimination System									
Municipal Flow Data Summary - annual 12-month average flow data for municipal NJPDES/DSWs									
NJPDES No.	FACILITY NAME	PIPE	2008	2009	2010	Permitted Flow(MGD)	STP Type	WMA	MAJOR/
			Annual Average Flow (MGD)	Annual Average Flow (MGD)	Annual Average Flow (MGD)				MINOR
NJ0020028	BERGEN COUNTY WTP	001A	81.4947	78.7688	78.1978	75.00	PUB	5	Major SW
NJ0024813	NORTHWEST BERGEN COUNTY UA OAKLAND-SKYVIEW-HIGH BROOK	001A	17.8158	14.7833	10.2858	16.80	PUB	4	Major SW
NJ0021342	STP	001A	0.0157	0.0168	0.0170	0.023	SCH	3	

To date, Bergen County’s agricultural community has not indicated any issues pertaining to availability of adequate wastewater treatment.

3.8 MUNICIPAL MASTER PLAN AND ZONING OVERVIEW

3.8.1 Local Commitment

Currently, there are not any municipal farmland preservation programs in Bergen County. The absence of any municipal farmland preservation programs should not be viewed as a lack of interest in farmland preservation at the local level, but rather recognition that the County has accepted primary responsibility for farmland preservation in Bergen County. To date, each of Bergen County's preserved farms has received the required support from the municipal governing body.

3.8.2 Zoning

The zoning power in New Jersey is often used as a method of reducing the land conversion pressure without acquiring the land or the development rights outright. Large minimum lot sizes are often used in Conservation districts to discourage intensive residential development. This approach is successful to a degree. Developers are usually more interested in acquiring parcels where permitted lot sizes are smaller (when that is an option) since the number of houses that can be constructed on the subject parcel is greater. However, the primary disadvantage of large-lot zoning is that residential developments that do occur consume more land than is necessary for residential purposes. In addition, if minimum lot sizes are excessive, the development value of the agricultural land can be impacted. Rural communities usually want to reduce the potential for land development without reducing the value of the farmer's land equity. For that reason, easement acquisition or the clustering of planned development are preferred methods of preserving land.

Mahwah Township and Oakland Borough have conservation zoning districts with minimum lot sizes in excess of 2 acres. Mahwah Township's ordinance permits agricultural uses with specific regulations regarding the location of agricultural structures and the sale of products at roadside stands.

3.8.3 Innovative Planning Techniques

3.8.3.1 Municipal TDR Opportunities

Currently, there are not any municipal or regional TDR (Transfer of Development Rights) opportunities available within Bergen County. Due to the fact that the qualified farmland does not tend to be concentrated in a particular area, the concept of creating sending and receiving districts does not appear to be applicable to most of Bergen County. The only exception may be the Ramapo Valley corridor in Mahwah Township. Additional TDR discussion can be found in Section 3.3.4.1, earlier.

3.8.3.2 Regional TDR Opportunities

The Highlands TDR Program allocates TDR credits called Highlands Development Credits or HDCs to sending zone property owners. HDCs may be sold to developers for use in appropriate voluntary receiving zones. Use of HDCs by developers in established receiving zones will permit developers to increase the density or intensity of proposed projects in those zones. Under the Highlands Act, participation as a receiving zone is voluntary.

The Highlands Council will allocate credits to land within Sending zones that satisfy certain thresholds. Specifically, land parcels that are within the Protection Zone or the Conservation Zone of the Preservation Area which were zoned for residential use as of August 2004 and which have an area

of at least 5 acres or at least three times the minimum lot size of the residential zoning would be eligible for an allocation of HDCs.

It appears that portions of Mahwah Township and Oakland Borough would be eligible for consideration as TDR sending districts. They are included in areas designated for Conservation, even though they are not included in the Agricultural Priority Areas of the Highlands Council's Master Plan.

The Highlands Water Protection and Planning Act (PL 2004, c. 120), amended as of May 5, 2010, provides that any municipality, either 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, or any municipality located outside of the Highlands Region that has received plan endorsement by the State Planning Commission pursuant to the "State Planning Act" or the State Planning Commission in coordination with the Highlands Water Protection and Planning Council determines has designated an appropriate project areas as a receiving zone, 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.

The transfer of development credits requires the establishment of a sufficient number of receiving zones to be successful. The Highlands Council intends to identify areas that have the potential to serve as TDR receiving zones, but it would be up to a municipality to initiate the process by adopting a resolution indicating its interest in assessing the feasibility of establishing a voluntary TDR receiving zone. The Council intends to offer significant financial benefits to encourage municipalities to consider participation in the regional TDR program.

While this regional TDR program has only just begun, it may offer an alternative to the purchase of development rights along/within the Ramapo River Valley.

As for determining the merits of a TDR program, either at the municipal or county level, there may be areas in need of redevelopment where municipalities are not taking advantage of all of their available opportunities, such as "giving away density." There certainly would seem to be preservation possibilities in several areas – agricultural, environmental, or historic – within the same municipality or sub-region of municipalities. It may be that the recent softening of the real estate market makes these opportunities ripe to consider. Overall, under the right set of circumstances, the use of TDR at either the municipal, county, or regional level may have its merits.

3.8.3.3 Clustering

Residential cluster development is a form of land development in which principal buildings and structures are grouped together on a site, thus saving the remaining land area for common open

space, conservation, agriculture, recreation, and public and semipublic uses. Cluster development has a number of distinct advantages over conventional subdivision development. A well-planned cluster development concentrates dwelling units on the most buildable portion of the site and preserves natural drainage systems, vegetation, open space, and other significant natural features that help control storm water runoff and soil erosion. Later savings can be realized in street and utility maintenance (less surface area that needs repaving and fewer feet of water and sewer line to maintain). Clustering also enhances the sense of community, allowing parents better supervision of children playing in common areas and promoting social interaction among neighbors.

The use of clustering to preserve farmland has limited application in Bergen County since much of the remaining farmland is not within an expansive undeveloped corridor. Clustering should be evaluated on a project specific basis in areas where compact development could be supported in one portion of a qualified farm in exchange for permanent preservation of the remainder of the tract through a deed restriction.

Clustering is permitted in certain communities such as Oakland Borough to encourage planned development in certain residential districts. However, this clustering provision is currently oriented toward the creation of common open space and improved layout rather than farmland preservation.

To date, Bergen County has not used clustering to help preserve any of its remaining farms, nor any County-acquired open space.

3.8.3.4 Non-contiguous Clustering

The Municipal Land Use Law (MLUL) allows for the clustering of development rights from non-contiguous parcels for planned development. This concept of non-contiguous clustering is easier to implement than the Transfer of Development Rights and could be applied in certain municipalities in Bergen County. The basic concept is to allow a developer that controls two or more non-contiguous parcels to transfer the development rights from the parcel that is to be preserved to the parcel that is to be developed. Typically, the density of the development rights on the preserved parcel are less than the density of the development rights on the parcel being developed so the concept results in an increase in the overall development intensity but not a doubling of the by-right density.

Non-contiguous clustering should be explored in areas of Bergen County where the density can be sufficiently increased to enable the clustering of the development rights as an alternative to the public purchase of development rights.

3.8.4 Description of Buffer Requirements

A review of local ordinances has indicated that there are no agricultural buffer requirements in the County. It is recommended that local municipalities adopt agricultural buffer requirements around farms that are targeted for preservation to increase land use compatibility and to support the Right-to-Farm Act.

3.8.5 Development Pressures and Land Value Trends

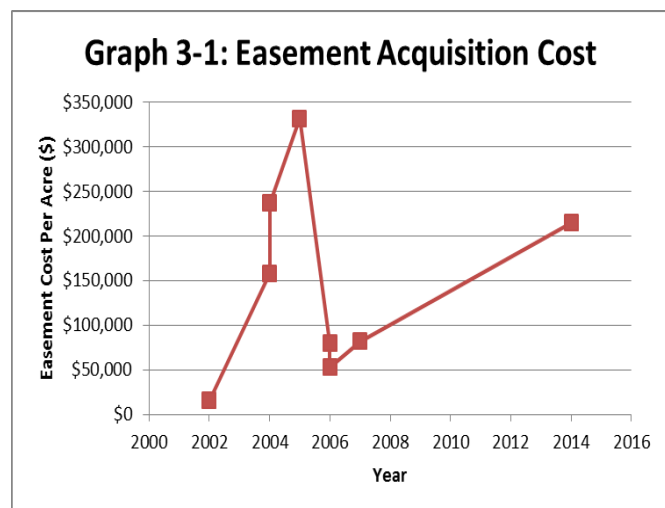
Table 18 summarizes the prior development easement acquisition costs. As shown in *Table 18*, on the next page, the cost of purchasing development easements in Bergen County had averaged about \$50,000 per acre. However, this average is deceiving since it is affected by the relatively low

cost of acquiring the largest farm in 2002 in Mahwah Township. If this sale were excluded, the average cost of acquiring development rights would be \$124,300 per acre.

It should be noted that a number of years had passed since the County’s last purchase. Further, there was a dramatic downturn in the financial and housing market in the United States beginning 2007/2008. This change had an adverse impact on housing value and could continue to impact land values. The tight credit market has also substantially reduced prospective investors in land transactions. As the market has begun to stabilize, the full effect of the current credit and economic downturn are just now being understood. While in the recent past, it could be assumed that land values would continue to increase, it appears now that there is a period of adjustment in which land values have declined and may just now be stabilizing before again increasing in accordance with the regional housing market demand.

Table 18 Bergen County Land Values Development Easement Acquisition Cost									
Date	Block	Lot	Address	Municipality	Assessment	Sale Price	Acres	\$/Acre	
04/26/02	1:19	145-147;12,16,17	Mountain Land	Mahwah	N/A	\$3,362,940	216.1	\$15,562	
02/06/04	1424.01	3	706 Franklin Avenue	Franklin Lakes	N/A	\$988,132	6.3	\$158,000	
06/29/04	2102	55	119 Hickory Lane	Closter	N/A	\$2,544,994	10.7	\$236,832	
04/04/05	201	1: 4	244 Wierimus Road	Hillsdale	N/A	\$3,354,196	10.1	\$332,000	
05/25/06	17	11	350 Ramapo Valley Road	Mahwah	N/A	\$1,320,654	16.5	\$80,064	
06/20/06	25	14	1174 Ramapo Valley Road	Mahwah	N/A	\$580,250	11.0	\$52,750	
01/17/07	147	23	560 Campgaw Road	Mahwah	N/A	\$3,864,906	47.1	\$82,000	
Source: SADC									
Selected Recent Privates Land Sale Transactions									
Date	Block	Lot	Address	Municipality	Assessment	Sale Price	Acres	\$/Acre	
04/15/08	910	9.01	4 Nadler Court	Allendale	\$278,100	\$1,115,000	0.53	\$2,098,030	
02/12/08	1106.05	3	5 Shinnecock Trail	Franklin Lakes	\$959,300	\$1,400,000	1.84	\$762,112	
03/04/08	1106.05	4	7 Shinnecock Trail	Franklin Lakes	\$961,800	\$1,510,000	1.85	\$817,542	
01/25/08	1413.01	3	289 Haven Road	Franklin Lakes	\$598,200	\$750,000	2.08	\$361,272	
03/15/07	2410.02	1	243 Lynn Drive	Franklin Lakes	\$580,000	\$990,000	0.92	\$1,076,087	
04/23/08	1109	1	Omaha Way	Franklin Lakes	\$994,500	\$2,000,000	13.89	\$143,988	
12/06/06	3601	29	25 Potash Road	Oakland Borough	\$875,000	\$875,000	7.90	\$110,745	
04/20/07	4004	9	8 Rarian Road	Oakland Borough	\$165,000	\$250,000	3.36	\$74,405	
11/15/06	1808	5	16 Eugene Road	Saddle River Borough	\$663,000	\$795,000	2.00	\$397,500	
04/30/07	1808	6	14 Eugene Road	Saddle River Borough	\$663,000	\$795,000	2.00	\$397,500	
05/15/08	1502	42	23 Denison Drive East	Saddle River Borough	\$1,150,600	\$2,210,000	2.10	\$1,052,381	

Table 18 also indicates selected recent land transactions for communities where farmland preservation was being considered. The table indicated that the fee simple land acquisition cost had ranged from \$74,000 per acre to over \$1 million per acre. However, it should be noted that most of the land transactions shown were for buildable tracts in the 1-3 acre range rather than farmland. In no way, should this data be relevant to the cost of acquiring farmland today. According to recent real estate data, there have not been any comparable sales of large vacant lots for development that could be considered applicable towards valuing farmland preservation easements. As such, for the 2012 farmland preservation application of Demarest Farms, Saddle River, the County was directed by SADC to employ the subdivision method for appraisal purposes. In March 2014, it resulted in the SADC’s certification of an easement value at \$215,000.00 per acre.



Graph 3-1 displays the acquisition cost of development easements over time (2002-2014) to illustrate that the easement cost is both a function of time and the location of the farm. (Note that the 2014 data point is for the 2014 pending easement acquisition of the Demarest Farms, Saddle River property, which is underway at the time of this writing.)

Bergen County Farmland Preservation Plan

IV. COUNTY FARMLAND PRESERVATION PROGRAM-OVERVIEW

4.1 FARMLAND PRESERVATION PROGRAM

The State of New Jersey has placed increasing emphasis in recent years on the need for farmland preservation. In 1999, Governor Whitman signed the Garden State Preservation Trust Act which had a goal of preserving one (1) million acres of New Jersey for open space and agricultural preservation. The retention of a viable agricultural industry in the State of New Jersey is contingent upon a number of complex factors but the preservation of contiguous tracts of land in agricultural districts is fundamental to this effort.

As shown in *Table 19* below, 207,080 acres have been permanently preserved in the State of New Jersey through the County and State easement purchase or fee simple acquisition programs. This represents almost 29% of the Land in Farms per the USDA Census of Agriculture (2012). Bergen County has preserved seven (7) farms encompassing 318 acres through the County Easement Purchase Program.

Table 19
New Jersey Farmland Preservation Program Summary
Agricultural Lands Preserved by County

County	Farms	Percent	Acres	Percent
Atlantic	48	2.2%	5,105	2.5%
Bergen	7	0.3%	318	0.2%
Burlington	202	9.1%	25,232	12.2%
Camden	13	0.6%	988	0.5%
Cape May	45	2.0%	2,649	1.3%
Cumberland	155	7.0%	17,431	8.4%
Gloucester	156	7.0%	12,734	6.1%
Hunterdon	369	16.6%	29,867	14.4%
Mercer	107	4.8%	7,886	3.8%
Middlesex	51	2.3%	4,818	2.3%
Monmouth	193	8.7%	14,703	7.1%
Morris	118	5.3%	7,319	3.5%
Ocean	48	2.2%	3,247	1.6%
Passaic	1	0.0%	15	0.0%
Salem	244	11.0%	30,596	14.8%
Somerset	104	4.7%	8,035	3.9%
Sussex	137	6.2%	15,148	7.3%
Warren	222	10.0%	20,989	10.1%
Total	2,220		207,080	100%

Source: SADC 2013 Annual Report December 31, 2013

4.1.1 Bergen County Farmland Preservation

Table 20 provides a breakdown of the preserved farmland by municipality. To date, seven (7) farms have been preserved in four (4) municipalities. Four of the preserved farms and over 90% of the 318 preserved acres of land are located in Mahwah Township in the northwestern corner of the County. In general, approximately one-third of the qualified farmland in Bergen County has been preserved.

Table 20
Bergen County
Agricultural Lands Preserved by Municipality

Municipality	Preserved Acres*	Percent
Closter Borough	10.7	3.4 %
Franklin Lakes Borough	6.3	2.0%
Hillsdale Borough	10.1	3.2%
Mahwah Township	290.7	91.5%
Total (Bergen County)	317.8	100%

* Source: SADC April 2014

(Note: As of the writing of this Plan, the 17-acre Demarest Farms, Saddle River, is underway for farmland preservation. Its successful completion will result in Bergen’s eighth preservation, although it is a continuation of the preserved Demarest Farms, Hillsdale property. As a result, Table 20’s data will be revised slightly.)

4.2 COUNTY AGRICULTURAL DEVELOPMENT AREAS

The Bergen County Agriculture Development Board (CADB) identified the County’s Agricultural Development Areas (ADA) by a map dated June 6, 2000 and by the criteria found in N.J.A.C. 2:76-1 and N.J.S.A. 4:1C-18. The ADA was adopted by the SADC by a resolution dated June 22, 2000. This Farmland Preservation Plan proposes to amend the approved ADA map, with the understanding that the owners of parcels that no longer qualify for farmland assessment are no longer considered potential applicants unless a specific exception is granted by the Bergen CADB and approved by the SADC. (Statutory criteria cannot be waived by the CADB.) Agricultural Development Areas must satisfy the following criteria, of which nos. 1-3 are mandatory statutory criteria per N.J.S.A. 4:1C-18:

1. *Encompass productive agricultural lands which are currently in production or have the 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 non-conforming use.*
2. *Consist of lands which are reasonably free of conflicting development.*
3. *Cannot comprise greater than 90 percent of the agricultural land mass of the County.*
4. *Consist of a predominance of soils that are prime or of statewide importance or can easily support viable agricultural production as classified by the Natural Resource Conservation Service.*

5. *Consist of at least five (5) acres of contiguous land.*
6. *Qualify for farmland assessment in accordance with the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et. seq.*
7. *May include woodland areas where owners follow farm management plans.*
8. *Agriculture is the preferred, but not necessarily the exclusive use.*

The adopted criteria also include the following exception: *In instances where land has been excluded from an Agricultural Development Area but is exceptionally good for agricultural production, one or more of the other criteria may be waived and that land may be included in the Agricultural Development Area.*

While, the CADB 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. To date, the CADB has neither received such written requests nor entertained specific consideration to expansion of its ADAs.

4.3 FARMLAND PRESERVED TO DATE BY PROGRAM

Table 21 on the next page lists all of the farms and parcels that have been acquired or otherwise deed restricted for agricultural purposes. A total of 318 acres have been preserved in the County under the County Easement Purchase Program. The grant programs are described below.

4.3.1 State Acquisition Programs

4.3.1.1 Fee Simple Purchase Program

Through the Fee Simple Program, the state buys a farm outright, which must be included in an Agriculture Development Area, retires the land's development rights, then auctions the property to the highest bidder. The property must continue to be farmed. The SADC negotiates a purchase price subject to recommendations of two independent appraisers and review by a state review appraiser. Once owned by the State, an easement is put in place so the land is permanently preserved for agriculture. In this type of acquisition, the landowner does not retain any rights and the property is resold by the SADC at auction for agricultural use. To date, the SADC has not acquired any farmland preservation easements in Bergen County via this method.

4.3.1.2 Direct Easement Purchase Program

Through the Direct Easement Purchase Program, the state can purchase development easements directly from landowners. Landowners do not have to be within an ADA if they are making an application directly to the State. The Direct Easement is similar to a County or municipality easement purchase. To date, the SADC has not acquired any farmland preservation easements in Bergen County via this method.

4.3.2 County Easement Purchase (EP) program

Under this program, the landowner retains the ownership of the deed-restricted land but voluntarily agrees to sell the development rights. After the sale, a permanent deed restriction is placed

on the property in order to ensure the land will not undergo non-agricultural development in the future. The cost to purchase the easement is shared by the State and County and can include financial participation by the municipality and non-profit groups.

To date, the CADB has solely utilized the Easement Purchase (EP) program in its preservation of 318 acres in Bergen County since 2000. A total of seven (7) farm properties were preserved under this program as shown in Table 21, below.

<i>Table 21</i>									
<i>Bergen County Farmland Preservation Plan</i>									
<i>Preserved Lands</i>									
Map Number	Municipality	Owner	Total Cost	State Share	Local Share	Acreage	Cost/Acre	Date	County Year
1	Mahwah	Greene, Carol Wehran	\$3,362,940	\$2,677,792	\$685,148	216.1	\$15,562	04/26/02	2000
24	Franklin Lakes	Twinbrook Nurseries: Scherer W.	\$988,132	\$592,879	\$395,253	6.3	\$158,000	02/06/04	2002
50	Closter	Brooks, Ellen L.	\$2,544,994	\$1,654,246	\$890,748	10.7	\$236,832	06/29/04	2003
37	Hillsdale	Demarest, Elizabeth	\$3,354,196	\$1,677,098	\$1,677,098	10.1	\$332,000	04/04/05	2004
12	Mahwah	Dator, James R. & Rehill, Darryl	\$1,320,654	\$545,081	\$775,573	16.5	\$80,064	05/25/06	2005
7	Mahwah	McDonnell, George & Elizabeth	\$580,250	\$345,513	\$234,737	11.0	\$52,750	06/20/06	2005
9	Mahwah	Kohout, Joseph & Lottie	\$3,864,906	\$2,227,034	\$1,637,872	47.1	\$82,000	01/17/07	2005
Totals			\$16,016,072	\$9,719,643	\$6,296,429	317.8	\$50,392		

The County EP program has been phased out as the primary type of easement purchase program and essentially been replaced by the more flexible County Planning Incentive Grant Program, which is described following.

4.3.3 County Planning Incentive Grant Program

The County Planning Incentive Grant (PIG) Program is intended to protect and preserve large areas of contiguous farmland through the purchase of development easements. In order to qualify for a PIG, the County must create an agricultural advisory board (our CADB serves this role) and must also maintain a dedicated funding source to purchase farmland easements. The Bergen County Open Space, Recreation, Farmland & Historic Preservation Trust Fund may, and has, been used to provide funding towards the purchase of development easements for farmland preservation purposes.

Presently, the County is completing the acquisition of its first development easement for farmland preservation purposes through this PIG program. It is the Demarest Farms, Saddle River property.

The PIG Grant Program was established to encourage farmland preservation in defined Project Areas. As further discussed in Chapter 5, the grant program may not be fully suited to the dispersed nature of qualified farmland in a suburban context. For that reason, not all of the qualified farms may be eligible for farmland preservation funding under the state PIG Program.

4.3.4 Non-Profit Program

Nonprofit organizations may also help achieve farmland preservation goals. Grants can be obtained from the SADC to fund up to 50% of the fee simple or development easement values on farms. These grants can help to preserve farmland, although generally, local non-profits target properties of environmental significance and do less farmland preservation. As with other programs,

grants are obtained through an application process in which the land is valued by independent appraisers.

Currently, there have not been any non-profit organizations in Bergen County engaged in any state farmland preservation program. Nevertheless, due to the cost of preserving land in Bergen County, it is possible that relationships with non-profit organizations may need to be pursued.

4.3.5 Municipal Planning Incentive Grant Program

The Municipal Planning Incentive Grant Program has similar requirements to the County PIG Program. Municipal PIGs require the adoption of a Comprehensive Farmland Preservation Element as part of the municipal master plan, an Agricultural Advisory Committee, establish and maintain a dedicated funding source for farmland preservation or an approved alternative, and adoption of a right-to-farm ordinance consistent with, or stronger than, the state model. Grants for a municipal PIG are provided by the SADC to purchase development easements. Presently, none of Bergen County's municipalities are participating in this program.

4.3.6 Transfer of Development Rights Program

Transfer of Development Rights (TDR) is a land use tool that allows a community to use market forces to encourage the transfer of development potential from areas that the community wants to preserve (called sending zones) to areas that are more appropriate to accommodate increased growth (called receiving zones). Landowners in the sending zones receive compensation for restricting development on their property. As a market-based system, payment for this lost development potential comes from purchasers who buy credits representing the lost development potential in the sending zones. The credits then entitle the purchaser to build in a receiving zone at a density greater than that permitted in the underlying zoning.

TDR has become an increasingly important tool in the preservation of lands with sensitive resources, whether those resources are environmental, agricultural, or historical. In New Jersey, TDR programs have been established to preserve large contiguous parcels of farmland to maintain agricultural viability, such as the programs in Chesterfield and Lumberton Townships in Burlington County, while in the New Jersey Pinelands TDR is used to preserve tracts of ecologically important lands to maintain ecosystem health and high water quality.

Currently, there are not any municipal, county, or regional TDR opportunities presented within Bergen County. Due to the fact that the qualified farmland does not tend to be concentrated in a particular area, the concept of creating sending and receiving districts does not appear to be applicable to most of Bergen County. The only exception may be the Ramapo Valley corridor in Mahwah Township.

4.3.7 Other Programs and Partnerships

In a unique effort, the Borough of New Milford acquired the development rights from two, small adjacent farm properties, utilizing funding assembled from Bergen County's Trust Fund, state Green Acres Program, and its own municipal open space trust fund. Together, these two farms totaled only 3.83 acres and were tucked away in a residential neighborhood. In exchange for its purchase of their development rights, the Borough and the County placed a restrictive easement on the two properties restricting their use to only agricultural or public open space. As a condition of using state

Green Acres’ funding, the Borough created public open space through the establishment of public walkways through the property. The farms presently abut other Borough-owned property.

There are a number of similar farm operations that are less than 5 acres in existence in the County. To date, though, no other municipality has approached the County to seek their preservation.

4.4 CONSISTENCY WITH SADC STRATEGIC TARGETING PROJECT

The SADC issued a Strategic Targeting Project Preliminary Report in March of 2003 in conjunction with the County Agricultural Development Boards (CADBs). The project had three main goals to coordinate farmland preservation/agricultural retention efforts with proactive planning initiatives; to create/update the maps used to target land preservation efforts; and to coordinate farmland preservation efforts with open space, recreation and historic preservation investments. The strategic targeting of farmland for preservation is intended to avoid conflicts with other types of infrastructure investments such as highway and wastewater expansions. The Preliminary Report indicated that the Strategic Targeting Project would be incorporated as a key component of the Department of Agriculture’s Smart Growth Plan and would be periodically updated to maintain its effectiveness in strategically prioritizing farmland preservation investments.

4.4.1 Agricultural Soils

One of the key components of the Strategic Targeting Project is to preserve the lands that have the best combination of characteristics to economically produce sustained high yields of agricultural crops. The Targeting Project emphasizes the importance of protecting these natural resources. The Bergen County Farmland Preservation Plan contains eight (8) Project Areas for land preservation and 46 target farms. The soil productivity of each project area is shown in *Table 22*.

