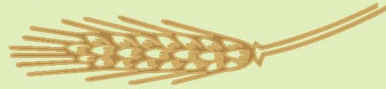


Township of Upper Deerfield

CUMBERLAND COUNTY



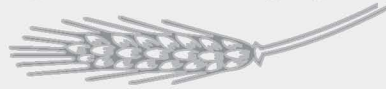
FARMLAND PRESERVATION PLAN

DELAWARE VALLEY
dvrpc
REGIONAL
PLANNING COMMISSION

January 2011

Township of Upper Deerfield

CUMBERLAND COUNTY



FARMLAND PRESERVATION PLAN

DELAWARE VALLEY
dvrpc
REGIONAL
PLANNING COMMISSION

January 2011

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Source: E. Overdevest

Snow Geese over the Coombs Farm (with the Myers Farm in the Background)

EXECUTIVE SUMMARY

This document is a Farmland Preservation Plan Element that has been prepared as an amendment to the Upper Deerfield Township Master Plan. It addresses the ways in which Upper Deerfield Township will increase protection and preservation of agricultural resources and businesses in the community. The document conforms to the guidelines of the State Agricultural Development Committee (SADC) for municipal Farmland Preservation Plans. It includes the required plan components and maps, along with information about farmland preservation in the township, the farming industry in the township and county, and various actions that the municipality will take to enhance and support the local agricultural industry.

Upper Deerfield Township is located directly north of the City of Bridgeton in Cumberland County. It is a heavily agricultural community, with 60 percent of its land area in farming and urban areas covering less than 15 percent. It was the site of the Seabrook Farms industry from 1917 to 1959, which created extensive farming and farm processing businesses and operated on an international level. Seabrook Farms also brought cultivators and workers to Upper Deerfield from many parts of the world, which enriched the community's cultural heritage and composition.

Today, horticulture and sod farming dominate in the township, although there are still many fruit and produce growers. Field crops actually occupy slightly more acreage (5,595 acres) than horticulture and sod growing combined (5,503 acres). There are also 48 farms that raise animals. Upper Deerfield has some significant farm-related businesses within the township, most notably the Clement-Pappas processing and packaging plant and the Seabrook Brothers and Sons freezing and packaging facility.

In recent years, Upper Deerfield has seen a growth in residential housing, most of which has been built in the southwestern section of the township, where sewer and water are available. Building permits issued over the past 10 years are the highest of any rural township in the county, behind only Vineland, Millville, and Bridgeton, all of which are urban communities. This led Upper Deerfield's leadership, many of whom are farm owners, to begin exploring wise options to protect agriculture and farmland. Zoning in the Agricultural District was changed to a six-acre minimum. Farmland preservation was promoted and has been extensive. Cumberland County's Farmland Preservation Program has preserved 3,242 acres in Upper Deerfield, more than in any other Cumberland County municipality.

Upper Deerfield has rich natural resources, especially along its Cohansey River corridor and across its farmland. Township leaders have sponsored the development of an Environmental Resource Inventory and an Open Space and Recreation Plan. They are currently looking at other measures of land protection, such as a conservation clustering ordinance. This Farmland Preservation Plan is part of that comprehensive strategy. The Plan lays out various methods for protecting farmland, including application to the SADC for a Farmland Planning Incentive Grant (PIG). Such a grant would provide Upper Deerfield with funding to preserve farmland through municipal purchase of development easements or fee-simple purchase, as an addition to Cumberland County's efforts.

In 2006 Upper Deerfield Township established its Agricultural Advisory Committee (AAC), consisting of three farmers who farm land that they own, plus two additional nonfarming members. In this Plan, the AAC has delineated a municipal Project Area, where unpreserved farms of 20 acres or larger are depicted and listed as “Target Farms.” Nearly all the target farms in the Project Area are contiguous to or in close proximity to preserved farmland. Establishing the Project Area potentially qualifies the township for a Farmland PIG. The inclusion of target farms “pre-approves” those farms for preservation utilizing that PIG funding, should owners wish to pursue sale of easements. Total acreage of the Project Area target farms is 3,958 acres, and the total estimated cost for preserving 75 percent of this land over a 10-year period is \$17,834,748. The Plan describes how Upper Deerfield could fund its 20 percent matching share, in conjunction with county and state funding.