Table 22: Soil Productivity Summary-Project Areas/Target Farms

	<i>Masonicus Brook (A)</i>		<i>Ramapo Valley(B)</i>		<i>Montvale(C)</i>		<i>Franklin Lakes(D)</i>	
Soil Category	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Prime	20.4	56.2%	27.2	41.1%	4.2	9.8%	2.7	6.3%
Statewide	0.0	0.0%	11.4	17.1%	11.6	27.3%	5.0	11.7%
Unique	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Local	16.0	43.8%	34.5	41.8%	26.8	62.9%	86.6	91.2%
Total	36.4	100.0%	73.1	100.0%	42.6	100.0%	93.5	100.0%

	<i>Saddle River (E)</i>		<i>Lake Tappan/ Oradell Reservoir(F)</i>		<i>Oakland Borough(G)</i>		<i>Paramus (H)</i>	
Soil Category	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Prime	17.2	18.7%	27.1	36.2%	7.0	8.6%	0.0	0.0%
Statewide	20.1	21.7%	8.6	11.4%	33.4	41.0%	1.0	4.0%
Unique	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Local	55.0	59.6%	45.3	52.4%	41.1	50.4%	22.8	96.0%
Total	92.3	100.0%	81.0	100.0%	81.5	100.0%	23.8	100.0%

	<i>Project Area Totals</i>		<i>Target Farm Totals</i>	
Soil Category	Acres	Percent	Acres	Percent
Prime	105.8	20.2%	107.2	18.7%
Statewide	91.1	17.4%	101.6	17.8%
Unique	0.0	0.0%	0.0	0.0%
Local	328.0	62.5%	363.4	63.5%
Total	525.0	100.0%	572.2	100.0%

Source: NRCS (SSURGO); 2007; Alaimo Group analysis;

While the percentage of important soils fluctuates from 4 to 56% in the individual project areas, prime agricultural soils and soils of statewide importance represent about 43% of the total Project Areas in a county where important agricultural soils encompass less than 10% of the total land area. When target farms that are not within Project Areas are added, the important soil percentage declines slightly to about 35% of the qualified farmland. In summary, the preservation of all of the target farms in Bergen County would result in the protection of about 534 acres of which 190 acres are considered important agricultural soils. A significant percentage of the non-important soils have also been determined to be soils of local importance meaning that they require substantive amendment but are not located on steep slopes, nor subject to frequent flooding.

4.4.2 Agricultural Land Use

Agricultural land use in the State of New Jersey has continued to decline in acreage and to change in character. The Census of Agriculture data show a consistent decline in the acreage devoted to agricultural production as well as a change in the nature of agricultural land use to activities that are unrelated to high yield food production.

The Bergen County Farmland Preservation Plan is seeking to sustain viable agricultural land use within defined Project Areas located along stream corridors in areas that are contiguous with open space preservation. The intent is to maintain land economic conditions that are suited for long-term agricultural production due to the strength of the local market. This Farmland Preservation Plan has demonstrated the continued strength and diversity of farming activities in Bergen County despite the presence of exceptionally strong land conversion pressures. However, the remaining farms tend to be somewhat dispersed in Bergen County, possibly for economic reasons, rather than concentrated.

4.4.3 Sewer Service Areas

The Strategic Targeting Project indicates that extensive agricultural lands in the State are within existing or future sewer service areas. The preservation of lands within sewer service areas (SSA) can create a conflict in public investments. The preservation of land in proximity to existing sanitary sewers or within proposed sewer service areas would both reduce the value of the public investment in the sewer system and would increase the cost of easement acquisition since the development value is enhanced by inclusion in the sewer service area.

With the exception of the extreme western fringe of the northern Bergen study area, most of the qualified farms are within sewer service areas, which influences the value of the land slated for preservation. While the Strategic Targeting Project advocates land preservation in areas outside of sewer service areas, the issue in Bergen County is the retention of a small number of relatively small farms that do not represent a significant displacement of residential or non-residential development.

4.4.4 Imminence of Change

The Strategic Targeting Project indicates that the priority system “*must take into account the statutory mandate to consider the likelihood of conversion from agricultural land use*” and “*should call attention to the farmlands ...subject to the greatest development pressures and least likely to be available for preservation 3,5 or 10 years from now.*” These priorities can be summarized as the “imminence of change” factor.

The targeting project recognizes that public investment well removed from development pressure may preserve farmland, but farmland that is not under an immediate threat of conversion. Conversely, public investment in an area where conversion has been occurring for some time and is suited for continued growth in terms of roads and planned infrastructure is very costly and may not achieve the objectives of the Smart Growth Plan.

All of the remaining farms in Bergen County that have not been preserved are candidates for conversion to land development. In fact, all of the farmland owners have made a conscious decision to retain the farmland in its current state rather than liquidate the land asset. As a result of these extreme land conversion pressures, the economic value of the farmland is very high. To a large extent, the remaining farms are the largest remaining tracts of cleared and developable land in the entire County. In that respect, the preservation of farmland is high on a per-acre basis but relatively low in total cost relative to the size of the County. For example, the preservation of 30 acres of farmland in Bergen County on an annual basis could likely cost on the order of \$3.0 million in County funding which would only represent about \$3 on a per-capita basis. The cost of preserving a substantive portion of the remaining farms in Bergen County is relatively small on a per-capita basis even though the cost per-acre is high. The high per-acre cost of easement acquisition is warranted to preserve the important remaining farms in the county.

4.4.5 Transportation Network Proximity

The qualified farmland in Bergen County is proximate to the transportation network but is not located along the commercial corridors. In some cases, qualified farmland is located adjacent to limited access roads such as the Garden State Parkway, but not along minor arterials such as Route 17. In general, the farms in Bergen County are highly accessible, which is advantageous from a marketing standpoint, but are not located within major commercial corridors, where they would displace other economic activity. It could be argued that the qualified farmland represent “islands” or an “oasis” amongst a sea of primarily residential development.

4.4.6 Farmland Preservation Program Activity

The Strategic Targeting Project places emphasis on further farmland preservation in areas where farmland preservation has already taken place. A few counties have preserved more than 20,000 acres, which represents more than 10% of their total land area.

Bergen County has preserved over 300 acres on seven (7) farms since 2002, which represents over one-third of the qualified farmland in the County, yet only about 0.2% of its land mass. With the exception of the farms in Mahwah Township, the preserved farms have not been clustered in any one area of the County. As noted throughout this Farmland Preservation Plan, the concept of creating contiguous agricultural districts is not feasible in Bergen County. The only clustering of qualified farms is along the Ramapo River. However, as indicated on **Map 4: Open Space and Conservation Map**, much of the qualified farmland is proximate to other compatible open space. The preservation of several of the target farms would enhance open space and help protect stream corridors.

The SADC has previously invested in the preservation of farms in Bergen County despite the high cost of land and despite the dispersed nature of the qualified farmland. Public investment is warranted to preserve a scarce resource. While the targeting project is focused on the preservation of agricultural districts, the preservation of small and unique farms in Bergen County is also critical and

warranted. The key issue is the quality of the farmland as well as the viability and value of the ongoing agricultural operations.

4.4.7 Coordination with County and Municipal Plans

The Bergen County Farmland Preservation Plan will be fully consistent and coordinated with the County's Master Plan Update. This Plan is being prepared under the supervision of the County planning office and the County Agriculture Development Board. The County staff fully recognizes the importance of farmland preservation in Bergen County to a number of regional planning objectives.

4.4.8 State Development and Redevelopment Plan Consistency

The Bergen County Farmland Preservation Plan is generally consistent with the State Development and Redevelopment Plan (SDRP). In particular, the Farmland Preservation plan is entirely consistent with the Environmental Planning Area designations along the Ramapo River, Saddle River, and Hackensack River. Approximately half of the farms are within or immediately adjacent to the Planning Area 5 designations in the county. Three preserved farms are also within these protected areas. Therefore, the implementation of the Farmland Preservation plan will help protect and enhance the Environmental Planning Area designations of the SDRP.

The remaining qualified farms are located within Planning Area 1 where metropolitan growth is permitted and encouraged. A hypothetical argument could be made that the preservation of the target farms within PA 1 contributes to the expansion of the suburban area by displacing moderate density residential growth that can be supported by the infrastructure. An argument could also be made that the displacement of non-residential growth could impact the economic potential of northern Bergen County. The weaknesses in these hypotheses are that the amount of land that is available for residential development is rather low and equates to a total build-out of less than 50 units. Many of the farms are not suited for full build-out due to their configuration or location. Furthermore, the preservation of farms that have a market or related business attached promotes local economic activity and supports the fabric of the community. The only significant conflicts within PA1 are circumstances in which municipalities have designated farmland for major corporate or industrial development or for affordable housing. In these situations, the municipality needs to voice its objection to land preservation when it conflicts with other important planning objectives for which there are no alternatives. In accordance with the SADC regulations, each municipality has been notified of potential target farms in their community to enable objections to be raised in accordance with the planning process.

4.4.9 Garden State Greenways Coordination

The New Jersey Conservation Foundation in conjunction with the Green Acres Program has supported the development of a statewide open space and conservation plan. The Bergen County Farmland Preservation Plan is fully coordinated with the Garden State Greenways program in the western part of the County where continued open space and conservation acquisition is recommended by the "green infrastructure" plan.

Included in this Plan's Appendix D is a copy of the Garden State Greenways map.

4.4.10 Critical Resource Areas

The only critical resource area in Bergen County is the Highlands Region which includes the municipalities of Mahwah Township and Oakland Borough in Bergen County. This Farmland Preservation Plan has been determined to be in full conformance with the Highlands Regional Master Plan. While the Highlands Plan does not consider any part of Bergen County to be an agricultural priority area, it does include qualified farmland within Conservation planning areas.

4.4.11 Crossroads of the American Revolution

Bergen County does not contain any Crossroads of the American Revolution Special Resource Areas as defined in the Strategic Targeting Project.

4.4.12 NJ Trails Plan

The New Jersey Trails Plan shows three existing north-south trails in Bergen County. The one trail that traverses a key Project Area is the Ramapo River Trail which is described as follows in the Trails Plan:

Ramapo River Trail.

The section of the Ramapo River most used as a river trail is almost ten miles between Mahwah and Oakland in Bergen County. This scenic, winding, somewhat remote section of the river parallels the heavily wooded Ramapo Mountains. The river passes Ramapo College, various estates and runs through Ramapo Valley County Reservation. The water is primarily smooth but still contains some riffles. The river is usually canoeable from November to mid-May, except in dry years. There are two weirs along the route that must be portaged.

Continued farmland preservation within the Ramapo River Valley will contribute to the scenic value of the Ramapo River trail.

4.4.13 Watershed Management Coordination

Recently adopted state regulations place increased emphasis on the need to reduce non-point source pollution from land development and by the implementation of best management practices by agricultural enterprises. The required Wastewater Management Plan updates will need to involve the local farming community in the resolution of critical environmental issues without adversely impacting their operations.

4.4.14 Groundwater Recharge/Protection; Surface Water Reservoir Protection

Portions of Mahwah Township have been identified as prime groundwater recharge areas in the Highlands Master Plan. In addition, several farms are located in close proximity to the Lake Tappan and Oradell reservoirs. In general, it can be stated that farmland preservation in Bergen County will contribute to groundwater recharge and surface water reservoir protection.

4.4.15 Targeting Project Consistency

From a statewide perspective, the strategic targeting project does not place high priority on Farmland Preservation in Bergen County. Nevertheless, as discussed above, farmland preservation in

Bergen County would help achieve a number of important planning objectives, including protection of areas slated for conservation under the state plan and/or the Highlands Master Plan. While the farms that are targeted for preservation in Bergen County do not conform to the agricultural district concept, they are worthy of preservation due to their significance as a local resource and due to the imminence of change that could result in the loss of important farming operations without public intervention.

4.5 COORDINATION WITH COUNTY OPEN SPACE PRESERVATION INITIATIVES

Bergen County will coordinate its open space preservation policies with its farmland preservation program since both programs are funded under the same County Open Space Trust Fund.

4.5.1 Open Space and Recreation Plan (OSRP)

Bergen County adopted an Open Space and Recreation Plan (OSRP) in August of 2004. The purpose of the OSRP was to provide a countywide policy direction on open space and recreation issues and to maintain the county's eligibility for Green Acres planning incentive grant funding. The stated goals of the OSRP are as follows:

- *To provide facilities regional in nature an capable of serving residents of the entire county;*
- *To protect and preserve natural and scenic values in the county;*
- *To present current information on the supply, demand and need for recreation and open space in Bergen County.*
- *To implement open space and recreation planning policies and projects that are consistent with the New Jersey Development and Redevelopment Plan;*
- *To encourage coordinated open space and recreation planning, acquisition and development initiatives of state and local governments and conservation organizations;*
- *To effectively use funds from the Bergen County Open Space, Recreation, Farmland and historic preservation trust fund, New Jersey Green Acres funding and other sources of funding which may become available.*

The OSRP includes an inventory of all of the existing county recreational facilities and open space areas. These areas are shown on **Map 4: Open Space and Recreation Plan Map.**

4.5.2 Open Space Preservation Initiatives

Although the OSRP does not contain a listing of specific parcels slated for acquisition, it does contain a discussion of the County's open space acquisition and preservation opportunities. In particular, the OSRP indicates that the these opportunities include the addition of appropriate lands adjacent to, or abutting existing state, county or municipal parklands that further expand or enhance conservation, preservation and recreation objectives within the following areas:

- The Ramapo Mountains and Highlands region in northwest part of county;
- East Hill Greenway Corridor in northeast part of county;
- The New Jersey Meadowlands Commission area

- Existing county parks
- Wetlands, woodlands and watershed properties associated with the Hackensack River, the Passaic River, the Saddle River and related bodies of water;

The farms targeted for preservation will specifically support the open space objectives for the Highlands Region and the Saddle and Hackensack river corridors.

The County has not established any policies specifically regarding open space purchases in agricultural areas and purchases of farmland for open space purposes. Should such situations arise, then it all likelihood the County would weigh and consider the opportunities, costs, and benefits on a case-by-case basis.

Establishing walking trails or extending existing trail networks for public access in agricultural areas would be addressed on a case-by-case basis, in conjunction with a landowner's farmland preservation application as warranted, and with respect to any agricultural farm property adjacent to public parkland. Issues related to existing wildlife, endangered species and habitat, that may be associated with preserved open spaces involve maintain environmental integrity so as not to diminish the environmental resource.

4.5.3 Funding

It is common for open space and farmland preservation initiatives to compete for funding at the municipal and county levels. Bergen County has demonstrated a substantive financial commitment to farmland preservation by its prior farmland preservation actions. To date, over \$6.2 million or almost 10% of the project awards from 1999-2006 were directed to farmland preservation projects. It is anticipated that funds from the County trust fund for farmland preservation will continue in the future.

4.5.4 Project Coordination

County open space and farmland preservation initiatives should be coordinated whenever possible. Farmland that is preserved adjacent to, or in close proximity to, recreation areas will usually contribute to the park setting. In addition, farms that encourage agritourism activities would tend to contribute to the overall range of recreation activities in or near a county park.

However, in many instances, the last remaining tract of farmland in a developed community is often viewed as the best location for an active recreation complex by the municipality. While there may be situations where open space, recreation, and farmland preservation objectives conflict, the objective of this Farmland Preservation Plan is to encourage coordinated land preservation efforts. In particular, the protection of farmland adjacent to important river corridors will contribute to the County's resource protection objectives.

In certain circumstances, it may be feasible to utilize Green Acres, SADC, and County trust fund monies in a cooperative manner to achieve common objectives. There may be situations where portions of farms could be acquired in fee simple to foster open space initiatives for which public access is required and there could be situations where agricultural activities may be considered within parkland to promote community gardens.

It s recommended that the ranking criteria give priority to the preservation of farmland that is located within an area of existing or future open space acquisition such as the Ramapo River Valley.

It is further recommended that the County open space and farmland preservation initiatives be coordinated to protect important resources and, where feasible, to create complimentary recreational activities.

4.6 EIGHT YEAR PROGRAMS

Under this program, farmland owners voluntarily agree to restrict the non-agricultural use of their land for an eight-year period in exchange for certain benefits including the funding of 50% of soil and water conservation projects as well as protection from certain public policies such emergency water provisions. The eight-year program requires the farmland owner to give the SADC the right of first refusal prior to the sale of the property. Participants in this program enter into an eight-year agreement with the County Agriculture Development Board that is recorded with the county clerk in the same manner as a deed. Land may be withdrawn prior to expiration of the eight-year period only in cases of death or incapacitating illness of the owner or other serious hardship or bankruptcy. An owner who wants to sell the farm while enrolled in an eight-year program must provide the SADC with an executed contract of sale for the property. The SADC then has the first right and option to match the conditions of that contract and purchase the property itself. This program is not currently utilized in Bergen County.

4.7 FUNDING EXPENDED TO DATE BY PROGRAM

As shown in *Table 21*, Bergen County received state appropriations totaling \$9.7 million under the County Easement Purchase Program, but has not yet drawn down any appropriations under the Planning Incentive Grant program. The County has received a \$1.5 million base grant in an appropriation bill signed by Governor Chris Christie on August 17, 2011 and is also eligible to access up to an additional \$3.0 million in competitive grant funding on a first-come, first-served basis under the County PIG Program.

4.8 MONITORING OF PRESERVED FARMLAND

Bergen County is responsible for the monitoring of preserved farmland for which the county holds the easement. The SADC would be responsible for the monitoring of any farms under the Direct Easement Purchase program. All preserved farms to date have been under the County Easement Purchase program.

The Bergen County open space staff and members of the CADB conduct annual inspections of the preserved farmland to ensure that the farmland is being utilized in accordance with the provisions of the deed of easement. If any prohibited activities are evident onsite, the County will notify the SADC and the farmland owner and direct the farmland owner to bring the farm into conformance with the deed restriction.

4.9 COORDINATION WITH TRANSFER OF DEVELOPMENT RIGHTS PROGRAMS

To date, Bergen County has not engaged the exploration of preservation opportunities associated with the Highland Development Credit Program. However, the County is open to consider such opportunities should such a situation warrant it.

V. FUTURE FARMLAND PRESERVATION PROGRAM

5.1 PRESERVATION GOALS

5.1.1 Farmland Preservation Goal

The goal of the Bergen County Farmland Preservation Plan is to acquire the development rights on one to two farms per year of an average size of 15 acres for a total of 300 acres over a ten-year planning period. If this goal were to be achieved, Bergen County would have preserved about 618 acres of useable farmland or about two-thirds of the remaining qualified farmland in the County at the end of the planning period.

This planning goal was established based on the following considerations:

- The number of farms and the average size of the farms;
- The level of anticipated interest in the voluntary farmland preservation program;
- The level of financial commitment that the goal represents to the State and County;
- The acreage needed to preserve a viable yet decentralized agricultural industry; and,
- The number of high priority farms that warrant public investment.

While it is recognized that some landowners may not choose to participate in the farmland preservation program, the planning objective will be to preserve as much of the grant eligible lands within the County as is feasible. The preservation of two-thirds of the qualified farmland in Bergen County is a reasonable and attainable goal.

5.1.1 County Planning Incentive Grant Farmland Preservation Goal

The County Planning Incentive Grant Program is a farmland preservation grant program available to the County. Although this grant program has certain regulatory limitations, Bergen County intends to maximize its use in accordance with the program's eligibility and project area definition criteria. The financial projections presented herein consider the total cost of acquiring the eligible or potentially eligible Target farms within Project Areas under this grant program, which encompasses about 500 acres or significantly more than the County's farmland preservation goal. (It should be noted that, in general, counties can target farms that may not be eligible for SADC cost-share funding. Such an action by a county would be on a case-by-case basis.)

5.1.2 Modified County Planning Incentive Grant Farmland Preservation Goal

Based on the analysis of the qualified farmland in Bergen County, there is a clear need for the SADC to establish an alternate farmland preservation grant program or to modify the regulations of the current Planning Incentive Grant Program to increase the eligibility of important farms that are not clustered in a defined Project Area.

The premise and emphasis of the current Planning Incentive Grant regulations (NJAC 2:76-1 et. seq.) is to focus public investment in areas where contiguous agricultural districts can be created, primarily in rural fringe areas. This premise has merit since farmland preservation can shape growth by purchasing development easements in important farming areas that are beginning to experience strong land conversion pressures. Farmland preservation funding used in this manner also creates the economic conditions that are necessary for a viable and sustainable high yield agricultural industry in the State.

In most counties, the remaining agricultural lands tend to be clustered in a particular area of the county. However, the pattern that has evolved in Bergen County is a more dispersed pattern of surviving farms. The remaining farms have been characterized herein as a “scarce resource” due to their small number, their continued presence in an extremely strong residential market from a land value perspective, and their importance to the community. (Virtually any useable undeveloped land in Bergen County has a land value in excess of \$100,000 per acre.)

Many of the remaining farms have important community value for agritourism and consequently have a strong geographic draw. Some of these isolated farms are the only form of agriculture left in certain areas of Bergen County and their loss will impact the community fabric. Not only are these farms a source of fresh agricultural products but they also have educational and recreational value. However, their potential long-term viability is directly related to the strength of the local market.

Due to the dispersed nature of some of the most important farms in the County, they do not fit the regulatory structure of the current Planning Incentive Grant program. While efforts will be made to maximize the applicability of the current grant funding program, there is a clear need for a modified program to preserve important farms in suburban areas of the state in Bergen, Passaic, and other suburban counties in New Jersey. Bergen County will work with the SADC and other interested counties (such as Passaic County) to review and discuss modifications to the PIG Program to enable Bergen County to protect its most viable farms that may not be eligible for preservation under the current regulations.

5.1.2 Clustering/Transfer

For the purposes of the initial County Farmland Preservation Plan, it is assumed that none of the eligible qualified farms will be preserved through the use of clustering or transferring mechanisms. Despite this assumption, it is recommended that municipalities in the highlands explore the applicability of the Highlands Development Credit program and that other municipalities explore the applicability of non-contiguous clustering.

5.2 COUNTY AGRICULTURAL DEVELOPMENT AREAS

The Agriculture Retention and Development Act (NJSA 4:1C-18) provides for the establishment of an Agricultural Development Area (ADA) by the County Agriculture Development Board (CADB). The ADA is defined as the area where agriculture shall be the preferred but not necessarily the exclusive use of land if that area:

- *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;*

- *Is reasonably free of suburban and conflicting commercial development;*
- *Comprises not greater than 90% of the agricultural land mass of the county; and*
- *Incorporates any other characteristics deemed appropriate by the board.*

5.2.1. Adopted Criteria

The Bergen County Agriculture Development Board (CADB) identified the County's Agricultural Development Area (ADA) by a map dated June 6, 2000 and by criteria listed below. A total of 97 subject properties were identified as the County's ADAs.

1. *Agricultural Development Areas shall encompass productive agricultural lands which are currently in production or have the 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 non-conforming use.*
2. *Agricultural Development Areas must consist of lands which are reasonably free of conflicting development.*
3. *Agricultural Development Areas cannot comprise greater than 90 percent of the agricultural land mass of the County.*
4. *Agricultural Development Areas shall consist of a predominance of soils that are prime or of statewide importance or can easily support viable agricultural production as classified by the Natural Resource Conservation Service.*
5. *Agricultural Development Areas shall consist of at least five (5) acres of contiguous land.*
6. *Agricultural Development Areas must qualify for farmland assessment in accordance with the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et. seq.*
7. *Agricultural Development Areas may include woodland areas where owners follow farm management plans.*

The adopted criteria also include the following exception: In instances where land has been excluded from an Agricultural Development Area, but it is exceptionally good for agricultural production, one or more of the other criteria may be waived and that land may be included in the Agricultural Development Area. (Statutory criteria cannot be waived by the CADB.) The ADA was adopted by the Bergen CADB by a resolution dated June 22, 2000. The SADC subsequently reviewed and certified the ADA criteria and the ADA map. The SADC specifically determined that the CADB complied with the regulatory requirements for defining ADAs.

Note that this Farmland Preservation Plan proposes to amend the approved ADA map, with the understanding that the owners of parcels that no longer qualify for farmland assessment are no longer considered potential applicants unless a specific exception is granted by the Bergen CADB and approved by the SADC. (Statutory criteria cannot be waived by the CADB.)

5.2.2 Basis of Agricultural Development Area Designation

The concept and definition of an ADA is problematic in Bergen County for a number of reasons. Agriculture is generally not a permitted use in most municipal zoning ordinances but is permitted as a nonconforming use. Because of the scattered nature of the agricultural activities in the

County, it is not possible to define an area that contains most of the productive agricultural lands in the County which is “*reasonably free of suburban and conflicting commercial development.*”

Since agriculture in Bergen County is best categorized as a scarce resource that deserves protection, the establishment of an ADA that excludes qualified farmland that would otherwise satisfy minimum grant eligibility requirements would not be in the public interest.

The planning process that is inherent in the SADC regulations represents a sound planning approach in rural or developing areas where the objective is to establish agricultural districts with limited intrusions. The underlying principles behind this planning approach are that certain types of agricultural activities can best be performed within contiguous agricultural districts and that the establishment of a contiguous ADA creates preferred land management and growth management policies.

However, this approach does not fit the Bergen County context where qualified farmland is scattered throughout the landscape and not clustered in particular areas. In fact, the scattered pattern of farms is to some extent an outgrowth of the type of agricultural that remains in Bergen County. Most of the agricultural enterprises in Bergen County are small-scale independent operations that serve a particular specialized market or geographic area. The remaining farms are critical since they provide the last opportunity for local contact between the public and the farming community.

For these reasons, a planning process that emphasizes the establishment of agricultural development areas that could result in the exclusion of farms due to geography or proximity to each other is not appropriate in Bergen County. The critical issue in Bergen County is the ranking criteria to ensure that public investment is focused in the highest rated farms.

As part of this Bergen County Farmland Preservation Plan, an updated version of the approved ADA map is being presented, which will eliminate tracts that no longer qualify for farmland assessment. It can be found in Appendix E.

5.3 PROJECT AREAS

The term “Project Area’ is used in the Farmland Preservation statute (N.J.S.A. 4:1C-43.1) in the following context:

4:1C-43.1 Farmland preservation planning incentive grant program.

1. a. There is established in the State Agriculture Development Committee a farmland preservation planning incentive grant program, the purpose of which shall be to provide grants to eligible counties and municipalities for farmland preservation purposes as authorized pursuant to this act.

*b. To be eligible to apply for a grant, a county or municipality shall...**Identify project areas of multiple farms that are reasonably contiguous and located in an Agriculture Development Area** authorized pursuant to the "Agriculture Retention and Development Act," P.L.1983, c.32 (C.4:1C-11 et seq.);*

The term is further defined in the SADC regulations (N.J.A.C. 2:76-17.2) as follows:

“Project area” means an area identified by a county agriculture development board that identifies discrete areas within the county’s farmland preservation plan that constitute separate, significant

areas of reasonably contiguous farmland that will promote the long-term viability of agriculture as an industry in the county, and which consists of the following lands and lands that are within one mile of any of the following lands:

1. *Targeted farms located within an ADA;*
2. *Lands from which an application for the sale of a development easement has been granted final approval by the municipality, county and/or the Committee pursuant to the Agriculture Retention and Development Act, as amended, and the Garden State Preservation Act;*
3. *Lands from which development easements have already been purchased;*
4. *Other land permanently deed restricted for agricultural use;*
5. *Lands enrolled in an eight-year farmland preservation program or municipally approved farmland preservation programs; or*
6. *Other permanently preserved lands dedicated for open space purposes that are compatible with agriculture, as approved by the Committee.*

In order to comply with the provisions of the Planning Incentive Grant program, a total of eight (8) project areas have been defined that include target farms, preserved lands, and compatible open space within a reasonably contiguous pattern. The criteria used in delineating the Bergen County Project Areas were two or more eligible farms (or farms capable of satisfying the eligibility criteria), preserved farmland, and compatible open space linked along stream corridors to create a reasonably contiguous Project Area suitable for Planning Incentive Grant program eligibility. It is recognized that several of the project areas are of irregular configuration to limit the non-conforming land development since the concept of contiguous farmland is not fully exemplified in Bergen County.

5.3.1 Project Area Summaries

The Bergen County Project Areas are shown on **Map 9: Farmland Preservation Plan Acquisition Map** and are generally described below. Project Area summaries and detailed maps of the Project Areas are presented in **Appendix B**.

A. Masonicus Brook Project Area (MPA)

The Masonicus Project is located in the northeastern corner of Mahwah Township within the Highlands Planning Area. The Project Area consists of two (2) target farms located along or near Airmount Avenue. The Secor Target Farm is located directly across the street from an expansive permanent conservation area owned by the Township Board of Education on both sides of Masonicus Brook. The other target farm is located on Masonicus Road and is owned by Chestnut Trees LLC. This farm may not currently meet eligibility criteria but is capable of satisfying the criteria in the future. The target farm is located in close proximity to Township open space as well as the Apple Ridge Golf club as shown on **Figure B-1**. The Masonicus Project Area will enhance the limited open space and conservation areas in this part of Mahwah Township. The key characteristics of this Project Area are summarized below:

- **Total area.** Project Area covers 160.9 acres with 36.4 acres of qualified farmland;
- **Preserved lands.** There are no preserved lands within this Project Area.
- **Compatible Open Space.** The compatible open space encompasses 66.9 acres.
- **Density.** The density of the qualified farmland and compatible open space to the project area is 41.6%.

- Tillable Acres. This Project Area contains 15 acres of tillable acres or 50% of the total land.
- Targeted Farms. The two qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 56% of the soils on the target farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$125,000 per acre, the total easement acquisition cost for the 36.4 acres of qualified farmland is \$4.55 million.

B. Ramapo Valley Project Area (RVPA)

The Ramapo Valley Project Area is located entirely within the Highlands Preservation Area. The 7.6 square mile Project Area was generally defined to include the Ramapo River Valley. The Project Area includes five (5) target farms located along Ramapo Valley Road and one (1) located along Darlington Road. All of the Target Farms except one are located in Mahwah Township. The one exception is the Mottola farm in Oakland Borough. The prevailing agricultural activity is equine and pasture for livestock. There are also four (4) preserved farms located within this Project Area.

This Ramapo Valley Project Area is immediately adjacent to and bordered by the Ramapo Valley County Reservation, the Campgaw Mountain County Reservation, and the Darlington County Park, which are three major county parks. The RVPA is primarily located along the Ramapo River Valley and is surrounded by the County reservations on each side. The preservation of the target farms within the RVPA will complement and enhance the adjacent open space and conservation areas.

While the target farms only represent 73.1 acres, they are within an expansive area of compatible open space. In fact, as shown on the Project Summary Form, the density of the Project Area is 85.9% when compatible open space is considered. In addition, the developed land within this project area that constitutes the remainder of the land area is very low-density residential development that is compatible with the agricultural land use. *Figure B-2* indicates the location of the target farms and illustrates the extent of compatible open space within this expansive project area.

- Total area. This Project Area includes 73.1 acres of qualified farmland within a 4,856.9 acre Project Area.
- Preserved lands. There are four (4) preserved farms encompassing 326.8 acres within this Project Area.
- Compatible Open Space. The compatible open space encompasses 3,847.6 acres and consists primarily of major county parks.
- Density. The density of the qualified farmland and compatible open space to the project area is 85.9%.
- Tillable Acres. This Project Area contains 56.8 acres of tillable acres or 78.2% of the total agricultural land.

- Targeted Farms. The six (6) qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 52.8% of the soils on the target farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$125,000 per acre, the total easement acquisition cost for the 73.1 acres of qualified farmland is \$9.14 million.

C. Montvale Project Area (MPA)

The Montvale Project Area (MPA) consists of two (2) target farms in the Montvale Borough that are under common ownership (DePiero). The crop production portion of the DePiero Farm consists of two tracts that are referred to herein as Target Farm #15A located along Summit Avenue. The commercial market and orchard area, referred to here as Farm #15B, is located nearby along Grand Avenue. The total qualified farmland acreage is about 43 acres.

Although located in an area of expansive office development, the quality of the marketplace and the relationship to local crops is unique in this part of the County. While the two target farms are under common ownership, they are distinct in location and purpose. *Figure B-3* illustrates the location of the target farms and the key characteristics of this Project Area are summarized below:

- Total area. Project Area covers 56 acres with 42.6 acres of qualified farmland;
- Preserved lands. There are no preserved farms within this Project Area.
- Compatible Open Space. There is no compatible open space adjacent to this Project Area.
- Density. The density of the qualified farmland and compatible open space to the project area is 0%.
- Tillable Acres. This Project Area contains 34.5 acres of tillable acres or 92% of the total agricultural land.
- Targeted Farms. The two (2) qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 37.1% of the soils on the target farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$125,000 per acre, the total easement acquisition cost for the 42.6 acres of qualified farmland is \$5.3 million.

As of this Plan, the DePeiro Farm properties are the subject of a municipal zoning change to allow for nonagricultural development. It is not yet known how much, if any, of the existing agricultural operation will continue.

D. Franklin Lakes Project Area (FLPA)

The Franklin Lakes Project Area is located on the fringe of the Highlands Planning Area, primarily within Franklin Lakes Borough. The one exception is the Abma Farm that is located primarily in Wyckoff Township, immediately adjacent to Franklin Lakes.

This Project Area consists of six (6) target farms located along, or near, the headwaters of the Ho-Ho-Kus Brook. The prevailing agricultural activity is vegetable crops and livestock operations. A preserved farm (Twinbrook Nurseries) is located adjacent to the Project Area.

This Project Area includes an expansive municipal recreation complex (Paulus Avenue Recreation Complex) as well as Tannery Pond and is proximate to the Saddle Ridge Horseback Riding Center and the Campgaw Mountain County Reservation. The Project Area will enhance the adjacent open space and conservation areas and help protect the Ho-Ho-Kus Brook corridor (see **Figure B-4**).

- Total area. This Project Area includes 94.25 acres of qualified farmland within a 340-acre Project Area.
- Preserved lands. There is one preserved farm within this Project Area.
- Compatible Open Space. Compatible open space encompasses about 140 acres of this Project Area.
- Density. The density of the qualified farmland and compatible open space to the project area is 43.2%.
- Tillable Acres. This Project Area contains 60.1 acres of tillable acres or 87.1% of the total agricultural land.
- Targeted Farms. The six (6) qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 10.9% of the soils on the target farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$140,000 per acre, the total easement acquisition cost for the 71.2 acres of qualified farmland is \$9.97 million.

E. Saddle River Project Area (SRPA)

The Saddle River Project Area (SRPA) consists of farms located along the Saddle River and Saddle Brook in Allendale Borough, Saddle River Borough, Woodcliff Lake Borough, and Hillsdale Borough and the Smokis Vall Brook in Allendale and Saddle River Boroughs. The Project Area consists of three separate sub-areas linked by the connection to stream corridors of the Saddle River and its tributaries. The SRPA consists of seven (7) target farms located along the stream and highway corridors in this central area of the Study Area. One of the Target Farms, the Demarest Farms in Saddle River, is presently undergoing farmland preservation as of this Plan.

The prevailing agricultural activity is diverse and includes apple and peach orchards at the Demarest Farms in Saddle River (adjacent to the preserved farm under similar ownership), the Rohsler nursery operation in Allendale and Saddle River; livestock operations along East Saddle River Road and egg production at the Jensen Farm in Woodcliff Lake Borough

Municipal parkland along the Saddle River corridor includes Rindlaub Park located adjacent to Target Farm #35 and parkland down-gradient of Target Farm #34. The Jensen farm in Woodcliff Lake is located along the Parkway across from a municipal recreational complex. The Demarest farm in Saddle River Borough is across the street from preserved land under common ownership in Hillsdale and is immediately adjacent to Saddle Brook, a tributary of the Saddle River. (see *Figure B-5*).

- Total area. Project Area covers 357.8 acres of which 73.4 acres is qualified farmland;
- Preserved lands. There is one preserved farm within this Project Area encompassing 13 acres. (Note that the Demarest Farms in Saddle River, is presently undergoing farmland preservation as of this Plan.)
- Compatible Open Space. Compatible open space encompasses about 43 acres of this Project Area.
- Density. The density of the qualified farmland and compatible open space to the total Project Area is 20.5%.
- Tillable Acres. This Project Area contains 73.6 acres of tillable acres or 82.4% of the total agricultural land.
- Targeted Farms. The seven (7) qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 40% of the soils on the Target Farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$165,000 per acre, the total easement acquisition cost for the remaining 55.712 acres of qualified farmland is \$9.2 million.

F. Lake Tappan/Oradell Reservoir Project Area (LT/ORPA)

The Lake Tappan /Oradell Reservoir Project Area (LT/ORPA) includes the Lake Tappan Reservoir in River Vale Township and Old Tappan Borough and the Oradell Reservoir that extends through Emerson, Haworth, Norwood, and Closter Boroughs as well as lands adjacent to the Reservoirs, the Hackensack River, and the minor tributaries of that river. The 6.0 square mile project area includes extensive land holdings of the water purveyor (United Water NJ) that are held for water protection and conservation purposes.

The Lake Tappan and Oradell reservoirs and adjacent lands are owned and managed by United Water Company of New Jersey. United Water NJ is the major water purveyor in the region and utilizes an expansive surface water supply system consisting of four interconnected reservoirs, three of

which are located in Bergen County (Oradell, Woodcliff Lake and Lake Tappan). The 200 MGD regional water treatment plant is located in Haworth Borough.

The Lake Tappan/Oradell Project Area contains seven (7) target farms located along the reservoirs, the interconnecting Hackensack River corridor, and minor tributaries of the Hackensack River. The prevailing agricultural activity is diverse and includes a major vegetable and herb production operation (Binaghi) located adjacent to the Lake Tappan reservoir as well as several nursery operations. There is one preserved farm (Brooks Farm) located in Closter within the defined Project Area.

In addition to the reservoirs and the adjacent land holdings of United Water, there are several golf courses including two publicly owned courses, two county parks (Wood Dale and Pascack Brook County Parks) and various municipal recreation facilities (including the Closter Nature Center) that are congregated along the Hackensack River corridor within this Project Area. The LT/ORPA is fully compatible with this expansive conservation area. The project area is shown in *Figure B-6*.

- Total area. This Project Area includes 77.5 acres of qualified farmland within a 3,878.4 acre (or 6.1 square miles) Project Area.
- Preserved lands. There is one preserved farm within this Project Area.
- Compatible Open Space. Extensive compatible open space is located within this Project Area, including the extensive land holdings of the water purveyor.
- Density. The density of the qualified farmland and compatible open space to the project area is 81.6%.
- Tillable Acres. This Project Area contains 63.5 acres of tillable acres or 71.8% of the total agricultural land.
- Targeted Farms. The seven (7) qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 46.1% of the soils on the target farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$125,000 per acre, the total easement acquisition cost for the 77.5 acres of qualified farmland is \$9.68 million.

G. Oakland Borough Project Area (OBPA)

The Oakland Borough Project Area consists of five (5) target farms, four of which are located in Oakland Borough and one is immediately adjacent in Franklin Lakes Borough. The Oakland Borough Project Area is located within the Highlands Planning Area.

The target farms are located along or within the drainage area of the Ramapo River. Target farm #18 is used for ornamental crops and is immediately adjacent to the river. The remaining four (4) target farms consist of coupled farms in the upper reaches of tributaries to the River. Target farms #16 and #17 are located along the I-287 corridor and contain quality agricultural soils. These farms are

currently used for livestock and woodland production. Target farms #20 and #26 straddle the Oakland/Franklin Lakes boundary are committed to vegetable crop, ornamental crop, and livestock production. These farms are located adjacent to an expansive areas being considered for open space acquisition.

This Project Area is in close proximity to the Ramapo Mountain State Park on the opposite side of the River corridor. The southern part of the Project Area includes an expansive conservation area, some of which is publicly owned along the County border and extends into Passaic County. The Oakland Borough Project Area will enhance the adjacent open space and conservation areas along the Ramapo River and its tributaries. This Project Area encompasses over 81 acres of qualified farmland as shown on **Figure B-7**.

- Total area. This Project Area includes 81.5 acres of qualified farmland within a 1,134.5-acre (or 1.78 square miles) Project Area.
- Preserved lands. There is no preserved farmland within this Project Area.
- Compatible Open Space. Compatible open space encompassing 381.6 acres is located within this Project Area.
- Density. The density of the qualified farmland and compatible open space to the project area is 33.6%.
- Tillable Acres. This Project Area contains 23.6 acres of tillable acres or 29% of the total agricultural land.
- Targeted Farms. The five (5) qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 50% of the soils on the target farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$110,000 per acre, the total easement acquisition cost for the 81.5 acres of qualified farmland is \$8.97 million.

H. Paramus Project Area (PPA)

The Paramus Project Area (PPA) consists of two (2) target farms located in the Borough of Paramus adjacent to an expansive conservation area, part of which is publicly owned.

The Joy Farm (Target Farm #46) is a community-supported farm that straddles the Parkway. Target farm #47 is a farm devoted to ornamental and nursery crop production within or near an important conservation area of the Borough. The Project Area consists of about 24 acres of qualified farmland near the 29 acre Reid Park and the wetlands portion (27 acres) of a privately owned tract. (see **Figure B-8**).

- Total area. This Project Area includes 23.8 acres of qualified farmland within a 102.6-acre Project Area.
- Preserved lands. There is no preserved farmland within this Project Area.

- Compatible Open Space. Compatible open space that is located within this Project Area includes a municipal public park and extensive protected wetlands on a privately-owned tract.
- Density. The density of the qualified farmland and compatible open space to the project area is 54.9%.
- Tillable Acres. This Project Area contains 18.3 acres of tillable acres or 69.3% of the total agricultural land.
- Targeted Farms. The two (2) qualified farms within this Project Area are Target Farms.
- Soil Characteristics. Approximately 4% of the soils on the target farms are classified as Important Farmland Soils.
- Easement Cost. Based on a projected average easement value of \$165,000 per acre, the total easement acquisition cost for the 23.8 acres of qualified farmland is \$3.93 million.

5.4 COUNTY MINIMUM ELIGIBILITY CRITERIA

5.4.1 Minimum Eligibility Criteria

The SADC relies on the minimum eligibility criteria outlined in N.J.A.C. 2:76-6.20 (a) 2, which are summarized below.

- *For lands less than 10 acres, the land must meet **all** of the following criteria or in the alternative, the land must be eligible for allocation of development credits pursuant to a transfer of development potential program authorized and duly adopted by law.*
 - i. *The land produces agricultural or horticultural products of at least \$2,500 annually;*
 - ii. *At least 75% of the land or a minimum of five acres (whichever is less) is tillable;*
 - iii. *At least 75% of the land or a minimum of five acres (whichever is less) consists of soils that are capable of supporting agricultural or horticultural production;*
 - iv. *The land must exhibit development potential based on the following standards:*
 - a. *The municipal zoning ordinance must allow at least one additional residential site beyond that which exist on the premises;*
 - b. *The land shall not contain more than 80% soils classified as freshwater or modified agricultural wetlands according to the NJDEP wetlands maps;*
 - c. *The land shall not contain more than 80% soils with slopes in excess of 15%;*
- *For lands greater than 10 acres, the land must meet **all** of the following criteria or in the alternative, the land must be eligible for allocation of development credits pursuant to a transfer of development potential program authorized and duly adopted by law.*
 - i. *At least 50% of the land, or a minimum of 25 acres, whichever is less, is tillable;*
 - ii. *At least 50% of the land or a minimum of 25 acres, whichever is less, consists of soils that are capable of supporting agricultural or horticultural production;*

- iii. *The land must exhibit development potential based on the following standards:*
- a. *The municipal zoning ordinance must allow additional development, and in the case of residential zoning, at least one additional residential site beyond that which exist on the premises;*
 - b. *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 must be verified. If access is only available pursuant to an easement, the easement must specify that further subdivision of the land is feasible.*
 - c. *Land that is less than 25 acres shall not contain more than 80% soils classified as freshwater or modified agricultural wetlands according to the NJDEP wetlands maps;*
 - d. *Land that is less than 25 acres shall not contain more than 80% soils with slopes in excess of 15%;*

5.4.2 Qualified Farmland Eligibility Evaluation

The 47 unpreserved qualified farmland tracts in Bergen County in 2006 were evaluated based on the SADC minimum eligibility criteria. The tillable soils evaluation was based on the Farmland Assessment Application filed by the farmland owner since this document is certified by the owner and approved by the municipal tax assessor. While aerial photographs and other information may provide a different insight, the Tax Assessment Application was relied upon for the eligibility evaluation. The information on the application would be verified as part of any farmland preservation application. The eligibility evaluations are presented in *Appendix C* and indicate the following:

- A total of 34 qualified farms satisfy the minimum eligibility criteria;
- One (1) qualified farm would satisfy the minimum eligibility criteria if combined with the adjacent farm under common ownership;
- Ten (10) qualified farms do not satisfy the minimum eligibility criteria but may satisfy the eligibility criteria in the future – most, if not all, do not meet the SADC’s required minimum tillable acreage criteria.
- Two (2) farms were determined to no longer be qualified farmland.

The CADB would work with the SADC to develop any “special circumstances” as appropriate for the consideration of exploring all appropriate farmland preservation opportunities.

5.4.3 County Eligibility Policy Recommendation

It is recommended that Bergen County accept the minimum eligibility criteria developed by the SADC for the Planning Incentive Grant program as the eligibility criteria for the Bergen County Farmland Preservation Plan under the following conditions:

- Farms that satisfy the minimum eligibility criteria that continue to be qualified farmland shall be considered Target Farms and shall be the focus of the County Farmland Preservation program;

- Farms that only satisfy the eligibility criteria when included with adjacent farms under common ownership shall be included for planning purposes but will not be eligible for farmland preservation grant funding unless the eligibility criteria are satisfied by including the adjacent farm in the grant application;
- Farms that do not currently satisfy the minimum eligibility criteria but are deemed to be capable of satisfying these criteria in the future shall be included in the County Farmland Preservation Plan for planning purposes but will not be eligible for farmland preservation grant funding until they satisfy the minimum eligibility criteria;
- The data used to conduct the eligibility evaluations shall be subject to verification as part of the farmland preservation application process, including the tillable acreage;
- The tillable soils criteria shall continue to be satisfied by farms that are preserved under the Bergen County Farmland Preservation Plan.

5.5 AGRICULTURAL RESOURCE VALUE

The objective of the Bergen County Farmland Preservation Plan is to preserve farmland and to create the conditions that will result in the protection and continued operation of agricultural activities on the preserved farmland. The preservation of land under the easement purchase program represents a major investment in public funds at the state and county levels and possibly at the municipal level. Since public funds are limited and since the use of these funds should be carefully scrutinized, the relative value of the agricultural resource needs to be evaluated.

In accordance with NJAC 2:76-6, the County Open Space Trust Fund needs to adopt ranking criteria that fully reflect the priorities and concerns of the County and the CADB. This section presents the ranking criteria that will be used in evaluating applications under the Farmland Preservation Program. The objective is to give priority to the highest value farmland.

5.5.1 County Ranking Criteria

The Bergen County Agricultural Development Board previously prepared ranking criteria for use in its evaluation of farmland preservation funding. These criteria have been reviewed based on the factors listed in N.J.A.C. 2:7-6.16 and other factors that reflect County interests.

All individual applications received will be evaluated on a comparative basis but will also be scored based on the factors listed and the weighting of the criteria. The updated ranking criteria, the objective of these criteria, and the factors that will be considered and measured, are described below:

- **Farm Size and Density Criterion.**

Priority will be given to Target Farms of the largest farm or district size. Factors to be considered will be the size of the preserved lands and/or the mass of the contiguous preserved farmland that will result from the application. Larger farms should be given priority since they result in the preservation of a concentrated area of farmland. Applications will be scored based on their size relative to the average farm size in the County. Farms that are twice the average size (>34 acres) will be given the maximum score. Farms that are less than one-half the average size (<9 acres) will be given the lowest score. Farms that are contiguous to previously preserved land will be scored

based on the combined acreage to give emphasis to the preservation of contiguous tracts of qualified farmland.

- **Soil Quality Criterion.**

Priority will be given to the Target Farms with the best soil conditions for agricultural or horticultural activities. The factors that will be considered in this evaluation will be the percent of Important Farmland Soils (Prime Agricultural Soils and Soils of Statewide Importance) on the Target Farm as well as the percentage of “Other” soils of local significance that are unconstrained by steep slopes or frequently flooded conditions. Soils that are specifically suited for the production of specialty crops will also be considered. The soil quality will be calculated using the following formula:

$$(\% \text{ Prime soils } \times 15) + (\% \text{ Statewide soils } \times 10) + (\% \text{ Unique soils } \times 12.5) + (\% \text{ Unconstrained local soils } \times 5) = \text{Total weight}$$

Note: The weight used for unique soils could range from 0 to 12.5 depending upon the extent to which the unique soil qualities are utilized.

- **Tillable Acres Criterion.**

Priority will be given to the Target Farms with the most tillable acreage with emphasis on harvested cropland. The factors that will be considered in this evaluation will be the acres reported to be cropland harvested, cropland pastured, and permanent pasture on the most recent Farmland Assessment Application. Target farms that have a significant amount of untillable soils, unmodified wetlands, or woodlands will be given lesser priority. The tillable acres criterion will be calculated using the following formula:

$$(\% \text{ Cropland harvested } \times 15) + (\% \text{ Cropland pastured } \times 10) + (\% \text{ Permanent pasture } \times 5) = \text{Total weight}$$

Note: The tillable acreage reported may need to be verified with onsite observations.

- **Boundaries and Buffers Criterion.**

Priority will be given to Target Farms that are the most compatible with the adjacent land use and which are well-buffered from residential or commercial development. The highest scores will be given to Target Farms that are adjacent to permanent open space, preserved farmland, stream or wetland corridors, or similar low intensity resources. The lowest scores will be given to Target Farms that are adjacent to existing residential or commercial development.

One of the objectives of the Planning Incentive Grant program is to create contiguous agricultural districts. Since most of the remaining qualified farmland remaining in the County is not located in a specific area, the concept of establishing a contiguous agricultural district is not feasible. Nevertheless, priority should be given to the preservation of farms that are in proximity to preserved farms and to other qualified farmland. Factors that will be considered under this criterion are the adjacency or proximity of previously preserved farmland, deed restricted lands, or compatible protected lands. Residential intrusion will be a negative factor unless it is located in a manner that does not detract from the agricultural activities. Target farms that are located in a manner that will contribute to the creation of a contiguous agricultural district will be given priority.

- **Proposed Land Use Compatibility**

Priority will be given to Target Farms that are the most compatible with proposed land use for the tract and for the neighborhood. The proposed land use will be scored based upon the compatibility of the zoning regulations with long-term agricultural use. The highest scores will be given to Target Farms that are adjacent to areas that are zoned for open space and conservation. The scores will be reduced for Target Farms that are zoned for residential or commercial development with the intensity of the proposed development determining the score. For example, zoning for low-density residential development will be scored higher than high-density residential development. Land that is zoned for office or commercial development or affordable housing projects that are needed by the local community will be scored the lowest since in these cases, the preservation of the farm may conflict with other planning objectives. Where there is a conflict with local zoning regulations, local officials will be contacted to determine their policy.

- **Community Value**

Priority will be given to agricultural operations that by their nature have value to the local and regional community. This factor should also consider the nature of the agricultural operation to the local or regional community. Farms that provide fresh produce to local markets, provide pick-your-operations, roadside farm markets or otherwise directly relate to the community would be given preference over farms that are inaccessible to the public and do not have a clear relationship to the general public. Factors that will be considered in evaluating this criterion are the farm's soil conservation plan, the farm's market connections, the activities that are undertaken on the farm, and the overall revenue of the agricultural operation. While the county will support the preservation of any targeted and eligible farm, the focus and emphasis of public investment should be on the farms that provide the most economic, educational, social, and recreational values to the community. In this regard, farms that by their nature are accessible to the public will be given the highest priority under this criterion.

- **Agricultural Sustainability**

Priority will be given to the preservation of lands that are currently used by well-managed agricultural operations that demonstrate agricultural sustainability. While the preservation of land does not mean that the existing character of the farm will remain in perpetuity, the County believes that public investment should be preferentially focused on farms that are the most economically viable, the best managed, and have the best track record. Farms that have found a niche market are the ones that have the potential for the highest gross revenue.

- **Local Commitment**

Priority will be given to applications in communities that agree to cost-share in the acquisition of the development easement. Local financial support is desirable but not mandatory. It is recommended that any application from a municipality that agrees to cost-share in the purchase of the development easement that has local financial support be granted bonus points in relation to the local commitment up to a maximum of 5 points. In other words, a farmland preservation application that has municipal support in the form of a resolution agreeing to provide 5% of the total cost of development easement acquisition shall be granted a

bonus of 5 points. Lesser commitments will be granted lesser bonus points. A minimum commitment shall be 1% of the easement purchase price.

- **Imminence of Change**

Priority will be given to farms that have the highest potential to be converted to non-agricultural purposes due to their location or pending sale and the negative impact that conversion would have on the County’s Farmland Preservation Plan. While it is true that all of the remaining qualified farmland is under strong pressure in Bergen County, the impact of conversion on the integrity of the Plan is varied. This criterion takes that factor into consideration.

- **Easement Price**

Priority will be given to applications that enter into option agreements for an easement value that is compatible with the prior appraisals in the Project Area or its immediate vicinity. The County is only interested in using public funds for appraisals and other preliminary work for projects in which it is anticipated that the certified value will be within the range specified within the option agreement. The factors to be considered are the basis of the range cited in the option agreement and the comparative value of the easement purchase price.

- **Proposed Exceptions/Details**

Priority will be given to farms that demonstrate the highest funding flexibility and farmland preservation potential. Factors that will be considered in this final criterion are exceptions that may detract from the farmland preservation objective and the willingness of the applicant to accept the conditions of potential grant funding sources (i.e, impervious cover limitation). Other factors that improve the attractiveness of the application (donation of conservation easement) will be considered under this criterion.

5.5.2 Weighting System

The above-cited criteria will be weighted to provide emphasis to the key priorities. The proposed weighting system is as follows:

Table 23: Ranking Criteria

Criterion	Weight
Farm Size/Density	15
Soil Quality	15
Tillable Acres	20
Boundaries and Buffers	10
Proposed Land Use Compatibility	10
Community Value	10
Agricultural Sustainability	5
Local Commitment	5
Imminence of Change	5
Easement Price	10
Proposed Exceptions/Details	5
Total	110

5.6 FARMLAND PRESERVATION FUNDING PLAN**5.6.1 Farmland Preservation Assumption**

Bergen County initiated its Farmland Preservation Program in 2000 with the commencement of the application to purchase the development rights on the 216 acre Wehran Estate. Since that initial acquisition, six additional smaller farms have been preserved encompassing an additional 102 acres. (One farmland preservation is pending in 2014.) The average preserved farm from 2004 to 2007 had been 17 acres which is approximately the average size of the farms remaining in the County. The prior preservation rate can be summarized as follows:

- One farm of 216 acres approved in 2000; Closing occurred in April of 2002;
- One farm of 6.3 acres approved in 2002; Closing occurred in February of 2004;
- One farm of 10.7 acres approved in 2003; Closing occurred in June of 2004;
- One farm of 10.1 acres approved in 2004; Closing occurred in April of 2005;
- Three farms of 74.6 acres approved in 2005; Closing occurred in 2006 and 2007;
- One farm of 17 acres pending final approval in 2014; Closing to occur in 2014.

Based on the foregoing trend and the fact that the number and acreage of farmland remaining in the county is at a critical stage, the goal of preserving two farms per year averaging a total of 30 acres per year in size is reasonable. The result of this objective would be the permanent preservation of two-thirds of the current qualified farmland and virtually all of the eligible farms remaining in Bergen County.

5.6.2 Open Space, Recreation, Farmland & Historic Preservation Trust Fund

In November of 1998, the voters of Bergen County approved a public question that authorized the Board of Chosen Freeholders to establish the Bergen County Open Space, Farmland & Historic Preservation Trust fund. The initial trust fund was financed through a ½ of 1 cent per \$100 dedicated tax of total county equalized real property valuation and had a life span of five years ending in 2003.

Based on the success of the Trust Fund program, the County sought to re-authorize and modify the Trust Fund in 2003. Once again, the voters strongly supported the ballot question. The modified Trust Fund was financed through a 1 cent per \$100 dedicated tax of total county equalized real property valuation. Beginning in funding year 2010, the Board of Freeholders reduced the open space tax assessment to ¼ of 1 cent per \$100 of total county equalized real property valuation, which remains for funding year 2014.

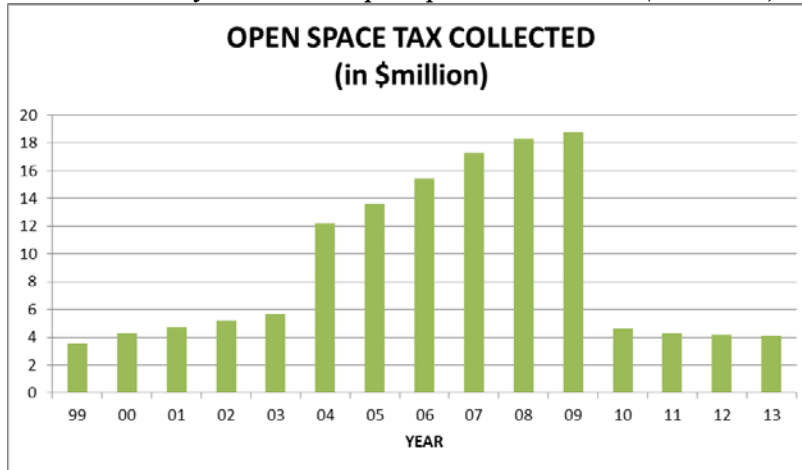
The Trust Fund is divided into two programs: the County Program and the Municipal Park Improvement and Land Acquisition Program. The allocations of the Trust Fund are 70% to the County Program and 30% to the Municipal Program. County Program funding is the source of funds for farmland preservation, in addition to providing funding towards acquisition of lands for open space conservation or recreation purposes, floodplain protection (to begin in 2014), historic preservation projects, and improvements to County park facilities. There is no annual allocation into each of the eligible funding categories. Grant monies are provided on a “competitive” basis.

Chart 5-1, below, and its adjacent table, illustrate the amount of open space tax collected in each year 1999-2013. The Board of Chosen Freeholders has set the open space tax assessment rates per \$100 of total county equalized real property valuation as follows:

- 1999-2003 at ½ of 1 cent (An additional \$20 million in County bonding was also available in years 1999-2003.)
- 2004-2009 at 1 full cent
- 2010-2013 at ¼ of 1 cent

The Board of Chosen Freeholders set the 2014 open space tax assessment rate at ¼ of 1 cent.

Chart 5-1: County Trust Fund Open Space Tax Collected (1999-2013)

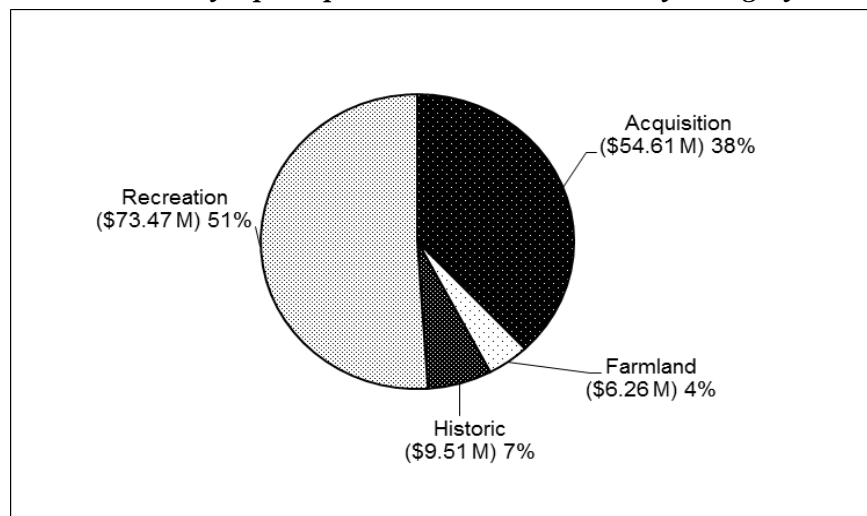


Source: Bergen County Division of Treasury

YEAR	TAX COLLECTED
1999	\$ 3,614,280
2000	\$ 4,268,955
2001	\$ 4,726,655
2002	\$ 5,249,107
2003	\$ 5,737,688
2004	\$ 12,160,170
2005	\$ 13,646,599
2006	\$ 15,398,469
2007	\$ 17,286,350
2008	\$ 18,276,751
2009	\$ 18,758,007
2010	\$ 4,585,302
2011	\$ 4,331,463
2012	\$ 4,218,700
2013	\$ 4,135,912
	\$ 136,394,408

To date, a total of about \$6.25 million has been awarded from the Trust Fund for the preservation of seven (7) farms, which amounts to about 4% of the approximately \$144 million in 911 project grant awards from the Trust Fund Program for funding years 1999-2013, as illustrated in **Chart 5-2**.

Chart 5-2: County Open Space Trust Fund Awards by Category



Source: Bergen County Open Space Trust Fund

Funding year 2014 represents the 16th year of the County’s Open Space Trust Fund Program.

5.6.3 Financial Plan

Bergen County has prepared a preliminary funding plan for Farmland Preservation under the Planning Incentive Grant program. There are a number of factors that will impact the financial cost including, but not limited to: the acreage preserved; the cost of acquisition; the projected Trust Fund revenue; and the County/State cost-sharing arrangement.

Prior to the establishment of the SADC PIG Program, the acquisition cost to preserve Bergen County’s 7 farms to date is indicated in **Chart 5-3**, following.

Chart 5-3: Acquisition Costs Bergen County Preserved Farms to Date.

DATE	FARM	TOWN	ACRES	TOTAL COST	PER ACRE COST	SADC's SHARE		BERGEN's SHARE	
April 02	Sun Valley Farm	Mahwah	216.1000	\$ 3,362,312.00	\$ 15,559.06	\$ 2,677,792.00	80%	\$ 684,520.00	20%
Feb 04	Twinbrook Nurseries	Franklin Lakes	6.4820	\$ 988,132.00	\$ 152,442.46	\$ 592,879.00	60%	\$ 395,252.00	40%
June 04	Brooks Farm	Closter	10.6121	\$ 2,544,993.82	\$ 239,820.00	\$ 1,654,245.98	65%	\$ 890,748.84	35%
Apr 05	Demarest Farms	Hillsdale	10.3530	\$ 3,354,196.00	\$ 323,983.00	\$ 1,677,098.00	50%	\$1,677,098.00	50%
May 06	Mahrapo Farm	Mahwah	12.4590	\$ 1,320,654.00	\$ 106,000.00	\$ 545,081.25	41%	\$ 775,572.75	59%
June 06	Deepdale Farm	Mahwah	11.0000	\$ 580,250.00	\$ 55,000.00	\$ 345,512.50	60%	\$ 234,737.50	40%
Jan 07	Kohout Farm	Mahwah	47.133	\$ 3,864,906.00	\$ 82,000	\$ 2,241,645.48	58%	\$ 1,623,261	42%
TOTALS:			314.1391	\$16,015,443.82	\$ 50,982.01	\$ 9,734,254.21	61%	\$6,281,189.61	39%

5.6.3.1 Farmland Preservation Plan Goal

The objective is to estimate the total cost of acquiring 300 acres of the targeted farms in conformance with the goal of this Plan. Since farmland preservation is a voluntary program and since some farms will have priority over others in the short term, the acquisition of the all of the targeted farms in the Project Areas is not realistic. The 300 acre easement acquisition goal was selected since it is ambitious yet achievable. The key assumptions of this Scenario are as follows:

- Easement Acquisition Target. The farmland preservation target under this scenario would be the 300 acre Farmland Preservation Plan goal.
- Easement Acquisition Cost. The average cost per acre for the acquisition of development easements is assumed to be \$140,000 per acre and is assumed to increase at 4% per year.
- Dedicated Tax Revenue. The County’s dedicated tax for open space and farmland preservation would remain available, although its rate could certainly fluctuate year-to-year.

- Cost-sharing. The cost-sharing arrangement with the state would be as stipulated in the Planning Incentive Grant regulations which would result in an average split of 43% State funding and 57% County funding in 2014 and declining to approximately 38% State and 62% County in 2024.
- Leveraging. While the County would seek to pursue funding relationships with non-profits to further leverage local funding, the Financial Plan will not be dependent upon these alternative sources of funding.

The following **Table 24** provides the estimated cost projections for the 1, 5, and 10-year time periods from 2014 to 2024.

YEAR	GOAL ACRES	TOTAL PROJECTED COST	ESTIMATED LOCAL COST SHARE	ESTIMATED COUNTY COST SHARE	PERCENT COUNTY COST SHARE	ESTIMATED STATE COST SHARE	PERCENT STATE COST SHARE	OTHERS
1	30	\$4,200,000	\$0	\$2,392,500	57%	\$1,807,500	43%	\$0
5	150	\$22,748,555	\$0	\$13,356,199	59%	\$9,212,356	40%	\$0
10	300	\$50,425,650	\$0	\$31,508,085	62%	\$18,917,565	38%	\$0

5.6.4 Installment Purchase Agreements

Several counties in New Jersey are utilizing Installment Purchase Agreements as a means of leveraging available funds. While Bergen County has decided not to consider the use of IPAs, their use may be considered in the future based on the experiences in other counties and once the actual cost of acquiring easements is further defined.

5.7 FARMLAND PRESERVATION PROGRAM ADMINISTRATION

5.7.1 Professional Planning Resources

The farmland preservation program policies will be coordinated and administered by the County’s Department of Planning & Economic Development in conjunction with the County Agriculture Development Board. These activities may include adoption of revisions to the Farmland Preservation Plan, implementation of key planning policies, reviewing and ranking of applications, and preparing policy recommendations. GIS data related to the County’s Farmland Preservation Program will be maintained by staff in the Department of Planning & Economic Development.

5.7.2 Administrative Staff

The Administrator of the Bergen County CADB will oversee the day-to-day administration of the program. The administrative responsibilities will include disseminating and receiving applications, tracking the status of applications, and compiling the survey, appraisal, and title information required before an application proceeds to closing. All County funding determinations will be made by the Board of Chosen Freeholders based on recommendations of the Open Space Trust Fund Public Advisory Committee and the CADB.

5.7.3 County Planning Board

The key function of the County Planning Board is to provide for the preparation and periodic reexamination and revision of the County’s Master Plan. In this regard, the Farmland Preservation Plan could be adopted as an element of the County Master Plan, which is presently being updated, or as a related guidance document. However, the planning policies of the County Master Plan will be in full conformance with this Farmland Preservation Plan. As the planning agency for the County, the Department of Planning & Economic Development needs to ensure that policies in the Farmland Preservation Plan are fully compatible and consistent with other Master Plan elements.

5.7.4 County Agriculture Development Board

Bergen County established a County Agriculture Development Board (CADB) that meets to review the status of the agricultural industry in Bergen County. Among other things, the Board oversees the county’s farmland preservation program and mediates right-to-farm disputes. The current members are as follows:

- | | |
|---|--|
| Evelyn Spath-Mercado, Public, Chairperson | Denny Wiggers, Public |
| Chris James, Public, Vice Chairperson | Angelo Caruso, Soil Conservation District |
| James Alan Abma, Sr., Farmer | Joel Flagler, County Agent, NJ Cooperative |
| Ronald Binaghi, Jr., Farmer | Extension Service |
| Darryl Secor, Farmer | Joseph Valente, County Planning Board |

There currently is a vacancy for another farmer member.

The CADB’s responsibilities are broad and include reviewing the farmland preservation plan, commenting on policies that impact the farmer in the community, and supervising the implementation of the Planning Incentive Grant program.

5.7.5 Legal Support

The County’s Office of County Counsel provides legal counsel to the CADB. This support may include but not be limited to, the preparation of option agreements, as well as legal opinions on farmland policies, including right-to-farm disputes.

5.7.6 Database Development

The County’s Department of Planning & Economic Development is responsible for developing and maintaining the database needed to successfully implement the Farmland Preservation Plan. The database will include, but not be limited to, data on land ownership, land development patterns or trends, and the data compiled for the preparation of the Farmland Preservation Plan Update and the information needed to implement all aspects of the program.

5.8 FACTORS LIMITING FARMLAND PRESERVATION IMPLEMENTATION

5.8.1 Funding Resources.

5.8.1.1 State Funding Commitment

One of the factors that may limit the implementation of the farmland preservation program outlined herein is the adequacy of state farmland preservation funding commitments. The Financial Plan estimated the SADC will need to provide about \$2 to \$2.3 million per year for each of the next ten years or a total of \$21.5 million to achieve the planning goal.

The long-term funding commitment of the State of New Jersey has not been established. Presently, the state’s Garden State Trust has run out of money and a permanent funding plan or program has not yet been identified nor established. While over the years the electorate has supported funding for various preservation programs, including farmland, long-term funding resources are unclear at the time of the preparation of this Plan. This is especially so during this fiscally-constrained time period and “anti-tax” climate.

5.8.1.2 Bergen County Funding.

Bergen County anticipates that it will be able to provide its share of the farmland preservation funding commitment through the County’s Open Space Trust Fund.

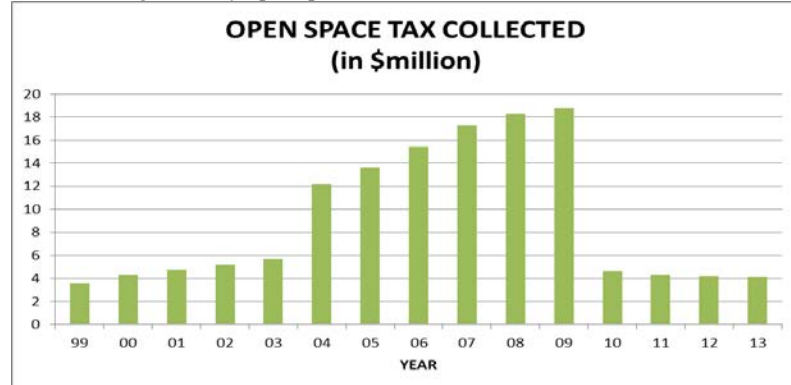
Farmland preservation must compete with other open space, recreation, and historic preservation projects for funding under the Trust Fund.

As previously shown, **Chart 5-1** illustrated the amount of open space tax collected in each year 1999-2013. The Board of Chosen Freeholders set the open space tax assessment rates per \$100 of total county equalized real property valuation as follows:

- 1999-2003 at ½ of 1 cent (An additional \$20 million in County bonding was also available in years 1999-2003.)
- 2004-2009 at 1 full cent
- 2010-2013 at ¼ of 1 cent

YEAR	TAX COLLECTED
1999	\$ 3,614,280
2000	\$ 4,268,955
2001	\$ 4,726,655
2002	\$ 5,249,107
2003	\$ 5,737,688
2004	\$ 12,160,170
2005	\$ 13,646,599
2006	\$ 15,398,469
2007	\$ 17,286,350
2008	\$ 18,276,751
2009	\$ 18,758,007
2010	\$ 4,585,302
2011	\$ 4,331,463
2012	\$ 4,218,700
2013	\$ 4,135,912
	\$ 136,394,408

Chart 5-1: Bergen County Open Space Trust Fund Tax Collected



The Board of Chosen Freeholders set the 2014 open space tax assessment rate at ¼ of 1 cent.

5.8.2 Projected Costs/Revenues

As discussed in the funding plan, the total projected cost of the Bergen County Farmland Preservation program could be on the order of \$50 million over the next ten years. This level is based on past practices and is achievable with adequate funding resources. However, one key assumption is that the easement acquisition cost will increase at an average rate of 4% per annum.

Land values in the County appear to have flattened as a result of the current housing slump. The only reason that land values have not declined has been the wait-and-see approach of farmland owners and the absence of major land sales.

While it is anticipated that land values will remain flat or show slow increase due to the severity of the housing slump and the inventory of homes available for sale, it is possible that the housing market could vigorously respond once the housing financing problems are resolved. This could result in another steep increase in land values. If this were to occur, it would undermine a key assumption of the funding plan that land values will increase at an average rate of 4% per annum. Therefore, even if the financial resources outlined in the funding plan were to be realized, the success of the program would be limited by another steep increase in land values similar to that experienced from 2003 to 2006.

5.8.3 Land Supply

Land supply is a major limiting factor in Bergen County. The County has less than 1000 acres of qualified farmland of which 318 acres have already been preserved leaving about 690 acres of unpreserved qualified farmland. The number of farming entities is 54, of which 7 entities have already been preserved, leaving a total of 47 farms with unpreserved land. Therefore, the potential applicant pool is very small. Furthermore, the number of targeted farms and farms eligible for funding is further reduced. Consequently, the extent of the program is limited by the land supply.

It is for this reason that this program is so important to Bergen County at this time since these farms are the last left in the County and this plan is the last opportunity to effectively preserve a significant portion for land preservation. The goal is to preserve 300 acres over the next 10 years which would result in the preservation goals of 618 acres by 2024. For all practical purposes, this goal basically represents the preservation of all eligible farms remaining in Bergen County. The only farms that will not have been preserved at the end of the planning period will likely be those that do not qualify for funding or those for which the owners have chosen not to participate in the program.

5.8.4 Administrative Resources

The cost of providing the professional support needed to implement the farmland preservation program is significant. Although some of these costs can be recouped, the program does involve a substantial outlay of resources for “soft costs.” The funding plan anticipates that these costs will stabilize as the program matures and that these costs will be covered by the dedicated funding. It is anticipated that the administrative costs will not exceed 5% of the easement acquisition cost in any one year.

5.8.5 Landowner interest

Landowner interest may be a limiting factor. As noted previously, this program is basically seeking to preserve all of the remaining farmland in the County that is eligible for grant funding. In a County with extremely high land values, it is possible that some landowners of qualified farmland will sell their land for development rather than apply for farmland preservation. It is likely that the owners of the least viable farming operations will be more interested in conversion to non-agricultural purposes. Therefore, land supply and landowner interest are two major obstacles in Bergen County.

A number of factors could affect landowner interest and participation including the certified values, the level of success, and the time involved to complete the land transaction. Therefore, the County and the SADC need to be very conscious of the issues that will impact landowner interest and program success. Effective farmland preservation programs tend to generate more success. The level of landowner interest has not been clearly established but will be once this Plan is adopted and individual applications are solicited.

5.8.6 Land Values

The value of vacant land in Bergen County is very high compared to other counties. As noted earlier, land values throughout the study area exceed \$100,000 per acre and land transactions in certain communities have been well in excess of \$100,000/acre. Even with the recent downturn in real estate values, land values throughout the study area more than likely still remain higher when compared to agricultural lands in other counties.

5.9 COUNTY POLICIES RELATED TO FARMLAND PRESERVATION APPLICATIONS

5.9.1 Farmland Preservation Application Policies/Procedures

Applications will be accepted on a rolling basis by the Bergen County Agriculture Development Board. In order to encourage the greatest possible amount of landowner participation in the County farmland preservation program, this Farmland Preservation Plan seeks to provide a high degree of flexibility in the application process with an understanding towards the uniqueness of Bergen's remaining agricultural landscape.

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.

Among other things, this Plan establishes the Project Areas, the target farms, the minimum eligibility criteria, and the ranking criteria that will be used to implement the easement acquisition portion of the Farmland Preservation Plan.

As necessary and appropriate:

- Applications. The County could solicit applications from the target farm landowners by direct mailing. Once the applications are received, meetings would be held with the interested landowners to fully understand the application process. Applicants could

then be asked to indicate the option price or range that they would accept in an option agreement.

- Option Agreements. One approach could be to then have the applicant and the County execute option agreements with appropriate contingencies. During the preparation of the option agreement, issues relating to exceptions, proposed subdivisions, nonagricultural uses, etc., and the easement language will be discussed with the applicant.
- Ranking. The applications are reviewed by staff and, as necessary, will be ranked by the CADB. With Board of Freeholder approval, certified appraisals will be undertaken.
- Trust Fund Commitment. As an application proceeds, the CADB would submit a funding request to the County Open Space Trust Fund Public Advisory Committee as appropriate.
- Final Approval. Final approval of the highest ranked applications will be forwarded to Board of Chosen Freeholders for action and then to the SADC.

Once all necessary approvals are received, the settlement documents would be prepared including a survey and title commitment and the application would proceed to closing.

5.9.2 County Policies Related to Preserved Premises, Housing, Division of Premises, Exceptions

5.9.2.1 Housing

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 Bergen 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 SADC's policy on Residual Dwelling Site Opportunities (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 allocated prior to preservation at a density not to exceed one residential unit per 100 acres, including existing and proposed structures. Because of that density requirement, RSDOs are presently unattainable in the County as there aren't any remaining unpreserved agricultural properties greater than 40 acres.

5.9.2.2 Division of Preserved Farmland

The County will follow the SADC guidelines and policy related to requests for a Division of Preserved Farmland. 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 CADB that division of preserved farmland 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 the resulting parcels must continue to be agriculturally viable; additional details are found in SADC Policy P-30-A, whereby all such Policies related to Farmland Preservation can be found: <http://www.nj.gov/agriculture/sadc/rules/>. The CADB does not have any other policy or any other perspective on this issue at this time.

5.9.2.3 Exceptions

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. The County will limit the number of exceptions by taking into account the individual application conditions. The location and configuration of each exception, as well as proposed access to each exception, are also given considerable attention in the application phase. For all exceptions, severable and non-severable, the CADB considers the impact on the remaining agricultural lands, particularly ensuring that areas are not "orphaned" from the larger fields. The CADB follows SADC Policy P-41 (found at <http://www.nj.gov/agriculture/sadc/rules/>) with regard to access to exception areas. For example, access exclusively for non-agricultural purposes to a non-severable exception must be included within the exception. The CADB does not have any other policy or any other perspective on this issue at this time.

Bergen County Farmland Preservation Plan

VI. ECONOMIC DEVELOPMENT

Farmland preservation is directly related to the economic viability of the agricultural industry. Therefore, one objective of the Farmland Preservation Plan is to outline agricultural industry retention, expansion and recruitment strategies that are appropriate for the study area. Bergen County is a relatively densely developed county approaching a population of 1 million persons. The key economic issue is how local farmers can successfully reach the strong local retail market.

6.1 CONSISTENCY WITH NJDA ECONOMIC DEVELOPMENT STRATEGIES

The New Jersey Department of Agriculture (NJDA) published a document entitled *Economic Development Strategies in 2007* that listed various economic development strategies for the key agricultural sectors in the state. It is recommended that Bergen County support the economic development strategies of the relevant agricultural industries in the County.

Chart 6-2, on the following page, lists the relevant agricultural sector for each farm in the County based on the farmland assessment application data submitted by the landowner. The data indicates the areas of agricultural production that farms are engaged in. Note that a farm may have agricultural production in more than one area. The number of farms identifying their areas of agricultural production is as follows: Field Crops (4); Fruit Crops (7); Ornamental Crops (24); Livestock-Poultry (15); Equine (21); Vegetable Crops (15); Aquaculture (4); Woodland Products (9); and, Renewable Energy (0). The category of Renewable Energy on the state's Farmland Assessment Application form was only recently added.

As Chart 6-2 indicates, many of the farms in the County are involved in more than one agricultural sector, except that farms involved in woodland products are primarily confined to the production of firewood as the main source of income. In addition, about half of the farms with horses and ponies are committed only to that agricultural sector.

While there are a number of farms with fowl and livestock, the concentration of animals or fowl is relatively low. There are no intensive livestock operations in the County and only one poultry operation that could be considered an intensive fowl operation.

Based on the foregoing, the key agricultural sectors in Bergen County in order of priority are as follows:

- Ornamental horticulture industry
- Produce industry
- Equine industry
- Livestock and poultry industry
- Field and forage crops industry

In addition, there is strong interest and involvement in the organic industry and in agri-tourism as a means of enhancing agricultural value.

The key elements of the economic development strategies for these industries are discussed here with specific comment on the relationship of these strategies to Bergen County.

Chart 6-2: Farms by Industry

Farm	Field Crops	Fruit Crops	Ornamental Crops	Livestock/Poultry	Equine	Vegetable Crops	Aquaculture	Woodland Products	Renewable Energy
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
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57									
58									
59									
60									
61									
Totals	4	7	24	15	21	15	4	9	0

6.1.1 Produce Industry

New Jersey has a strong and diverse fresh produce industry. The production of fruits and vegetables in close proximity to consumers should result in a strong economic relationship. However, national food market chains are reluctant to enter into contracts due to the seasonal nature of local production and the strong competition from other suppliers, in some cases, international suppliers.

New Jersey has sought to overcome this dilemma with an aggressive *Jersey Fresh* program that touts the advantages of local products. The media campaign has had some success by appealing directly to consumers to help break down access to certain markets. However, the best demonstrations of the advantages of a strong connection to local markets were the spinach contamination problem in 2006 and the tomato contamination problem in 2007. In both cases, local produce from safe sources was made available for consumers to replace produce from distant sources of suspect quality.

The key strategies for the produce industry identified by the NJDA include the following:

- Adapt local produce operations to new food safety standards;
- Strengthen *Jersey Fresh* hospitality program that results in the marketing of produce to the hotel, restaurant and institutional food service industries;
- Expand the branding of produce as *Jersey Fresh* on packaging and at the point of sale;
- Strengthen the appeal of the *Jersey Fresh* brand to major food markets and broaden the promotional program to be more inclusive;
- Provide for third-party food safety certifications with trace-back capability and promote these certifications as part of the *Jersey Fresh* program;
- Promote vertical integration working with national produce brands to integrate New Jersey produce into the year-round supply model;
- Communicate and coordinate with East coast growers to develop and improved database of suppliers and market cooperatives;
- Facilitate state purchases of New Jersey farm products to state correctional and school facilities as well as emergency feeding organizations;
- Promote community farm markets as a means of direct marketing that benefits the consumer and the producer;
- Identify alternate crops that can be produced in New Jersey and the channel of product distribution;
- Evaluate flash-freeze applications for vegetable and fruit products; and,
- Use vegetable marketing task force to pursue means of improving market access and distribution of New Jersey agricultural products.

Bergen County is an active participant in the *Jersey Fresh* program and had used its own *Bergen Fresh* program to increase the awareness of local products. Many of the Bergen County farmers have overcome the marketing issues by selling their products in their own markets or nearby community markets. Excellent examples of direct sales operations include Demarest Farm (Hillsdale), Abma Farm (Wyckoff/Franklin Lakes), Secor Farm (Mahwah), Old Hook Farm (Emerson), Abram Demaree Homestead (Closter), and Joy's Farm (Paramus). Other local operations have direct connections with proximate but offsite markets. For example, Stokes Farm in Old Tappan has a strong connection to the Greenmarket program in New York City.

6.1.2 Ornamental Horticulture Industry

New Jersey has a strong and expanding horticultural industry. This industry has benefited from the strong consumer market, the increasing demand for plant material, and the need for quality plants that are grown locally. The competition is from major national retail stores that may not purchase locally and may not implement the necessary quality control programs. The relevant economic development strategies that have been identified for this industry are as follows:

- Implement comprehensive plant health program including inspections and certifications of nurseries, seed certification programs for turf grass; utilization of new methods of pest control; and continued research to identify resistant plants;
- Support the establishment of a drought emergency protocol to enable the implementation of predictable, effective and reasonable restrictions during emergencies;
- Strengthen the use of the *Jersey Grown* brand to enable the industry to benefit from a common trademark with advertising at the point of sale; by communicating the benefits of these products; and by disseminating a list of certified growers through various means;
- Encourage governmental agencies to purchase *Jersey Grown* products whenever possible for highway planting, landscaping, and forestry programs;
- Sponsor community awards program to recognize exemplary use of landscaping in community applications; and,
- Improve communications with horticultural and floricultural producers.

The Secor Farm in Mahwah Township is an example of a major greenhouse operation with high production capabilities designed primarily for direct retail sales.

6.1.3 Field and Forage Crop Industry

New Jersey retains a strong field and forage crop industry despite the high cost of production. However, the NJDA recognizes that since commodity prices are based on national production yields and costs, the return on investment for commodity items is lower in New Jersey than elsewhere. The NJDA economic development strategy for this industry does foresee an opportunity for the use of field crops as a feed stock for renewable energy technologies if the energy production plants are located in

New Jersey. The field and forage crop industry in Bergen County is quite small and would not be impacted by such a prospect.

The field crop strategies listed by the NJDA can be summarized as follows:

- The health of the field and forage crop industry must be protected from the threat of devastating pests and diseases by vigilant monitoring and by direct action such as the release of beneficial insects;
- Establish a statewide working group to improve the production and yield of field crops by the utilization of improved management practices; increased economic sustainability of forage livestock systems; and improved production and quality of conserved feeds;
- Encourage the production of certified organic soybeans, corn and wheat to increase the value of these crops;
- Assist in the linking of growers with organic food processors to take advantage of the growing demand for processed food products using organic ingredients;
- Support efforts to construct an ethanol plant in New Jersey to create a market for local growers and to elevate the price of regionally produced corn;
- Support efforts to construct bio-diesel production facilities and soybean crushing facilities in New Jersey to create a strong market for local growers and to elevate the price of regionally grown soybeans; and,
- Conduct grain marketing sessions to inform producers about the role of crop insurance in mitigating marketing risk in forward contracting.

6.1.4 Livestock and Poultry Industry

Bergen County has relatively small livestock and poultry industry components. Nevertheless, the continued presence of these sectors in the County is dependent upon improvements in the marketing of local products. The relevant NJDA economic development strategies for this industry are as follows:

- Protect the health of the poultry and livestock industry from the threat of devastating and economically damaging diseases by the implementation of best management practices for bio-security;
- Strengthen the branding of meat products under the *Jersey Bred* program;
- Encourage the production of goat products through expansion of the goat purchasing program and through the feed-out of goats on a seasonal basis to reduce costs;
- Support the marketing and distribution of grass-fed and organic grass-fed livestock production;

- Support the marketing of locally grown poultry, meat, and eggs by ensuring that the State's industry reflects current industry models of production and distribution;
- Support the improvements to the state's livestock markets by upgrading facilities, adapting operations to meet the needs of traditional and ethnic markets; and initiating a dialogue with auction markets to conduct graded sales;
- Support the improvements to the state's livestock markets by upgrading facilities, promote livestock sales at several locations throughout the State and enhance the support for the sale of market lambs and 4H animals.

6.1.5 Equine Industry

The equine industry in New Jersey reportedly accounts for about 81,000 acres of farmland around the State. In Bergen County, it is believed that over 100 acres of farmland are devoted to equine-related activities. While the County does not have a major horse breeding operation, several farms in the County have the facilities to board and train horses as a source of recreation and show. Several farms in Mahwah Township list the equine industry as the primary source of revenue.

The economic development strategies that have been developed by the NJSDA for his industry include the following:

- Protect the health of horses from the threat of devastating and economically damaging diseases;
- Support the research efforts of the Equine Science Center at Cook College of Rutgers University to ensure the implementation of best management practices;
- Promote the equine industry by supporting various equine shows and events throughout the state;
- Expand career opportunities in the equine industry through promotion and education programs; and,
- An Equine Agricultural Management Practice has been adopted by the SADC to allow for increased Right-to-Farm protection for the equine industry.

While the equine industry is relatively small in Bergen County, it offers important recreational opportunities for local residents.

6.1.6 Organic Industry

The organic food industry is rapidly expanding throughout the nation and particularly in suburban areas where there is increasing awareness of the need for controlled food production practices. Annual growth in the organic industry has been on the order of 15-20 percent in recent years.

In order to use the organic labeling, producers and processors must be certified by the USDA. Recently, New Jersey has implemented a quality organic certification process approved by the USDA

that has helped farmers and related industries transition into the organic industry. These regulations allow farmers to use the “transitional sustainable” label without waiting 36 months “free of prohibited materials” as is required for national organic certification.

The advantage of the organic industry is that farmers are able to increase the value of products by gaining the required certification. The select consumer market is willing to pay more for the use of sustainable practices and the improved quality of the products. New Jersey has adopted *Jersey Organic* rules to help support the marketing of these products.

The specific organic marketing strategies proposed by the NJDA are as follows:

- Continue outreach efforts to educate growers and handlers about federal funds that are available to help defray certification costs;
- Assist the industry in supplying the types of organic products that the marketplace demands;
- Promote New Jersey grown organic products as of higher value than competing products;
- Educate growers and handlers on the NJDA’s legal and regulatory requirements for the production and sale of organic products and on the implementation of the organic certification process; and,
- Continue working with the USDA on accreditation of the State Certified Organic program as well as the marketing of products as “transitional sustainable” during the interim.

6.1.7 Agritourism

Bergen County has a number of excellent examples of agritourism or farms that serve as places to be educated and entertained while selling locally grown agricultural products. Farms that fit into this category produce products and conduct activities that are compatible with this objective including hayrides, pick-your-own fields, petting areas, and corn mazes. Examples of these operations include Demarest Farms in Hillsdale, Secor Farm in Mahwah, and Abma’s Farm in Wyckoff Township and Franklin Lakes Borough. Farms of this type develop a community relationship that extends well beyond the products that are grown and sold. They become part of the community fabric, which helps to justify public investment in the preservation of these types of farms.

New Jersey has a website at: <http://visitnjfarms.org/>. It permits the public to search for farms that have products and events that cater to the agritourism objective throughout the state. Currently there are five Bergen County farms listed on the website. They are: Abma Farm (Wyckoff/Franklin Lakes), Demarest Farm (Hillsdale), DePiero Farm* (Montvale), Old Hook Farm (Emerson), and Secor Farm (Mahwah). Each of these farms caters to their own geographic draw. The website allows farmers to indicate whether they have on-farm activities, pick-your-own operations, and/or farm market products. It is anticipated that as interest in these operations continues to expand, websites of this type will be important in communicating special events and activities to the consumer. (*At the time of this Plan, DePeiro’s Farm is undergoing potential conversion to a non-agricultural land use.)

6.2 AGRICULTURAL INDUSTRY RETENTION, EXPANSION & RECRUITMENT STRATEGIES

6.2.1 Institutional

The primary institutional concern expressed by local farmers is the need for improvement in all forms of primary and secondary marketing. While farmers are supportive of the *Jersey Fresh* promotion, the program has not fundamentally changed the level of competition for local products. More attention needs to be focused on the marketing issues that impact the profitability of the local farming community. One advantage in Bergen County is the presence of strong direct sales markets that reduces the farmers' reliance on wholesale produce markets.

The State Agriculture Development Committee has established the "Farm Link" Program to serve as a resource and referral center for new farmers, farmers seeking access to land and farming opportunities, landowners seeking farmers, and farmers working on estate and farm transfer plans.

The program's [linking service](#) works to connect farm owners with farmers seeking access to land and farming opportunities. People looking for land typically include new farmers or farmers looking to expand or relocate their operations. When matches occur, they often involve leases, partnerships, apprenticeships, standard sales, and other arrangements.

The Farm Link Program provides support for all farmers, both new and established. The program's linking service and [resource pages](#) are particularly useful for the following groups:

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

Information and application materials are available from the SADC's webpage at: <http://www.nj.gov/agriculture/sadc/farmlink/>.

6.2.2 Support Businesses

Bergen County does not contain the specialized agricultural support services that are found in more rural areas. Local farmers obtain services and products from a multitude of service providers throughout northeastern New Jersey. It is recommended that a listing of service providers that are utilized be compiled to share that information with other local farmers. Because of the closely-knit nature of the local agricultural community, information tends to be communicated by word-of-mouth.

6.2.3 Anticipated Agricultural Trends

Bergen County has retained certain key segments of the agricultural industry. These include several agricultural operations involved in fruit and vegetable crop production as well as numerous farms in involved in ornamental or horticultural crop production. These farms generally depend on direct sales and will continue to respond to a strong market demand. In many cases, the livestock, poultry, and equine sectors on these farms are spin-offs of the base farm products.

While there are several farms that report field and forage crop production, the local farms are not suited for efficient production of field crops. These farms tend to utilize their field crop output for onsite purposes.

The equine industry in the County is relatively small as a primary source of income. Horse breeding and sales operations are not substantive in nature but appear to be sufficient to qualify for farmland assessment. It is envisioned that the equine industry is sustainable in the County at current levels.

Livestock and poultry components are relatively small and as noted above tend to be a secondary source of agricultural income. However, there is at least one intensive poultry operation that should be sustainable.

The farms that depend on firewood as a primary source of income may qualify for farmland assessment but may not be the types of farms that are the focus of this farmland preservation plan without substantive clearing.

The County should recognize the factors that affect the retention and sustainability of local farming operations. Agricultural operations that are cost-efficient and which meet the strong market demand for local produce, ornamental crops, and poultry deserve particular attention and focus.

6.3 MARKETING

Because of the size and density of the local communities, the marketing of agricultural products is focused on direct sales to consumers in local establishments or in green markets in New York City. What Bergen lacks in specialized services, it makes up for in the access to markets both in the County and in the region.

6.3.1 Roadside Stands/Commercial Markets

As of this writing, the New Jersey Department of Agriculture (NJDA) lists 12 roadside markets in Bergen County on their website at: <http://jerseyfresh.nj.gov/>. In many cases, these “roadside stands” are much more than the name connotes. Instead of referring to the small produce stand along the side of the road, this term is also being applied to major commercial markets with a propensity for the sale of a diversity of local products. The roadside markets that are listed by the NJDA are as follows:

- Abma’s Farm; 700 Lawlins Road, Wyckoff Township
- DePiero’s Farm*; 300 Grand Avenue, Montvale
- Demarest Farm; 244 Werimus Road, Hillsdale
- Goffle Brook Farm & Garden Center; 425 Goffle Road, Ridgewood
- Joy’s Farm & Garden; 7231 Pascack Road, Paramus

- Lannings Greenhouse; 341 Grove Street, Ramsey
- Market Basket; 813 Franklin Lakes Road, Franklin Lakes
- Old Hook Farm; 650 Old Hook Road, Emerson
- Secor Farms; 168 Airmont Avenue, Mahwah
- Stokes Farm; 23 DeWolf Road, Old Tappan
- The Farm in Closter; Piermont Road, Closter
- Twinbrook Nurseries; 706 Franklin Avenue, Franklin Lakes

*(*At the time of this Plan, DePeiro's Farm is undergoing potential conversion to a non-agricultural land use.)*

These markets are not only an outlet for the farmer to sell locally farm grown products, but they are also a community resource providing access to local products. In many cases, the activities that take place at several of these marketplaces include educational as well as recreational benefits. These commercial enterprises have created their own unique market products and geographic draw. In some cases, these markets are an excellent example of agritourism. It should be noted, however, that Market Basket is actually a grocery store market and The Farm in Closter was recently sold and is anticipated to be converted into a non-agricultural use.

6.3.2 Community Farmers Markets

In addition to the roadside stands and the commercial marketplaces, there are several community farmers markets in Bergen County that provide access to fresh produce on a seasonal basis. As of this writing, the New Jersey Department of Agriculture (NJDA) lists 12 farmer's markets in Bergen County on their website at:

These farmers markets have been identified as follows:

- Allendale Farmer's Market. Variety of fresh fruits and vegetables on Saturdays at 120 West Allendale Avenue, Allendale;
- Englewood Farmers Market. Variety of fruits and vegetables on Fridays at North Van Brunt Street and Demarest Avenue, Englewood;
- Fort Lee Farmers Market. Variety of fruits and vegetable market on Sundays at the Fort Lee Community Center;
- Hasbrouck Heights Farmers Market. Variety of fruits and vegetables on Tuesdays at Central Avenue & the Boulevard in Hasbrouck Heights;
- Oakland Farmers' Market. Variety of fruits and vegetables on Saturdays at Borough Hall;
- Paramus Farmers Market. Jersey Fresh fruits and vegetables on Wednesdays at 475 Fairview Avenue, Paramus;
- Ramsey Farmer's Market. Variety of fruits and vegetables on Sundays at Main Street Train Station, Ramsey;

- Ramsey Winter Farmer's Market. Variety of fresh produce on Sundays indoors at Eric Smith School, Ramsey;
- Ridgewood Farmers' Market. Variety of fruits and vegetable market on Sundays at the NJ Transit Railroad Station (Garber Square), Ridgewood;
- River Vale Farmers Market. Variety of fruit and vegetable market on Thursdays at Town Hall;
- Rutherford Farmers Market. Variety of fresh fruits and vegetables on Wednesdays and Saturdays at Williams Plaza in Rutherford; and,
- Teaneck Farmers Market. Variety of farm fresh fruits and vegetables on Thursdays at Beverly Road and Garrison Avenue, Teaneck.

Access to the majority of these farmers' markets is May through October. The Ramsey Winter Farmer's Market essentially provides year-round access to a community farmers market in the County. These community farmer's markets draw Bergen County farmers as well as other more distant agricultural operations from northern and central New Jersey. Specific information about each of these farmers markets may be obtained from web addresses listed on the previously-referenced NJDA web page.

6.3.3 Community Supported Agriculture

Community Supported Agriculture (CSA) is a relatively new concept in farming that attempts to share the benefits and risks associated with agricultural production. The concept is to create a community of individuals that pledge their financial support to a particular farm operation by becoming stakeholders in the operation and then receive an equitable share of the products. Typically, the stakeholders pick up their share of the weekly farm production. Some CSA operations either require or allow the stakeholders to participate in agricultural production activities. In most cases, the CSA operations are organic farms, which increase the public's interest and support.

The advantages of a CSA are that shareholders receive a variety of organic products throughout the growing season from a farm using defined and sustainable agricultural practices. The advantages to the farming entity are that they receive a source of initial capital for planting and that they avoid all of the costs associated with packaging, delivery, and third party marketing of the products.

At this time, the only example of the use of this concept by a Bergen County farm is the Joy Farm in Paramus Borough. The Joy Farm is located in a major suburban community and is literally bisected by the Garden State Parkway. The CSA has been in operation since 2003. The farm offers shares to the public every year and has reported that shares sell out early.

It is anticipated that the CSA concept will expand in Bergen County and throughout the region as consumers seek to ensure vertical integrity in food quality.

Another example of the CSA concept underway in Bergen County is based at the Whole Foods Market in Ridgewood, in which they have made an arrangement with a New York State farm whereby that farm would use this Whole Foods' site as its delivery area for its agricultural output.

6.3.4 Publicity

An article in the April 2005 (201) *Magazine* provided insight into specific case studies of Bergen County agriculture. The four farms that were highlighted in that article remain active operations and the characterizations presented remain a meaningful perspective.

The specific farms that were highlighted were the Joy Farm in Paramus an example of community supported agriculture; the Stokes Farm in Old Tappan, a multi-generational farm that is a major producer of herbs and specialized products for sale at Greenmarkets in NYC; the Old Hook Farm in Emerson specializing in organic farming; and the Demarest Farm in Hillsdale and Saddle River that is the largest apple/peach orchard in the County.

Information about agriculture and farmland preservation in Bergen County can also be found on the web pages of the Bergen County Department of Planning & Economic Development at: <http://www.co.bergen.nj.us/index.aspx?nid=462>.

The County of Bergen offers information to visitors about community farmers markets, which can be found at: <http://www.co.bergen.nj.us/index.aspx?nid=766>. It also offers information to visitors about agritourism activities, which can be found at: <http://www.co.bergen.nj.us/index.aspx?NID=765>.

The New Jersey Department of Agriculture has lots of statewide information on roadside stands, pick your own, Jersey Fresh, CSAs, organic farms, and farmers markets, which can be found on its website at: <http://www.jerseyfresh.nj.gov/>.

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. Jointly published by the Counties of Bergen, Hunterdon, Morris, Passaic, Somerset, Sussex, and Warren, 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 Bergen County Farms are listed in this guide.



6.3.5 Agricultural Education and Market Research Coordination

Bergen CADB could play a role in dissemination information and sponsoring of seminars and workshop to benefit farmers, landowners, agricultural-support services, and local officials. Agriculture is changing in New Jersey and farmers need to keep apprised of these changes. Local officials need to be informed in order to respond in ways that support and nurture their agricultural community. Agricultural organizations, such as the Bergen County Board of Agriculture or the Rutgers Cooperative Extension, may suggest seminars that the CADB can sponsor or cosponsor on new and potentially profitable ideas that may improve or increase agricultural productivity. Marketability – especially niche marketing – is particularly important in today’s agriculture. Workshops can be held to better understand these new and existing markets. The CADB, through partnerships with other organizations, could sponsor and/or assist in the dissemination of such information.

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

6.3.5.1 New Jersey Agricultural Experiment Stations

The New Jersey Agricultural Experiment Station is the research and outreach arm of Rutgers, The State University of New Jersey. Rutgers Cooperative Extension agents and specialists deliver wide-ranging educational programs in the areas of agriculture, fisheries, urban and community outreach, youth development, food, nutrition and health, and related areas of economic and workforce development across New Jersey. A variety of helpful information can be found in centers, institutes, and off-campus stations of the New Jersey AES and School of Environmental and Biological Sciences. A full listing of these stations is available at: <http://njaes.rutgers.edu/centers/>.

6.3.5.2 Rutgers Cooperative Extension

The Rutgers Cooperative Extension office in Bergen 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. Agriculture is a thriving industry in Bergen County because it has diversified to meet changing consumer needs. Bergen County growers are producing a wide array of ornamental plants as well as vegetables and orchard fruits. The Rutgers Cooperative Extension's main office in Bergen County is located in the County Administration Building, One Bergen County Plaza, Hackensack. Its webpage is at: <http://bergen.njaes.rutgers.edu/ag/index.html>.

Cooperative Extension helps the diverse population of New Jersey adapt to a rapidly changing society and improve their lives and communities through an educational process that uses science-based knowledge. Through science-based educational programs, Rutgers Cooperative Extension truly enhances the quality of life for residents of New Jersey and brings the wealth of knowledge of the state university to local communities.

The Programs goals include: Ensure healthy lifestyles; provide productive futures for youth, adults, and communities; enhance and protect environmental resources; ensure economic growth and agricultural sustainability; and improve food safety and nutrition. Specific information about the thrusts of each Program can be found here: <http://njaes.rutgers.edu/extension/>.

In addition, Rutgers Cooperative Extension offers the following:

- The [Department of 4-H Youth Development](#) provides educational outreach programming for youth in grades K-13 (one year out of high school) through 4-H clubs, special interest programs, school enrichment, afterschool child care education programs and overnight camping. Regardless of the subject matter - whether it be science, healthy living or citizenship, 4-H uses a learn-by-doing approach to help youth learn responsibility, community awareness and character development. Along with Rutgers faculty and staff, volunteers share their knowledge and time with today's youth.
- The [Agriculture and Resource Management Agent Department](#) delivers programs that assist commercial businesses, governmental agencies, agribusinesses and residents with assistance, information, field research, and consultation on various issues related to agriculture, environmental issues, and natural resources management. Integrated Pest Management, the Master Gardener and Environmental Steward Programs, water resource rain barrel and rain garden workshops, pesticide applicator recertification, horticultural therapy and outreach programs, and Extension Bulletins and Factsheets are some of our

most well known and subscribed efforts. Master Gardeners of Bergen County information can be found on its web page at: <http://www.mgofbc.org/>.

- [Family and Community Health Sciences \(FCHS\)](#) helps people stay healthy, enjoy life, be active, and reduce health care costs. Many of today's health problems--obesity, heart disease, diabetes, and cancer--can be reduced through good nutrition and a healthy life style. FCHS encourages today's busy families and individuals to learn more and make personal choices to improve health. FCHS combines research and practical advice to improve your health for a better tomorrow.
- Bergen County's Fair and Fall Harvest Festival is a recent county-wide initiative taking place in Overpeck County Park. Assisted by Rutgers Cooperative Extension, this event features local vendors from county farms, in addition to carnival rides and games, craft fair, live music, and a local high school football game.

6.4 BUSINESSES

6.4.1 Input Suppliers and Services

It's possible that Bergen County's farms rely on a complex, regional, and to a certain extent, national network of inputs' suppliers and services, product distributors and processors. A number of farmers make use of the Internet to research and acquire various supplies and services. The growth of Internet-based businesses has allowed farmers to look beyond local areas to find products – and prices – more suitable to their specific needs. Nationwide shipping services, in addition to the US Postal Service, allow for quick, easy, affordable, and convenient deliveries.

Rutgers Cooperative Extension of Salem County has a very good website for farmers to find suppliers, services, and many other resources. It can be found at: <http://salem.rutgers.edu/greenpages/index.html/>.

6.4.2 Product Distributors and Processors

Vegetable farmers sell directly to consumers through their own or local farm stands or markets. Depending on the agricultural operation, horticultural and ornamental plant material is sold either directly to consumers and/or to private companies, such as landscaping operations.

A few farms may also process additional food items from their own farm product, such as poultry and eggs.

6.5 ANTICIPATED AGRICULTURAL TRENDS

6.5.1 Market Location

Bergen County is located in the northeastern corner of the state, directly across the George Washington Bridge from New York City. It is a large metropolitan area with substantial home-ownership, mobility, affluence, and serving a well-educated population. Many farmers market directly to the consumer either from on-site farm stands or markets or from local seasonal markets. At least one Bergen County-located farm sells its product in New York City at its Green Market.

Bergen's agricultural market is regional in nature including Passaic, Essex, Hudson counties as well as neighboring Rockland and Orange counties in New York State. As warranted, Bergen County remains receptive to being part of the regional conversation regarding the marketing and promotion of agricultural products and services.

6.5.2 Product Demand

The demand for organic and locally-grown food products is a growing trend. Given the high demand to "eat fresh – shop local," it is anticipated that demand for locally-grown products will grow because of health benefits, taste, reduced transportation costs, support of local businesses, and minimizing carbon footprints. One example is restaurants' use of more seasonally-available products in the design and composition its menu. Bergen County farmers have also regularly shown a willingness to change from low-value to high-value horticultural products to meet local needs.

Even though there was the downturn in the real estate market, demand for nursery products remained as evidence by being a top agricultural product in the county.

6.6 AGRICULTURAL SUPPORT NEEDS

6.6.1 Agricultural Facilities and Infrastructure

While the County of Bergen 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 will continue to provide input, guidance, and review as necessary and warranted through its existing county government infrastructure.

As warranted, there may be a need to develop a regional-based agricultural infrastructure in northeastern New Jersey in order to take advantage of its geographic location to New York City. Northeastern New Jersey also provides convenient access to the state and nation's system of parkways, highways, and turnpikes in order to better facilitate the distribution and transportation of its agricultural output.

6.6.2 Flexible Land Use Regulations

As generally believed, New Jersey's land-use regulations are among the strictest in the nation. While the goals of these regulations are worthy, it may be there are occasions in which they impede the efficiency of agricultural operations. In general, regulatory flexibility for the agricultural community would act to promote an improved, and perhaps sustained, economic climate for farmland and other agricultural operations within the county.

6.6.3 Agriculture Representation in Economic Development Organizations

It's almost certain that Bergen County's agricultural industry would benefit from increased industrial representation in economic development organizations. 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 Report, which can be found here:

<http://www.nj.gov/agriculture/conventions/2007/strategies.html>.

See below regarding Bergen County's Economic Development Corporation.

6.7 AGRICULTURAL SUPPORT IMPLEMENTATION

The County of Bergen supports its agricultural industry primarily through farmland preservation and Right-to-Farm administration. It established its Agriculture Development Board in 2000. Additional support is provided through the use of the County's website, which provides information about various community-supported agricultural operations, such as local farmers' markets.

Bergen County's Economic Development Corporation (EDC) is affiliated with the County's Department of Planning & Economic Development. It is a public-private partnership responsible for delivering economic development programs and services to the County. Its objective is to leverage resources, foster investment, and deliver programs and services that result in business retention, attraction, creation, and economic growth for the economy of the County. It's possible that the EDC could assist in the strengthening and growth of the County's agricultural community.

6.7.1 Cost

Any costs associated with implementation strategies presented within this Plan could be funded through administrative budgets, the County's Open Space Trust Fund, available and applicable grants, and cost-sharing, when available.

6.7.2 Funding Opportunities

The County will pursue all available funding opportunities through the federal and state governments and non-profit or private organizations.

6.7.3 Timeline

The County will implement the strategies presented in this Plan after the Plan has been approved and adopted by the appropriate governing bodies and when it is feasible and warranted to do so.

Bergen County Farmland Preservation Plan

VII. NATURAL RESOURCE CONSERVATION

7.1 NATURAL RESOURCE PROTECTION COORDINATION

There are a number of county and state agencies that coordinate natural resource protection and grant programs.

7.1.1 County Natural Resource Protection Program

The Bergen County Department of Planning & Economic Development maintains information on the County's natural resources and serves as the primary planning agency for natural resource protection in the County. The natural resource information presented in this Plan as well as the information that underlies the County Master Plan is based on a Geographic Information System that can be applied at the parcel level. The issuance of the soil survey in electronic format by the NRCS has permitted the preparation of site specific environmental opportunities and constraints analyses that consider local soil characteristics.

The County's Department of Planning & Economic Development also coordinates with the Bergen County Soil Conservation District on development applications to ensure that provisions are in place to prevent soil erosion and control sediment. There is a need for continuing coordination and communication between the NRCS, the Soil Conservation District, and the County Planning Board on resource protection issues.

7.1.2 Natural Resource Conservation Service (NRCS)

The Natural Resources Conservation Service (NRCS) of the USDA assists farmers in a variety of manners to conserve their soil, water, and other natural resources. The NRCS provides technical assistance based on proven practices and suited to the farmer's specific needs. The NRCS provides financial assistance for many conservation activities but participation in all of the NRCS programs is on a voluntary basis.

The Conservation Technical Assistance (CTA) program provides voluntary conservation technical assistance to land-users, communities, units of state and local government, and other Federal agencies in planning and implementing conservation systems. These natural resource conservation programs provide environmental, societal, financial, and technical benefits. The NRCS science and technology activities provide technical expertise in such areas as animal husbandry and clean water, ecological sciences, engineering, resource economics, and social sciences.

7.1.3 Bergen County Soil Conservation District

The Bergen County Soil Conservation District is one of 15 soil conservation districts in New Jersey with each serving one or more counties. The District, from its office in Oradell, provides soils information, technical assistance, and conservation education to the public. The SCD also implements the Soil Erosion and Sediment Control Act, which provides for the effective control of soil erosion and sedimentation. New Jersey's soil conservation districts have become the primary local governmental

agencies responsible for controlling point sources of pollution due to soil erosion and sedimentation associated with construction, mining, quarrying, and agriculture.

7.2 NATURAL RESOURCE PROTECTION PROGRAMS

There are a variety of federal and state resource protection programs available to the farming community. Some of the important programs are summarized here. Farmers would need to determine the applicability of these programs to their particular needs and conditions. The County's Agriculture Development Board should be aware of when and where these programs are utilized in the County and may propose the use of appropriate programs in key resource protection situations.

7.2.1 Federal Conservation Programs

7.2.1.1 Farm and Ranch Lands Protection (FRPP) Program

The Farm and Ranch Lands Protection Program (FRPP) is a voluntary program that helps farmers and ranchers keep their land in agriculture. The program provides matching funds to both government and non-governmental organizations with existing farm and ranch land protection programs to purchase conservation easements. This program is managed by the NRCS and, according to the most recent data posted online, more than 533,000 acres have been protected between Fiscal Years 1996-2007 in every state but for Mississippi. New Jersey is the 8th highest ranked state containing 4.1% (or 21,842 acres) of these protected lands. New Jersey's protected acreage is within 212 parcels, which represents 7.7% of the total of 2,764 parcels, making New Jersey the 4th highest ranked state in number of parcels protected.

The FRPP works with governmental and non-governmental organizations to acquire conservation easements from landowners. Participating landowners agree not to convert their land to non-agricultural uses and to develop and implement a conservation plan for any highly erodible land. The advantage of this program is that the funds can be matched with State and local funds up to a maximum of 50 percent of the easement cost.

To qualify for FRPP, the land offered must be part of a farm and must: contain prime, unique, or other productive soil or historical/archaeological resources; be included in a pending offer from another farmland protection program; be privately owned; be covered by a conservation plan for any highly erodible land; be large enough to sustain agricultural production; be accessible to suitable markets; and be surrounded by parcels of land that can support long-term agricultural production.

The FRPP is funded through the Commodity Credit Corporation. The FRPP share of the easement cost must not exceed 50 percent of the appraised fair market value of the conservation easement. As part of its share of the cost of purchasing a conservation easement, state or local government or nongovernmental organization may include a charitable donation by the landowner of up to 25 percent of the appraised fair market value of the conservation easement. At a minimum, a cooperating entity must provide funding for 25 percent of the appraised fair market value or 50 percent of the purchase price of the conservation easement.

7.2.1.2 Conservation Reserve Enhancement Program (CREP)

The Conservation Reserve Enhancement Program (CREP) is a voluntary land retirement program that helps agricultural producers protect environmentally sensitive land, decrease erosion,

restore wildlife habitat, and safeguard ground and surface water. The program is primarily a partnership among producers; government, and, in some cases, private groups. CREP is an offshoot of the country's largest private-lands environmental improvement program - the Conservation Reserve Program (CRP). CREP is administered by Farm Service Agency (FSA) of the USDA. By combining CRP resources with state, tribal, and private programs, CREP provides farmers and ranchers with a sound financial package for conserving and enhancing the natural resources of farms.

CREP addresses high-priority conservation issues of both local and national significance, such as impacts to water supplies, loss of critical habitat for threatened and endangered wildlife species, soil erosion, and reduced habitat for fish populations. CREP is a community-based, results-oriented effort centered on local participation and leadership.

A specific CREP project begins when a government or local nongovernment entity identifies an agriculture-related environmental issue of state or national significance. These parties and the FSA then develop a project proposal to address particular environmental issues and goals. Enrollment in a state is limited to specific geographic areas and practices.

CREP contracts require a 10- to 15-year commitment to keep lands out of agricultural production. CREP provides payments to participants who offer eligible land. A federal annual rental rate, including an FSA state committee-determined maintenance incentive payment, is offered, plus cost-share of up to 50 percent of the eligible costs to install the practice. Further, the program generally offers a sign-up incentive for participants to install specific practices. FSA uses CREP funding to pay a percentage of the program's cost, while state governments or other non-federal sources provide the balance of the funds. States and private groups involved in the effort may also provide technical support and other in-kind services.

For the landowner, CREP is not just a cost-effective way to address rural environmental problems and meet regulatory requirements; it can provide a viable option to supplement farm income as well. CREP supports increased conservation practices such as filter strips and forested buffers. These conservation practices help protect streams, lakes, and rivers from sedimentation and agricultural runoff. CREP also helps landowners develop and restore wetlands through the planting of appropriate groundcover. By maintaining clear goals and requiring annual monitoring, CREP helps participants measure progress and ensure success.

7.2.1.3 Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program (EQIP) is a voluntary conservation program for farmers and ranchers that promotes agricultural production and environmental quality as compatible national goals. EQIP offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land.

EQIP offers contracts with a minimum term of one year after the implementation of the last scheduled practices to a maximum term of ten years. These contracts provide incentive payments and cost-shares to implement conservation practices. Persons who are engaged in livestock or agricultural production on eligible land may participate in the EQIP program. EQIP activities are carried out according to an environmental quality incentives program plan of operations developed in conjunction with the producer that identifies the appropriate conservation practice or practices to address the resource concerns. The practices are subject to NRCS technical standards adapted for local conditions.

EQIP may cost-share up to 75 percent of the costs of certain conservation practices. Incentive payments may be provided for up to three years to encourage producers to carry out management practices they may not otherwise use without the incentive. However, limited resource producers and beginning farmers and ranchers may be eligible for cost-shares up to 90 percent. Farmers and ranchers may elect to use a certified third-party provider for technical assistance. An individual or entity may not receive, directly or indirectly, cost-share or incentive payments that, in the aggregate, exceed \$450,000 for all EQIP contracts entered during the term of the Farm Bill.

7.2.1.4 Wildlife Habitat Incentives Program (WHIP)

The Wildlife Habitat Incentives Program (WHIP) is a voluntary program that encourages creation of high quality wildlife habitats that support wildlife populations of National, State, or local significance. Through WHIP, the Natural Resources Conservation Service (NRCS) provides technical and financial assistance to private landowners and operators to develop upland, wetland, riparian, and aquatic habitat areas on their property. Since its inception in 1998, nearly 14,700 participants have enrolled more than 2.3 million acres into WHIP. Most efforts have concentrated on improving upland wildlife habitat but there is an increasing emphasis on improving riparian and aquatic areas.

The basis of the program is a State WHIP plan prepared by the NRCS with the support of the State Conservationist that serves as a guide for the development of the State WHIP ranking criteria. Persons interested in entering into a cost-share agreement voluntarily limit future use of the land for a period of time, but retain private ownership. The NRCS works with the participant to develop a wildlife habitat development plan. This plan becomes the basis of the cost-share agreement between NRCS and the participant. NRCS provides cost-share payments to landowners under these agreements that are usually 5 to 10 years in duration, depending upon the practices to be installed.

The NRCS welcomes projects that provide valuable wildlife habitat and does not want to discourage any landowner who desires to implement practices that will improve habitat conditions for declining species. NRCS continues to provide assistance to landowners after completion of habitat development activities. This assistance may be in the form of monitoring habitat practices, reviewing management guidelines, or providing basic biological and engineering advice on how to achieve optimum results for targeted species.

Eligible lands under the program are primarily privately owned land. If land is determined eligible, NRCS places emphasis on enrolling habitat areas for wildlife species experiencing declining or significantly reduced populations; practices beneficial to fish and wildlife that may not otherwise be funded; and wildlife and fishery habitats identified by local and State partners in each State.

7.2.2 State Conservation Programs

7.2.2.1 Soil & Water Conservation Grants

The State Agriculture Development Committee (SADC) provides grants to eligible landowners to fund up to 50 percent of the costs of approved soil and water conservation projects. Landowners apply to local Soil Conservation Districts, which assist in developing farm conservation plans and ensure projects are necessary and feasible. Applications are forwarded to the N.J. State Soil Conservation Committee which recommends projects to the SADC for funding approvals.

The soil and water conservation projects funded under this program include projects designed to control and prevent soil erosion and sediment damages; control pollution on farmland; impound, store, and manage water for agricultural purposes; or improve management of land and soils to achieve maximum agricultural productivity. Examples of eligible projects include: terrace systems; diversions; stream protection; water impoundment reservoirs; irrigation systems; sediment retention, erosion or water control systems; drainage systems; animal waste control facilities; agri-chemical handling facilities; and land shaping or grading. In order to qualify for funding, farms must be permanently preserved or enrolled in an eight-year preservation program. Permanently preserved farms receive first priority for grant funding.

7.2.2.2 Landowner Incentive Program (NJDEP)

The New Jersey Landowner Incentive Program (LIP) is a partnership program that can provide private landowners interested in conserving threatened and endangered species on their property with financial and technical assistance. It is the goal of LIP to work with private landowners to protect important habitats so our children and great grandchildren can witness our enormous conservation efforts. The purpose of the program is to help protect the critical habitats on private lands that support over 70 endangered and threatened wildlife species in New Jersey.

State biologists work with private landowners to enhance and protect important habitats across New Jersey. The N.J. Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP), within the Department of Environmental Protection diligently works to protect the habitats of such rare wildlife as the bald eagle, peregrine falcon, bog turtle, bobcat, tiger salamander, Northern pine snake, and other animals that struggle for survival every day in the most densely populated state in the nation.

To be eligible, the property must provide potentially suitable habitat for the targeted species and the proposed project must contribute to the enhancement of its habitat in a significant way. The results of the project must be measurable. Owners must agree to allow biologists onto your property for both a pre-agreement survey and annual progress checks. A project agreement and management plan that is unique to each landowner's needs and objectives is executed with the Division of Fish & Wildlife. While there is no minimum acreage requirement, most projects will require larger acreage (greater than 6 acres) to achieve the desired management objectives. The project must have a duration of at least five (5) years. A 25 percent cost share provided by the landowner is required (typically this cost share is labor and materials).

The Landowner Incentive Program (LIP) encourages creative, innovative and cost-effective projects for conserving rare species. The types of projects that might qualify for the Landowner Incentive Program are as varied and diverse as the many rare species and the habitats that they depend upon. Some examples of potential projects that could benefit rare New Jersey species include:

- Habitat Improvements; Native vegetation restoration; Vernal pool restoration; Invasive species control;
- Habitat Management: Changing haying or grazing regimes; Prescribed burns; implementing sustainable forestry practices;
- Habitat Protection: Constructing enclosure/exclosure fences; Gating caves; and, Fencing off streams.

For the foreseeable future, LIP is focusing its efforts on Grassland within regional priority areas; protecting critical migratory bird stopover areas; and projects adjacent to state Wildlife Management Areas and other permanently protected areas.

7.3 WATER RESOURCES

The availability of water for irrigation is a lesser concern in Bergen County than in other agricultural counties due to the size of the farm and the reliance of surface water supply sources. Nevertheless, high productivity can only be achieved with reliable and cost-efficient water sources. While some farms may have irrigation ponds, these facilities have limited capacity and are more difficult to maintain.

There is a need for an overall water management policy for agriculture. The policy should define the need for improved supply sources and for the interconnection of ground and surface water resources. Currently, individual farmers respond to their own needs without concern for an overall water management policy. Land preservation should be focused in the outcrop and recharge areas of the most important aquifers.

In this Plan's Section 1.4, Irrigated Acres and Available Water Sources, it was shown that there were 196 acres of irrigated land in 2007 as reported by the USDA Census of Agriculture.

In addition, it should be noted that the County of Bergen receives an average of 46.74 inches of rainfall annually, as calculated by the Office of the New Jersey State Climatologist at Rutgers University based on rainfall for the years 1895-2011.

7.3.1 Supply Characteristics

One of the tools NJDEP utilizes to assure that both current decision making and future planning adequately take into account protection of water quality and quantity is the Water Quality Management Planning rule, N.J.A.C. 7:15. NJDEP develops and administers this rule in conjunction with the Statewide Water Quality Management Plan (WQM), which together constitute the continuing planning process conducted pursuant to the NJ Water Quality Planning Act and as required by Sections 303(e) and 208 of the Federal Clean Water Act. Accordingly, the WQM Planning rules prescribe water quality management policies, procedures and standards.

In accordance with the Water Quality Management Planning Act and Section 208 of the Clean Water Act, there are 12 designated areawide Water Quality Management Planning Areas in New Jersey. The areawide WQM plans (formerly known as 208 plans), as part of the Statewide WQM Plan, are umbrella plans, each with various adopted components that address different aspects of water resource planning.

Bergen County is contained within the WMQ labeled "Northeast." This management area contains numerous smaller sub-watersheds. These areas are determined based upon given topography and the overall drainage characteristics of an area. Specific information about the sub-watershed characteristics is available at the following NJDEP webpage at:

<http://www.nj.gov/dep/wqmp/wqmps.html>.

7.3.2 Agricultural Demand & Supply Limitations

Bergen County's field crops and its sectors of nursery and greenhouse, sod, and vegetable farming all rely on rain, surface, and groundwater sources for water needs. As non-agricultural water demands increase in a suburban county such as Bergen, the negative impact on groundwater levels intensify. Many of its streams undergo very low flow conditions in late summer, although recent severe or super storm events, possibly due to climate change, have seen unprecedented river and stream bank flooding.

As stated in Plan Section 1.4, Bergen County Extension Service is not aware of any water diversion applications for agriculture. Water allocation permits are issued by the Bureau of Water Allocation, Division of Water Supply, NJDEP. This Bureau is responsible for ensuring that surface and ground water diversions do not exceed the sustainable yield of available water resources and do not adversely impact existing users of that resource.

As discussed in Plan Section 1.4, Bergen County's Irrigated Acres totals only 196 irrigated acres, which is only a small portion of the County's agricultural land.

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.

7.3.3 Conservation & 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.

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 delivery systems.

Additional strategies are plentiful. One good resource for additional strategies is the Sustainable Agriculture Network, which is an affiliate of the USDA. Another resource is the Soil and Water Conservation Society (SWCS), which is a nonprofit scientific and educational organization -- founded in 1943 -- that serves as an advocate for conservation professionals and for science-based conservation practice, programs, and policy. Its mission is to foster the science and art of natural resource conservation. Its work targets conservation of soil, water, and related natural resources on working land—the land used to produce food, fiber, and other services that improve the quality of life people experience in rural and urban communities. They work to discover, develop, implement, and constantly improve ways to use land that sustains its productive capacity and enhances the environment at the same time. Their website is at: http://www.swcs.org/en/about_swcs/.

The Highlands Regional Master Plan also addresses this critical issue.

7.4 WASTE MANAGEMENT PLANNING

Due to the increasing focus on non-point sources of pollution, the use of proper waste management practices will be a critical element in future agricultural activity, particularly on farms with livestock. The New Jersey Department of Agriculture has adopted regulations for animal waste management to proactively address non-point source pollution that may emanate from agricultural animal operations. Under the regulations:

- Agricultural animal operations with more than 8 animal units (AU) [1 AU=1000 lbs. of animal weight] or those receiving more than 142 tons of animal waste per year will be required to develop and implement a self-certified Animal Waste Management Plan (AWMP).
- Operations with Animal Densities that are greater than 1 AU per acre 300 will be required to have the AWMP reviewed by the NRCS.
- Operations with 300 or more AUs will be required to develop a Comprehensive Nutrient Management Plan (CNMP) and be certified by the NJDA.
- Operations with 1 to 7 AUs or those receiving animal waste but in quantities that are less than 142 tons per year will be encouraged but not required to develop a self-certified ANMP.

There are five basic requirements of the rules:

- No agricultural operation shall allow livestock 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 annual waste shall be conducted in full compliance with the NJDA best management practices (BMPs);
- Prior to the disposal of any dead animals from contagious diseases or bio-terrorism, the State Veterinarian shall be contacted;
- Any person entering a farm to conduct official business related to these rules shall follow bio-security protocol;

The basic premise of the regulations is to enable farmers to utilize a self-certified plan without the need for a formalized permitting process. Nevertheless, farmers would be subject to penalties if non-compliance was determined.

These rules and their requirements may be found at:
<http://www.state.nj.us/agriculture/divisions/anr/agriassist/animalwaste.html>.

7.5 ENERGY CONSERVATION PLANNING

The rapid increase in oil prices during the middle part of 2008 resulted in strong interest in the increased use of renewable energy. Farms have a strong relationship to energy conservation since agricultural operations are a major consumer of energy, the farmland offers the potential for the application of solar and wind energy technologies, and some of the crops and/or waste from farming operations can be used as a fuel source (i.e., ethanol; biowaste).

In general, the SADC encourages the use of solar and wind energy technologies on preserved farms provided that these systems do not impact or impede the agricultural operation and that the primary purpose of energy production is the onsite usage of the energy to reduce the agricultural operation's energy consumption.

More attention is needed to examine the potential for alternative sources of energy on the farm including the use of wind, solar, and bio-fuels. However, the future use of these renewable sources of energy should be based on the premise that the energy will be used to improve the cost-effectiveness of the agricultural operation and not to create solar or wind farms that would be eligible for farmland assessment.

Due to the proximity of qualified farms to residential receptors in Bergen County, it is critical that wind and solar technologies be utilized on farms in a manner that does not create increased land use conflicts. In particular, windmills are an accepted and integral element of farms but the use of wind turbines on farms may require use variances that assess the positive and negative impacts on the zone plan.

The State Agriculture Development Committee has adopted an Agricultural Management Practice, entitled, "AMP for the Construction, Installation, Operation or Maintenance of Solar Energy Generation Facilities, Structures and Equipment on Commercial Farms." The SADC adopted this rule to implement legislation that extends the protections of the Right to Farm Act to the generation of solar energy on commercial farm within certain limits. The rule establishes an agricultural management practice (AMP), or standards, which commercial farms must meet to be eligible for right-to-farm protection for the on-farm generation of solar energy. It may be found at: <http://www.nj.gov/agriculture/sadc/rtfprogram/amps/adoptedamps/solar.html>.

7.5.1 SOLAR ENERGY GENERATION FACILITIES ON PRESERVED FARMS

New rules at N.J.A.C. 2:76-24 became effective on June 3, 2013, that implement legislation allowing owners of farms preserved pursuant to the Agriculture Retention and Development Act, N.J.S.A. 4:1C-11 et seq., to install solar energy systems on preserved farmland within certain limits.

The new rules address construction, installation and operation of solar energy facilities on preserved farms. SADC approval is required for all new solar energy facilities on preserved farms, including those located in exception areas -- those areas excepted from the preserved premises and unencumbered by farmland preservation deed restrictions. The new rules address eligibility criteria, application requirements, evaluation criteria and the SADC review process for such projects. An application for either solar rooftop or ground-mounted systems can be found on the SADC's website at: <http://www.nj.gov/agriculture/sadc/ruleprop/recentlyadoptedrules.html>.

7.6 RESOURCE PROGRAM INFORMATION

There is a wealth of information available on natural resource programs, waste management, and energy conservation. These issues cannot be fully addressed in the context of this Farmland Preservation Plan. In that regard, it is recommended the CADB ensure that farmers and communities are aware of the websites that provide more detailed information on these topics. Of course, a “Google” search on the Internet will turn up a wealth of information on such topics.

The State of New Jersey’s main webpage is at: <http://www.state.nj.us/>. From there, state departments of Agriculture and Environmental Protection may be accessed for their relevant information.

Specifically, the State Agriculture Development Committee’s web page is at: <http://www.nj.gov/agriculture/sadc/>.

Bergen County Farmland Preservation Plan

VIII. AGRICULTURAL INDUSTRY SUSTAINABILITY, RETENTION, AND PROMOTION

8.1 SUSTAINABILITY

The term “sustainable agriculture” was used in the 1990 Federal Farm bill to mean:

“An integrated system of plant and animal production practices having a site specific application that will, over the long-term, satisfy human food and fiber needs; enhance environmental quality and the natural resource base upon which the agricultural economy depends; makes the most efficient use of non-renewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls; sustain the economic viability of farm operations and enhance the quality of life for farmers and society as a whole.”

The key issues that must be considered in assessing agricultural sustainability are as follows:

- Is the operation energy efficient or is it dependent on non-renewable sources of energy that will become an increasing cost burden?
- Is the operation ecologically sound or does it have impacts to the environment which are a hidden cost?
- Does the operation serve important human needs?
- Will the operation be economically viable for the long-term future and if not, what are the key factors that impact sustainability?

A sustainable farm is one that is capable of being profitable for the foreseeable future without the need to sell the development rights to the farmland asset. Some farmers have used farmland preservation programs as a means of monetizing an asset to overcome financial difficulties. The problem with this approach is that the one-time capitalization will not ensure long-term viability. However, on the other hand, a well-managed farm could use the resources resulting from the sale of development rights to improve the efficiency of the operation with improved equipment or to pay off operating loans to improve profitability. The irony of farmland preservation is that the most profitable farms are often the best candidates for land preservation even though they may not need the capital as much as other farming operations that are on the fringe of profitability.

The issue of agricultural sustainability in Bergen County is an important one. The remaining farms are relatively small in size and cannot expand in area due to adjacent non-agricultural development. The soils are, in most cases, adequate, but not prime. Therefore, the issue is whether the site-specific operation can achieve the high product value that is necessary for a long-term profitable entity. The presence of a strong consumer market in Bergen County is one of the critical factors in achieving and maintaining profitability. Many farms in the county are able to use farm markets for direct sales and thereby avoid the need for wholesale markets which increases the rate of return.

There should be a relationship between land preservation and agricultural sustainability. The County and State are not interested in making substantive public investments in the purchase of development rights if the existing operation is not sustainable or if the farm is not capable of being profitable. Yet, farmland owners that sell their development rights do not make any long-term commitments that their operation will be maintained in the present form or that it will continue in operation at all. While it must be recognized that farmland preservation is a land preservation program, there is a need for a successful agricultural operation to achieve the true objective.

Bergen County envisions that the implementation of a comprehensive farmland preservation program will help enable a sustainable agricultural industry in the County. The sale of easements not only compensates the current owner but it also increases the ability of other farmers interested in expanding their operations to acquire deed-restricted land at the farm value cost.

Farmland preservation does not, by definition, preserve an industry nor does it ensure that the current type of agricultural production activities will continue into the future. There are numerous factors other than asset monetization that impact the sustainability of the industry including the continued presence of working farmers, agricultural support industries, markets for local products, and viable working conditions. The viability of the working conditions is an area where state government can have an impact. The regulatory environment in New Jersey is considered stringent for farming and there is increasing attention to control of non-point source pollution that may be related to the agricultural industry. It is imperative that State government review its regulations and procedures on a continuing basis to determine the long-term impact on agricultural operations.

8.2 EXISTING AGRICULTURAL INDUSTRY SUPPORT

8.2.1 Agricultural Mediation Program

In order to ensure sustainable agriculture, farmers must be able to conduct the activities necessary for cost-effective production without unwarranted interference from neighbors. However, neighbors also need to be assured that farmers are utilizing best management practices to minimize any off-site impacts. Consequently, the establishment of a conflict resolution that protects the farmer and considers the neighbors interests is essential in the context of a densely developed County, such as Bergen.

The SADC has created an Agricultural Mediation Program, which is designed to help farmers and others resolve agriculture-related disputes quickly, amicably, and in a cost-effective manner. Mediation can be used by farmers and USDA agencies to help resolve USDA-related issues and by farmers, neighbors, and municipalities to help resolve Right to Farm-related issues. The program may also be used by farmers and private lenders to help resolve agricultural credit issues.

Mediation is voluntary, confidential, free, and generally only takes a meeting or two to complete. Mediation can also save farmers and others significant time and legal fees, as mediation is an alternative to the USDA appeals process and the Right to Farm complaint and public hearing process.

In April 2014, the SADC released “The New Jersey Agricultural Mediation Program Handbook,” which explains how the program works and provides examples of successful mediations. This new handbook is available on the SADC’s website at: <http://www.nj.gov/agriculture/sadc/agmediation/handbook.pdf>.

8.2.2 Right-to-Farm Law

The objective of right-to-farm laws is to provide agricultural operations with the necessary level of protection from nuisance suits and complaints to carry out their operations. The presence of farms in a dispersed pattern in a suburban county increases the likelihood of conflicts due to noise, traffic, dust, the application of pesticides, or similar activities. The Right-to-Farm Act (N.J.S.A. 4:C-10.1 et. seq.) as well as the SADC regulations at N.J.A.C. 2:7-2.3 established the County Agriculture Development Board as the arbiter of such disputes. The Bergen CADB has addressed these issues in accordance with the Act and is likely to encounter similar concerns in the future as the County continues to develop around the remaining farms.

One of the key provisions of the Right-to-Farm act is the pre-emption of local ordinances that regulate agricultural activities if the agricultural operation meets the eligibility requirements of a “commercial farm”. In general an operation involving more than five acres, having an agricultural production or horticultural production value of \$2,500 per year, and be eligible for farmland assessment is considered to be a commercial farm. Farms that are less than five acres must demonstrate an annual production of \$50,000, and the farm must qualify for farmland based on all criteria other than the farm size.

Typically, the process entails the filing of a complaint by a neighbor or by the municipality on behalf of the neighbors against the farming operation for a site-specific activity. The Right-to-Farm Act requires that the complaint be filed with the CADB prior to the filing of an action in court. The CADB then holds a public hearing to determine whether the farmer is entitled to the protections of the Act. In particular, the CADB needs to determine if the agricultural operation is being conducted in accordance with an Agricultural Management Practice (AMP) that has been promulgated by the SADC or in accordance with generally accepted agricultural practices. The final test is whether the farm is being operated in compliance with relevant state and federal statutes and whether it poses a threat to public health and safety. Whenever such complaints have been filed, the Bergen CADB has followed the process outlined in the SADC regulations in reviewing the dispute and making its determinations.

A review of local ordinances did not find any local right-to-farm ordinances in Bergen County. While there is a conflict resolution process at the county level, the adoption of local ordinances has certain advantages including ensuring proper notification of adjacent residents that are moving into an area adjacent to a commercial farm. In addition, conflict resolution at the local level is usually preferable to the CADB process. It is recommended that municipalities with qualified farms consider the adoption of the model ordinance prepared by the SADC.

The SADC has also issued a brochure on *Farmer-to-farmer advice on avoiding conflicts with neighbors and towns* which may be helpful to local farmers. The brochure consists of quotes from other farmers on the need for an open dialogue with neighbors and to be reasonable in trying to alleviate concerns without relinquishing any rights.

As appropriate, Bergen CADB is willing to work with municipalities with significant agricultural acreage to adopt Right to Farm ordinances consistent with the SADC model.

8.2.3 Farm Link Program

Farm Link is a resource and referral center for new and established farmers seeking access to land and farming opportunities, and for landowners looking for farmers to work their land. Farming opportunities include farms for lease, farm partnership and farm manager opportunities, apprenticeships, and preserved farms for sale. The Farm Link Program maintains online listings where farmers and landowners post short profiles of farming opportunities sought or available. The program's website also includes several pages of resources for farmers and landowners on topics such as getting started in farming, finding access to land, finding farmers, creating tenure agreements, and working on estate and farm transfer plans.

8.3 FARMLAND ASSESSMENT

New Jersey enacted the Farmland Assessment Act in 1964. The Act recognized that the extensive land holdings required for agricultural production should not be assessed in the same manner as other lands. In a sense, it was the state's first agricultural preservation legislation.

The New Jersey Farmland Assessment Act states that “*for general property tax purposes, the value of land, not less than five acres in area, which is actively devoted to agricultural or horticultural use and which has been so devoted for at least two successive years immediately preceding the tax year in issue, shall, on application of the owner, and approval thereof as hereinafter provided, be that value which such land holds for agricultural or horticultural use*”.

The key components of this Act are as follows:

- Eligibility. Five acres of land actively devoted to agricultural or horticultural production is the minimum area needed to qualify. Land related to the farmhouse does not count toward the five-acre requirement.
- Gross sales. The amount of gross sales of agricultural or horticultural products initially had to average at least \$500 for the first five acres and \$5.00 per acre for each additional acre of farmland and \$0.50 per acre for any additional acres of woodland and wetland during the two-year period preceding the tax year at issue. (Changes to this component of the law were recently enacted by the Governor as detailed below.)
- Assessment Values. The Farmland Evaluation Advisory Committee is a statewide committee which establishes ranges of fair value for use by assessors in assessing qualified farmland in accordance with its agricultural or horticultural use. The productivity values are reported by the use of the land and the soil group for each county.
- Land use changes. The Farmland Assessment Act provides for levy of a rollback tax in the event that the use of the land changes in order to recapture some of the taxes which would have been paid had the land been taxed on the same basis as other property. Any land which changes from eligible agricultural or horticultural use under the Farmland Assessment Act to a non-farm use is subject to the rollback taxes for the year in which the change takes place as well as the two preceding years. At this time, Bergen CADB

has not taken a position on increasing the rollback tax for land conversions nor on extending benefits for ag-related buildings.

Prior to the Farmland Assessment Act, local property taxes in New Jersey were a strong disincentive to own farmland. The Act has basically eliminated taxes as a serious land conversion influence. However, the Act has also allowed land speculators to hold land for extended periods at lower cost in anticipation of future development. A total of about 900 acres of land in Bergen County or only about ½ of 1% of the County is qualified farmland under the Farmland Assessment Act for the 2012 tax year.

On April 15, 2013, Governor Chris Christie signed legislation that raises the threshold of farm sales to qualify for Farmland Assessment from the previous minimum of \$500 to \$1,000. It also creates a \$5,000 penalty for landowners who intentionally misrepresent their eligibility for the program. In addition, an advisory committee must review the minimum threshold every three years and that municipal tax assessors should receive periodic training to better recognize what qualifies as a farm. The full bill can be found at: http://www.njleg.state.nj.us/2012/Bills/S1000/589_R4.HTM.

8.4 OTHER STRATEGIES

8.4.1 Permit Streamlining

Bergen County does not currently have a policy on permit streamlining for the agricultural industry. While the County is very supportive of the agricultural industry, most land use authority in New Jersey is at the municipal level. The concern with any permit streamlining process is that it could become a loophole in the established land development review process. Provisions that would apply solely to preserved land should be given careful consideration as an added inducement for the sale of easements.

8.4.2 Agricultural Vehicle Movement/Routes

The New Jersey Motor Vehicle Commission issues license plates for agricultural machinery to allow the machinery to use public roads between farms in daylight hours. There are no restrictions on agricultural vehicle movements or routes. Farmers are permitted to use existing roads as they deem necessary to carry out their farming activities. It is recommended that this right be reinforced by inclusion in a local right-to-farm ordinance. One issue that requires careful attention is the tracking of dirt or mud from a farm field onto public roads. While often necessary due to prevailing conditions, this condition can create a conflict with local residents and municipalities. Whether the County should consider designating routes for agricultural vehicle movement and special warning signs requires further investigation by all appropriate agencies.

8.4.3 Agricultural Labor Housing

The extent of agricultural labor housing in the County is not known. Any such existing housing would be considered a non-conforming use if it has been in continuous use. It is recommended that local zoning boards grant use variances for agricultural labor housing when it is demonstrated to be necessary and in accordance with appropriate conditions.

8.4.4 Wildlife Management Strategies

Farmers should be encouraged to manage the wildlife within their land holdings. The leasing of land for hunting can be a significant source of revenue for farmers. In this regard, farmers should be encouraged to protect and enhance forested and emergent wetlands on their property. The use of conservation easements to define the lands that require careful management should be encouraged and should not impact easement purchase values. County farmers should also be made aware of wildlife enhancement programs to protect rare and endangered species.

8.4.5 Agricultural Education and Promotion

The New Jersey Agricultural Experiment Station (NJAES) Cooperative Extension provides extensive publications and seminars to help educate and assist farmers. The value of these programs cannot be underestimated. Farmers and farming interests are encouraged to take maximum advantage of the information and the trained professionals that can assist in addressing operational specific issues.

Bergen County has limited ability to impact the education of farmers and should defer to the agencies that are best able to handle agricultural education. In this regard, the CADB and its staff should function as a clearinghouse for information about education and management programs. However, the CADB should educate the farmers about issues affecting the County that may impact the farming community to advance responsible and profitable farming interests. The County should also ensure that the local educational system satisfies the educational needs of future farmers.

Bergen County should support regional promotional efforts to increase awareness of local agricultural enterprises and the farmland preservation program. Currently, there are a limited number of agricultural entities that are interested in attracting the public on a recurring basis. The NJDA has an excellent agritourism website (www.visitnjfarms.org) that enables the public to know about local farm and their current activities. The County is interested in promoting any agricultural industry that wants to encourage agricultural tourism provided that the site is designed for public assembly.

CONCLUSION

Bergen County would like to see its agricultural industry in 10 years as continuing to be a viable economic activity that enhances and protects its agricultural industry. Farming has been, is, and would continue to be an important component of the county's economy. Farmland is an irreplaceable and unique natural resource. Preserving farmland and its associated agricultural activities is in the public interest for providing fresh foods and agricultural products, fun family-oriented farm-related activities, and reminding citizens of its agrarian roots.

Bergen County Farmland Preservation Plan
June 2014

APPENDIX A
BERGEN COUNTY
FARMLAND ASSESSMENT DATA
(Source: Farmland Assessment Data Forms 2011/2012)

Bergen County Farmland Preservation Plan
June 2014

APPENDIX B
BERGEN COUNTY PROJECT AREA SUMMARIES AND MAPS



County Planning Incentive Grant PROJECT AREA SUMMARY FORM

Project Area: Masonicus Brook

Municipality: Mahwah Township

County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms
Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
8	Chestnut Trees LLC	Mahwah Township	0233	126	129,130	11.3
14	Darryl & Jacqueline Secor	Mahwah Township	0233	120.01	¹ 131-133	25.1

Total Acreage of Targeted Farms: 36.4

ii. Farms with Municipal, County and/or SADC Final Approval:
Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval: 0.0

iii. Preserved Farmland
Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Preserved Farmland: 0.0

iv. Other Deed Restricted Farmland

Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland: 0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program: 0.0

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

Soil Productivity = 20.4 / 36.4 = 56.0%

Note:

- Important farmland soils are prime, statewide and unique soils
- Unique soils will only be considered if they are being used for special crops
- Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.

Total area of the targeted farms: 36.4 acres

Area of prime soils on targeted farms: 20.4 acres; 56.2 % of total area

Area of statewide soils on targeted farms: 0.0 acres; 0.0 % of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS: (See N.J.A.C. 2:76-17.5(a)5)
 The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)
 Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share <u>0</u> %	Estimated County Cost Share <u>53</u> %	Estimated State Cost Share <u>47</u> %	Estimated Cost Share <u>0</u> % from Other Sources
Mahwah Township	0233	36.4	\$125,000	\$4,550,000	\$ 0.00	\$2,411,500	\$2,138,500	\$ 0.00

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
36.4	\$4,550,600	\$ 0.00	\$2,411,500	\$2,138,500	\$ 0.00

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:
 (See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
2	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
3	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
4	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
5	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
6	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
7	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
8	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
9	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00
10	3.64	\$ 455,000	\$ 0.00	\$ 241,150	\$ 213,850	\$ 0.00	\$ 455,00



County Planning Incentive Grant PROJECT AREA SUMMARY FORM

Project Area: Ramapo Valley
Municipality: Mahwah Township
County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms

Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
2	Cipriano Farms	Mahwah Township	0233	18	22	9.9
4	George Surgent	Mahwah Township	0233	19	18; 19	11.4
5	Frank & Robin Weidner	Mahwah Township	0233	25	37	10.8
6	Adrienne Vas	Mahwah Township	0233	25	25	7.9
13	Amberfields Associates	Mahwah Township	0233	25	18	16.7
19	Gary/Irene Mottola	Oakland Borough	0242	2603	2	16.4

Total Acreage of Targeted Farms: 73.1

ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval: 0.0

iii. Preserved Farmland

Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres
1	Carol Wehran Greene	Mahwah Township	0233	1 19	145-147 12,16,17	252.6
7	George/Elizabeth McDonnell	Mahwah Township	0233	25	14	10.7
9	Joseph/Lottie Kohout	Mahwah Township	0233	147	23	48.6
12	James Dator & Darryl Rehill	Mahwah Township	0233	17	11	14.9

Total Acreage of Preserved Farmland: 326.8

iv. Other Deed Restricted Farmland
Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland: 0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program
Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program: 0.0

vi. Other Preserved Open Space Compatible with Agriculture
Add additional rows as needed.

Owner	Municipality	Municipal Code	Block	Lot	Acres	Description of Use
State of New Jersey	Mahwah Township	0233	25	15,19	17.4	Baldwin Bird Sanctuary
State of New Jersey	Mahwah Township	0233	1	108	77.2	NJDOT
State of New Jersey	Mahwah Township	0233	1	67	0.7	Ramapo State Forest
State of New Jersey	Mahwah Township	0233	1	56	0.2	Ringwood Manor State Park
State of New Jersey	Mahwah Township	0233	23	17, 18, 58-64	53.6	State Parkland
Bergen County	Mahwah Township	0233	3606; 3701; 21; 23	1 10-17 3-16; 19-41; 43,44,52,57, 29, 58	1,190.7	Campgaw Mountain County Reservation
Bergen County	Mahwah Township	0233	25	1, 2, 5	7.8	County Parkland
Bergen County	Mahwah Township	0233	1 19	18, 97.98, 101, 102, 106, 107, 109-111; 136- 144; 148-151; 184 8 & 9	1,933.4	Ramapo Valley County Reservation
Bergen County	Mahwah Township	0233	1	160-162; 164 & 165	119.2	Ramapo Valley County Reservation Camp Glen Gray
Bergen County	Oakland & Franklin Lakes Borough	0220	1602	1	99.8	Saddle Ridge Horseback Riding Area
Mahwah Township	Mahwah Township	0233	19	6	53.9	Continental Soldiers Field
Mahwah Township	Mahwah Township	0233	1	105	293.7	Mary Patrick Property
Oakland Borough	Oakland Borough	0242	2603 2605	6.01, 6.02, 22	12.0	Municipal Parkland

Total Acreage of Other Preserved Open Space Compatible with Agriculture:

3,847.6

TOTAL ACREAGE OF i., ii., iii., iv., v. & vi.

4,247.5

2. **AGGREGATE SIZE OF THE PROJECT AREA:** 4,856.9 Acres
 (See N.J.A.C. 2:76-17.5(a)2)

3. **DENSITY OF THE PROJECT AREA:** (See N.J.A.C. 2:76-17.5(a)3)
 Density Formula:

(Sum of ii., iii., iv., v. & vi.) / (Aggregate size of the Project Area)

$$\text{Density} = 4,247 / 4,857 = 87.5\%$$

4. **TARGETED FARM SOIL PRODUCTIVITY:** (See N.J.A.C. 2:76-17.5(a)4)
 Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

$$\text{Soil Productivity} = 38.6 / 73.1 = 52.8\%$$

Note:

- Important farmland soils are prime, statewide and unique soils
- Unique soils will only be considered if they are being used for special crops
- Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.

Total area of the targeted farms: 73.1 acres

Area of prime soils on targeted farms: 27.2 acres; 41.1 % of total area

Area of statewide soils on targeted farms: 11.4 acres; 17.1 % of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. **ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS:** (See N.J.A.C. 2:76-17.5(a)5)
 The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)
 Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share 0%	Estimated County Cost Share 53%	Estimated State Cost Share 47%	Estimated Cost Share 0% from Other Sources
Mahwah Township	0233	56.7	\$ 125,000	\$ 7,087,500	\$ 0.00	\$ 3,756,375	\$ 3,331,125	\$ 0.00
Oakland Borough	0242	16.4	\$ 125,000	\$ 2,050,000	\$ 0.00	\$ 1,086,500	\$ 963,500	\$ 0.00

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
73.1	\$ 9,137,500	\$ 0.00	\$ 4,842,875	\$ 4,294,625	\$ 0.00

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:

(See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
2	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
3	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
4	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
5	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
6	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
7	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
8	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
9	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750
10	7.31	\$ 913,750	\$ 0.00	\$ 484,288	\$ 429,463	\$ 0.00	\$ 913,750



County Planning Incentive Grant

PROJECT AREA SUMMARY FORM

Project Area: Montvale

Municipalities: Montvale Borough

County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms

Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
15A	Edward & Elaine DePiero	Montvale Borough	0236	1002 1903	5 2,3,4,5	17.1
15B	Edward & Elaine DePiero	Montvale Borough	0236	2802	2 & 3	25.5

Total Acreage of Targeted Farms:

42.6

ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval: 0.0

iii. Preserved Farmland

Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Preserved Farmland: 0.0

iv. Other Deed Restricted Farmland

Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland: 0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation

Program or Municipally-Approved Farmland Preservation Program:

0.0

vi. Other Preserved Open Space Compatible with Agriculture

Add additional rows as needed.

Owner	Municipality	Municipal Code	Block	Lot	Acres	Description of Use

Total Acreage of Other Preserved Open Space Compatible with Agriculture:

0.0

TOTAL ACREAGE OF i., ii., iii., iv., v. & vi.

42.6

2. AGGREGATE SIZE OF THE PROJECT AREA: 56.0 Acres

(See N.J.A.C. 2:76-17.5(a)2)

3. DENSITY OF THE PROJECT AREA: *(See N.J.A.C. 2:76-17.5(a)3)*

Density Formula: (Sum of ii., iii., iv., v. & vi.) / (Aggregate size of the Project Area)=

Density = 42.6 / 56 = 76.1 %

4. TARGETED FARM SOIL PRODUCTIVITY: *(See N.J.A.C. 2:76-17.5(a)4)*

Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

Soil Productivity = 15.8 / 42.6 = 37.1 %

Note:

- *Important farmland soils are prime, statewide and unique soils*
- *Unique soils will only be considered if they are being used for special crops*
- *Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.*

Total area of the targeted farms: 42.6 acres

Area of prime soils on targeted farms: 4.2 acres; 9.8% of total area

Area of statewide soils on targeted farms: 11.6 acres; 27.3% of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS: (See N.J.A.C. 2:76-17.5(a)5)

The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)

Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share 0%	Estimated County Cost Share 53%	Estimated State Cost Share 47%	Estimated Cost Share 0% from Other Sources
Montvale Borough	0236	42.6	\$ 125,000	\$ 5,325,000	\$ 0.00	\$ 2,822,250	\$ 2,502,750	

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
42.6	\$ 5,325,000	\$ 0.00	\$ 2,822,250	\$ 2,502,750	\$ 0.00

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:

(See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
2	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
3	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
4	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
5	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
6	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
7	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
8	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
9	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500
10	4.26	\$ 532,500	\$ 0.00	\$ 282,225	\$ 250,275	\$ 0.00	\$ 532,500



County Planning Incentive Grant

PROJECT AREA SUMMARY FORM

Project Area: Franklin Lakes

Municipality: Franklin Lakes Borough

County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms

Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
10	Charles Wanamaker Jr.	Mahwah Township	0233	154	44	12.2
11	Theodore & Minnie Bolkema et. al.	Mahwah Township	0233	154	44	15.7
21	John & Katherine Meeks	Franklin Lakes Borough	0220	1510; 1515	7,8,9 1.04	7.5
23	Abma & Sons	Franklin Lakes Borough	0220	2513.01	5	1.5
28	Anthony & Gail Palminteri	Franklin Lakes Borough	0220	2702	1	6.3
25	Bernard & Alessantrina Schwartz	Franklin Lakes Borough	0220	2408	1.02	23.05
29	Abma & Sons	Wyckoff Township	0270	202	2,4	28.1

Total Acreage of Targeted Farms:

94.25

ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval:

0.0

iii. Preserved Farmland

Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres
24	Twinbrook Nurseries	Franklin Lakes Boroughp	0220	1424.01	3	6.6

Total Acreage of Preserved Farmland:

6.6

iv. Other Deed Restricted Farmland

Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland:

0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation

Program or Municipally-Approved Farmland Preservation Program:

0.0

4. TARGETED FARM SOIL PRODUCTIVITY: (See N.J.A.C. 2:76-17.5(a)4)

Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

$$\text{Soil Productivity} = 7.7 / 94.5 = 8.2\%$$

Note:

- Important farmland soils are prime, statewide and unique soils
- Unique soils will only be considered if they are being used for special crops
- Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.

Total area of the targeted farms: 94.35 acres

Area of prime soils on targeted farms: 2.7 acres; 2.9 % of total area

Area of statewide soils on targeted farms: 5.0 acres; 5.3% of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS: (See N.J.A.C. 2:76-17.5(a)5)

The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)

Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share <u>0</u> %	Estimated County Cost Share <u>57</u> %	Estimated State Cost Share <u>43</u> %	Estimated Cost Share <u>0</u> % from Other Sources
Franklin Lakes	0220	38.35	\$140,000	\$5,369,000	\$ 0.00	\$3,060,330	\$2,308,670	TBD
Wyckoff Township	0270	28.1	\$140,000	\$3,934,000	\$ 0.00	\$2,222,380	\$1,691,620	TBD
Mahwah Township	0233	27.8	\$140,000	\$3,892,000	\$ 0.00	\$2,218,440	\$1,673,560	TBD

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
94.25	\$13,195,000	\$0	\$7,521,150	\$5,673,850	TBD

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:

(See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
2	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
3	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
4	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
5	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
6	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
7	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
8	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
9	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500
10	9.42	\$ 1,319,500	\$0.00	\$ 752,115	\$ 567,385	TBD	\$ 1,319,500



County Planning Incentive Grant

PROJECT AREA SUMMARY FORM

Project Area: Saddle River

Municipality: Saddle River, Allendale, and Woodcliff Lake Boroughs

County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms

Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
31	Rohsler Nursery Partners LP	Allendale Borough	0201	2004	Various	8.1
32	S.R. Enterprises	Saddle River Borough	0258	1801 1902	4,7 41,42	31.3
33	Rohsler Nursery Partners LP	Saddle River Borough	0258	1805	5, 5.01, 6	7.4
34	Elizabeth & Alan Hofer	Saddle River Borough	0258	1801	21.01	6.9
35	Louis & Helen Schoenleber	Saddle River Borough	0258	1607	20,21	16.0
36	George Demarest LLC	Saddle River Borough	0258	2101	13	17.8
40	Finn Kenneth Jensen	Woodcliff Lake Borough	0268	908	2	4.8

Total Acreage of Targeted Farms:

92.3

ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval:

0.0

iii. Preserved Farmland

Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

37	Elizabeth Demarest	Hillsdale Borough	0227	202 201	1 4	13.0

Total Acreage of Preserved Farmland: 13.0

iv. Other Deed Restricted Farmland

Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland: 0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program: 0.0

vi. **Other Preserved Open Space Compatible with Agriculture**
Add additional rows as needed.

Owner	Municipality	Municipal Code	Block	Lot	Acres	Description of Use
Hillsdale Borough	Hillsdale Borough	0227	207	1	0.1	Open Space
Saddle River Borough	Saddle River Borough	0258	1607	40	24.0	Rindlaub Park
Saddle River Borough	Saddle River Borough	0258	2002	3	0.6	Open Space
Waldwick Borough	Waldwick Borough	0264	73	3.03, 3.04,10.02	16.8	Open Space
Woodcliff Lake Borough	Woodcliff Lake Borough	0268	1201	7	1.5	Open Space

Total Acreage of Other Preserved Open Space Compatible with Agriculture: 43.0
TOTAL ACREAGE OF i., ii., iii., iv., v. & vi. 148.3

2. **AGGREGATE SIZE OF THE PROJECT AREA: 357.8** Acres
(See N.J.A.C. 2:76-17.5(a)2)

3. **DENSITY OF THE PROJECT AREA:** *(See N.J.A.C. 2:76-17.5(a)3)*

Density Formula: (Sum of ii., iii., iv., v. & vi.) / (Aggregate size of the Project Area)

$$\text{Density} = 148.3 / 357.8 = 41.4\%$$

4. **TARGETED FARM SOIL PRODUCTIVITY:** *(See N.J.A.C. 2:76-17.5(a)4)*

Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

Soil Productivity = 37.3/ 92.3 = 40.4%

Note:

- Important farmland soils are prime, statewide and unique soils
- Unique soils will only be considered if they are being used for special crops
- Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.

Total area of the targeted farms: 92.3 acres

Area of prime soils on targeted farms: 17.2 acres; 18.7 % of total area

Area of statewide soils on targeted farms: 20.1 acres; 21.7 % of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS: (See N.J.A.C. 2:76-17.5(a)5)
 The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)
 Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share 0 %	Estimated County Cost Share 62 %	Estimated State Cost Share 38%	Estimated Cost Share 0% from Other Sources
Saddle River Borough	0201	79.4	\$165,000	\$13,101,000	\$ 0.00	\$ 4,978,380	\$ 8,122,620	TBD
Woodcliff Lake Borough	0268	4.8	\$165,000	\$ 792,000	\$ 0.00	\$ 300,960	\$ 491,040	TBD
Allendale Borough	0201	8.1	\$165,000	\$ 1,336,500	\$ 0.00	\$ 507,870	\$ 828,630	TBD

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
92.3	\$ 15,229,500	\$ 0.00	\$ 9,442,290	\$ 5,787,210	TBD

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:
 (See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
2	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
3	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
4	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
5	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
6	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
7	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
8	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
9	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950
10	9.23	\$1,522,950	\$ 0.00	\$ 944,229	\$ 578,721	TBD	\$1,522,950



County Planning Incentive Grant

PROJECT AREA SUMMARY FORM

Project Area: Lake Tappan/Oradell Reservoir

Municipalities: Various

County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms

Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
42	V.E.R. Corporation	RiverVale Township	0253	813	18	5.1
43	Binaghi Family Partnership	Old Tappan Borough	0243	701, 702	11, 3	16,3
44	Richard & Barbara Sunden	Old Tappan Borough	0243	2001	2	6.3
45	Lupardi Realty Associates, LP	Norwood Borough	0241	81	3	13.1
49	Marek Corporation	Emerson Borough	0214	1201	1	6.7
51	Marianne Schaller (Trust)	Closter Borough	0207	2401	51	7.2
52	Abram Demaree Homestead	Closter Borough	0207	202	1	14.0
53	Lupardi Realty Associates, LP	Closter Borough	0207	1401	5	5.5
54	Joseph & Gloria Miele	Closter Borough	0207	1703	2.01	8.4

Total Acreage of Targeted Farms:

81.0

ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval: 0.0

iii. Preserved Farmland

Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres
50	Ellen Brooks	Closter Borough	0207	1201	1	7.9

Total Acreage of Preserved Farmland: 7.9

iv. Other Deed Restricted Farmland

Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland: 0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation

Program or Municipally-Approved Farmland Preservation Program:
vi. Other Preserved Open Space Compatible with Agriculture
Add additional rows as needed.

0.0

Owner	Municipality	Municipal Code	Block	Lot	Acres	Description of Use
Bergen County	Hillsdale	0227	2101	21, 22	9.9	Centennial Park
Bergen County	Hillsdale	0227	2101 2002	1, 20 28	53.5	Wood Dale County Park
Bergen County	Woodcliff Lake Borough	0268	2903 2801	1 18	55.4	Wood Dale County Park
Bergen County	Park Ridge Borough	0247	2103	7, 8, 9, 10	9.7	Wood Dale County Park
Bergen County	River Vale	0253	1106	29, 30, 31	2.2	Baylor Massacre Site
Bergen County	River Vale	0253	2301	2, 4, 5, 13, 22	133.4	Valley Brook Golf Course
Bergen County	Harrington Park	0224	1501	1	8.3	Valley Brook Golf Course
Bergen County	River Vale	0253	2201 2203.03 2208 2208.01	20 8 1, 7.01 17	20.1	Pascack Brook County Park
Bergen County	Westwood	0267	1701 1901 1902 1903	3, 5, 7, 11, 18 1 2, 4 2	60.6	Pascack Brook County Park
Closter Borough	Closter Borough	0207	1901	41	2.5	Amendola Park
Closter Borough	Closter Borough	0207	1806	1, 2	20.6	Buaaoni Park
Closter Borough	Closter Borough	0207	1402 1501 1601 1901 1902	25, 26, 27 22, 26, 27 10 1 1	119.8	Closter Nature Center
Closter Borough	Closter Borough	0207	2102	49, 50	5.4	McBain Farm
Closter Borough	Closter Borough	0207	1002	7, 8, 17	3.8	Metropolitan Park
Closter Borough	Closter Borough	0207	1006	9, 10, 11, 12	31.9	Nelson Park
Closter Borough	Closter Borough	0207	1902	1, 3, 4, 5	24.4	Ruckman Park

Closter Borough	Closter Borough	0207	1006	23, 24	3.8	Tenakill Park
Closter Borough	Closter Borough	0207	805	5, 6	9.7	Veteran's Memorial Park
Demarest Borough	Demarest Borough	0209	75 98	1, 2, 3 1	105.9	Demarest Nature Center
Emerson Borough	Emerson Borough	0214	1301	3.04	19.3	Emerson Woods
Harrington Park Borough	Harrington Park Borough	0224	401	1	9.5	Harrington Park
Harrington Park Borough	Harrington Park Borough	0224	1001	16	30.0	Highland Park
Old Tappan Borough	Old Tappan Borough	0243	501	1	48.7	Municipal Golf Course
Old Tappan Borough	Old Tappan Borough	0243	1903	15	11.7	Stone Point Park
Old Tappan Borough	Old Tappan Borough	0243	2902	1	9.6	Washington Avenue North
River Vale Township	River Vale Township	0253	1401	3	9.2	Grove Field
River Vale Township	River Vale Township	0253	1801.14	4	4.4	Ranges Field
Westwood Borough	Westwood Borough	0267	1701	23, 25, 26, 28, 29	2.4	Hageman Park
Westwood Borough	Westwood Borough	0267	1701	1	30.3	Westvale Park
Closter Borough	United Water New Jersey	0207		Various	290.9	Reservoir Conservation Area
Emerson Borough	United Water New Jersey	0214		Various	290.9	Reservoir Conservation Area
Harrington Park Borough	United Water New Jersey	0224		Various	349.9	Reservoir Conservation Area
Norwood Borough	United Water New Jersey	0241		Various	78.2	Reservoir Conservation Area
Old Tappan Borough	United Water New Jersey	0243		Various	792.8	Reservoir Conservation Area
River Vale Township	United Water New Jersey	0253		Various	299.5	Reservoir Conservation Area
Closter Borough	Closter Borough	0207		Various	20.7	Various Open Space

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Demarest Borough	Demarest Borough	0209		Various	1.8	Various Open Space
Harrington Park Borough	Harrington Park Borough	0224		Various	4.2	Various Open Space
Hillsdale Borough	Hillsdale Borough	0227		Various	1.4	Various Open Space
Norwood Borough	Norwood Borough	0241		Various	2.9	Various Open Space
Old Tappan Borough	Old Tappan Borough	0244		Various	62.5	Various Open Space
Park Ridge Borough	Park Ridge Borough	0247		Various	9.7	Various Open Space
River Vale Township	River Vale Township	0253		Various	1.7	Various Open Space
Westwood Borough	Westwood Borough	0267		Various	15.5	Various Open Space

Total Acreage of Other Preserved Open Space Compatible with Agriculture: **3,154.0**

TOTAL ACREAGE OF i., ii., iii., iv., v. & vi. 3,235.9

2. AGGREGATE SIZE OF THE PROJECT AREA: 3,878.4 ACRES

(See N.J.A.C. 2:76-17.5(a)2)

3. DENSITY OF THE PROJECT AREA: *(See N.J.A.C. 2:76-17.5(a)3)*

Density Formula: (Sum of ii., iii., iv., v. & vi.) / (Aggregate size of the Project Area)

$$\text{Density} = 3,236 / 3,878 = 83.4 \%$$

4. TARGETED FARM SOIL PRODUCTIVITY: *(See N.J.A.C. 2:76-17.5(a)4)*

Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

$$\text{Soil Productivity} = 35.7 / 81.0 = 44.1 \%$$

Note:

- *Important farmland soils are prime, statewide and unique soils*
- *Unique soils will only be considered if they are being used for special crops*
- *Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.*

Total area of the targeted farms: 81.0 acres

Area of prime soils on targeted farms: 27.1 acres; 36.2% of total area

Area of statewide soils on targeted farms: 8.6 acres; 11.4% of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. **ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS:** (See N.J.A.C. 2:76-17.5(a)5)
 The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)
 Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share 0%	Estimated County Cost Share 53%	Estimated State Cost Share 47%	Estimated Cost Share 0% from Other Sources
River Vale Township	0253	5.1	\$125,000	\$ 637,500	\$ 0.00	\$ 337,875	\$ 299,625	TBD
Old Tappan Borough	0243	22.3	\$ 125,000	\$2,787,500	\$ 0.00	\$ 1,477,375	\$1,310,125	TBD
Norwood Borough	0241	13.1	\$ 125,000	\$1,637,500	\$ 0.00	\$ 867,875	\$ 769,625	TBD
Emerson Borough	0214	6.7	\$ 125,000	\$ 837,500	\$ 0.00	\$ 443,875	\$ 393,625	TBD
Closter Borough	0207	33.8	\$ 125,000	\$ 4,225,000	\$ 0.00	\$2,239,250	\$ 1,985,750	TBD

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
81.0	\$10,125,000	\$ 0.00	\$ 5,366,250	\$ 4,758,750	TBD

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:

(See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
2	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
3	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
4	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
5	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
6	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
7	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
8	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
9	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500
10	8.1	\$1,012,500	\$ 0.00	\$ 536,625	\$ 475,875	TBD	\$ 1,012,500



County Planning Incentive Grant

PROJECT AREA SUMMARY FORM

Project Area: Oakland Borough

Municipality: Oakland & Franklin Lakes Boroughs

County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms

Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
16	RI-Arm Corporation	Oakland Borough	0242	3410	2,3,4	8.7
17	Salvatore Fanale	Oakland Borough	0242	3416	1, 1.01, 1.02	40.1
18	Michael & Katherine Bartholome	Oakland Borough	0242	2212	1	14.0
20	Robert, Norma & Julie Holland	Oakland Borough	0242	3104	1	9.6
26	Doris Mortimer	Franklin Lakes Borough	0220	1104	1,1.02	9.1

Total Acreage of Targeted Farms:

81.5

ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval:

0.0

iii. Preserved Farmland

Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres
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Total Acreage of Preserved Farmland: 0.0

iv. Other Deed Restricted Farmland

Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland: 0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program: 0.0

vi. **Other Preserved Open Space Compatible with Agriculture**
Add additional rows as needed.

Owner	Municipality	Municipal Code	Block	Lot	Acres	Description of Use
State of New Jersey	Oakland Borough	0242	1101 1102 1201 1310	1 1 1 1	269.0	Ramapo State Forest
Oakland Borough	Oakland Borough	0242	2301	5	23.0	Truman Rec Fields
Oakland Borough	Oakland Borough	0242	2320	1	33.7	Recreation
Oakland Borough	Oakland Borough	0242	3103 3105	3,4 5,6,7	12.2	Open space
Oakland Borough	Oakland Borough	0242		Various	43.7	Open Space

Total Acreage of Other Preserved Open Space Compatible with Agriculture: 381.6
TOTAL ACREAGE OF i., ii., iii., iv., v. & vi. 463.1

2. **AGGREGATE SIZE OF THE PROJECT AREA: 1,134.5 Acres**
(See N.J.A.C. 2:76-17.5(a)2)

3. **DENSITY OF THE PROJECT AREA:** *(See N.J.A.C. 2:76-17.5(a)3)*

Density Formula: (Sum of ii., iii., iv., v. & vi.) / (Aggregate size of the Project Area)

$$\text{Density} = 463.1 / 1,134.5 = 40.8\%$$

4. TARGETED FARM SOIL PRODUCTIVITY: (See N.J.A.C. 2:76-17.5(a)4)

Soil Productivity Formula:

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

$$\text{Soil Productivity} = 40.4 / 81.5 = 49.6\%$$

Note:

- Important farmland soils are prime, statewide and unique soils
- Unique soils will only be considered if they are being used for special crops
- Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.

Total area of the targeted farms: 81.5 acres

Area of prime soils on targeted farms: 7.0 acres; 8.6 % of total area

Area of statewide soils on targeted farms: 33.4 acres; 41.0 % of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS: (See N.J.A.C. 2:76-17.5(a)5)

The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)

Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share 0%	Estimated County Cost Share 48%	Estimated State Cost Share 52%	Estimated Cost Share 0% from Other Sources
Oakland Borough	0242	72.4	\$ 110,000	\$7,964,000	\$ 0.00	\$3,822,720	\$4,141,280	TBD
Franklin Lakes Borough	0220	9.1	\$ 110,000	\$1,001,000	\$ 0.00	\$ 480,480	\$ 520,520	TBD

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
81.5	\$ 8,965,000	\$ 0.00	\$ 4,303,200	\$ 4,661,800	TBD

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:

(See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
2	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
3	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
4	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
5	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
6	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
7	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
8	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
9	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500
10	8.15	\$ 896,500	\$ 0.00	\$ 430,320	\$ 466,180	TBD	\$ 896,500



County Planning Incentive Grant

PROJECT AREA SUMMARY FORM

Project Area: Paramus Borough

Municipality: Paramus Borough

County: Bergen

1. PROJECT AREA INVENTORY: (See N.J.A.C. 2:76-17.5(a)1)

i. Targeted Farms

Add additional rows as needed.

Map ID	Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres
46	Joseph & Bertha Joy	Paramus Borough	0246	7002 7003 7701	1 1, 2,3 2,3,4	17.8
47	Eisele Properties LLC	Paramus Borough	0246	7101	4	6.0

Total Acreage of Targeted Farms:

23.8

ii. Farms with Municipal, County and/or SADC Final Approval:

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms with Municipal, County or SADC Final Approval:

0.0

iii. Preserved Farmland

Add additional rows as needed.

Map ID	Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres
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Total Acreage of Preserved Farmland: 0.0

iv. Other Deed Restricted Farmland

Add additional rows as needed.

Owner / Farm Name (if known)	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Other Deed Restricted Farmland: 0.0

v. Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program

Add additional rows as needed.

Owner / Farm Name	Municipality	Municipal Code	Block	Lot	Acres

Total Acreage of Farms Enrolled in the Eight-year Farmland Preservation Program or Municipally-Approved Farmland Preservation Program: 0.0

(Total area of important farmland soils on targeted farms) / (Total area of the targeted farms)

Soil Productivity = 0.94/ 23.8 = 4.0%

Note:

- Important farmland soils are prime, statewide and unique soils
- Unique soils will only be considered if they are being used for special crops
- Attached is a list of soils considered statewide important only when drained. When these soils are present please confirm the presence of drainage before making soil calculations.

Total area of the targeted farms: 23.8 acres

Area of prime soils on targeted farms: 0.0 acres; 0.0 % of total area

Area of statewide soils on targeted farms: 0.94 acres; 4.0 % of total area

Area of unique soils on targeted farms: 0.0 acres; 0.0 % of total area

5. ESTIMATE OF EASEMENT PURCHASE COST ON TARGETED FARMS: (See N.J.A.C. 2:76-17.5(a)5)
 The SADC cost share formula can be found at N.J.A.C. 2:76-6.11(d)
 Add additional rows as needed.

Municipality	Municipal Code	Acres	Estimated Easement Price per Acre	Total Estimated Easement Price	Estimated Municipal Cost Share 0%	Estimated County Cost Share 62%	Estimated State Cost Share 38%	Estimated Cost Share 0% from Other Sources
Paramus Borough	0246	23.8	\$165,000	\$3,927,000	\$ 0.00	\$2,434,740	\$1,493,450	TBD

TOTALS

Total Acreage	Total Estimated Cost for Targeted Farm Easement Purchase	Total Estimated Municipal Funding	Total Estimated County Funding	Total Estimated State Funding	Total Estimated Funding from Other Sources
23.8	\$3,927,000	\$ 0.00	\$2,434,740	\$1,493,450	TBD

6. MULTI-YEAR PLAN TO PURCHASE DEVELOPMENT RIGHTS ON TARGETED FARMS:
 (See N.J.A.C.2:76-17.5(a)6)

Year	Acres	Estimated Cost	Municipal Funds	County Funds	State Funds	Other Funding Sources	Total Estimated Funding
1	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
2	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
3	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
4	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
5	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
6	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
7	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
8	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
9	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700
10	2.38	\$ 392,700	\$ 0.00	\$ 243,474	\$ 149,226	TBD	\$ 392,700

APPENDIX C
PRELIMINARY TARGET FARM ELIGIBILITY ANALYSIS

**Table C-1
Bergen County
Target Farm Program Eligibility**

Target Farm	Farmland Owner	Preserved Land	Satisfies Minimum Eligibility Criteria	Satisfies Eligibility Criteria w/ Adjacent Farm	May Satisfy Eligibility Criteria in Future	Not Qualified Farmland in 2008
1	Greene, Carol Wehran					
2	Cipriano Farms LLC					
3	Sidorski, Henry E.					
4	Surgent, George F.					
5	Weidner, Robin					
6	Vas, Adrienne					
7	McDonnell, George & Elizabeth					
8	Chestnut trees LLC c/o G. Krazinski					
9	Kohout, Joseph & Lottie					
10	Wanamaker, Charles Jr.					
11	Bolkema, Theodorre & Minnie et. als.					
12	Dator, James R. & Rehill, Darryl D.					
13	Amberfields Associates					
14	Secor, Darryl G. & Jacqueline L.					
15	De Piero, Edward & Elaine					
16	RI-Arm Corp					
17	Fanale, Salvatore J. T/A Beacon Realty					
18	Bartholme, Michael & Katherine					
19	Mottola, Gary F. & Irene					
20	Holland, Robert, Norma, Julie & noel					
21	Meeks, John A. & Katherine M.					
22	RCP Birch Road LLC					
23	Abma & Sons Inc.					
24	Twinbrook Nurseries					
25	Schwartz, Bernard A. & Alessantrina					
26	Mortimer, Doris J.					
27	Hovey, Jaems & Karen					
28	Palminteri, Anthony & Gail					
29	Abma & Sons Inc.					
30	CB Realty Investments					
31	Rohsler Nursery Partners LP					
32	S. R. Enterprises Inc.					
33	Rohsler Nursery Partners LP					
34	Hofer, Elizabeth Milyadis & Alan					
35	Schoenleber, Louis & Helen					
36	George H. Demarest LLC					
37	Demarest, Elizabeth					
38	Volek, Alfred & Mary					
39	JP Decandido/Dec. Faml Partnersihp					
40	Jensen, Finn Kenneth					
41	Sacchieri, Paul V. & Linda M.					
42	V.E.R. Corporation					
43	Binaghi Family Limited Partnership					
44	Sunden, Richard & Barbara					
45	Lupardi Realty Associates LP					
46	Joy, Joseph & Bertha					
47	Eisele Properties LLC					
48	Fieldstone Nursery LLC					
49	Marek Corporation					
50	Brooks, Ellen L.					
51	Schaller, Marianne (Trust)					
52	Abram Demaree Homestead, Inc.					
53	Lupardi Realty Associates LP					
54	D'Angelo, Jack & Marylou					
		7	34	3	10	2

APPENDIX D
GARDEN STATE GREENWAYS: BERGEN COUNTY

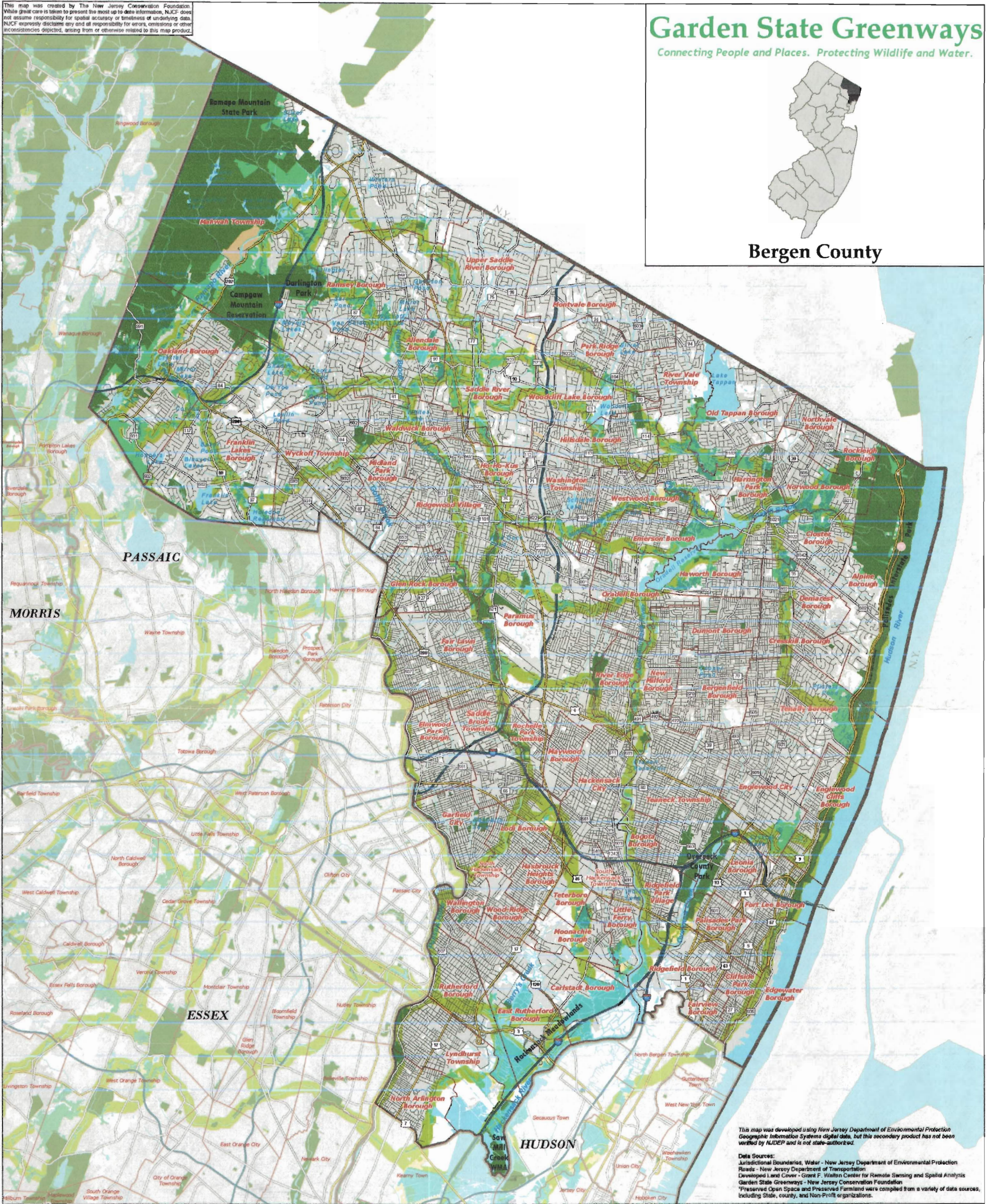
This map was created by The New Jersey Conservation Foundation. While great care is taken to present the most up to date information, NJCF does not assume responsibility for spatial accuracy or timeliness of underlying data. NJCF expressly disclaims any and all responsibility for errors, omissions or other inconsistencies depicted, arising from or otherwise related to this map product.

Garden State Greenways

Connecting People and Places. Protecting Wildlife and Water.



Bergen County



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

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

Garden State Greenways	Other Land Cover
Agriculture/Grassland	Preserved Open Space
Emergent Wetland	Preserved Farmland
Forested Wetland	Water
Upland Forest	Developed 2001
Beach/Dune	County Boundary
Connectors	Municipal Boundary

Other Land Cover	Other Land Cover
Interstate/Toll Highway	U.S./State Highway
County Road	Local Road

Scale: 0 0.75 1.5 2.25 3 Miles
 1:55,000

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

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

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

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

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



visit the GSG website at www.gardenstategreenways.org

APPENDIX E
AGRICULTURAL DEVELOPMENT AREAS: BERGEN COUNTY