The balance of the Plan consists of information gathered from a wide variety of sources about programs, opportunities, and business services that assist farmers, enhance the farming industry, or are available to protect resources on farms. This is essentially a menu of options for use at the municipal level, as well as a source of information for farmers. To hone in on the best supporting actions for the municipality to consider, the AAC circulated a farmer survey in 2007. A total of 80 responses were received and are summarized as a Plan Appendix. They indicate that farmers generally would like to see more preservation of farmland but are concerned about the values offered for land. The majority of Upper Deerfield’s farmers plan to continue farming for many years, but respondents were split 50-50 on whether they will preserve their land.

Farmers in Upper Deerfield operate highly successful businesses, for the most part. Maintaining the municipality’s focus on farmland protection and industry needs is critical to their continued success, especially in the face of the development pressure that reached into Cumberland County over the past five years and will do so again when market conditions improve. This Plan is a first step in positioning Upper Deerfield to take advantage of farmland preservation options and to explore coming trends that will protect and enhance agriculture generally. Both farming and nonfarming residents place great value on the open lands of the community. Protecting the rural quality of the township, while conducting thoughtful planning for the future, will assure that Upper Deerfield’s high quality of life continues.

1.0 UPPER DEERFIELD TOWNSHIP'S AGRICULTURAL LAND BASE

1.1 OVERVIEW

1.1.1 Cumberland County

Farm acreage and farming in Cumberland County and throughout New Jersey changed dramatically during the second half of the twentieth century. Farm acreage trends from 1954 to 1997 show a loss of 50 percent of the state's agricultural land base. Most of that decline occurred between 1954 and 1974, when an average of 35,192 acres of farmland were lost each year. The rate of decline slowed after 1974, and from 1974 to 2002, farmland in the state declined in acreage at an average of 5,561 acres per year. From 2002 to 2007, the rate increased substantially, with an average of 14, 446 acres being lost each year.

Unlike the rest of the state, Cumberland County has not experienced as dramatic a loss in farmland over the past 20 years. For example, from 2002 to 2007, only 322 acres per year were lost in Cumberland County. As shown below in *Table 1: Cumberland County Farms*, the number of farms, amount of farmland, and average farm size in 2007 were generally the same as they were in 1987. The number of farms and the amount of land in farms decreased at a modest pace between 1987 and 1997, but farms and farmland in the county increased sharply between 1997 and 2002. Another drop in farm acreage occurred between 2002 and 2007.

Table 1: Cumberland County Farms

	1987	1992	1997	2002	2007
Number of farms	612 60 9		573 61 6		615
Land in farms (acres)	72,406 6	8,627	66,288 7	1,097	69,489
Average farm size (acres)	118 11 3		116 11 5		113
Median farm size (acres)	(N)	(N)	30	30	27
(NA) Not available					

Source: USDA Census of Agriculture, 1987, 1992, 1997, 2002, 2007

Of the 615 farms in Cumberland County in 2007, 220 (36%) were 50 acres or greater in size, as seen below in *Table 2: Size of Cumberland County Farms*. About 40 percent of farms in the county were between 10 and 49 acres in size, and another 22 percent covered 9 or less acres.

Table 2: Size of Cumberland County Farms

	1987	1992	1997	1987	2002	2007
1 to 9 acres	116	111	123 11	6 12	4 13	7
10 to 49 acres	219	245	231 21	9 26	3 24	4
50 to 179 acres	176	155	132 17	6 13	8 14	5
180 to 499 acres	67	68	60 67 58 54			
500 to 999 acres	24	19	15 24 20 21			
1,000 acres or more	10	11	12 10 13 14			

Source: USDA Census of Agriculture, 1987, 1992, 1997, 200, 2007

According to the 2007 Census of Agriculture, Cumberland County has 69,489 acres of land in farms, comprising about 22 percent of the county’s total area. Of that, 54,430 acres (78%) consist of cropland, as shown in the table below.

Table 3: Cumberland County Farmland Acreage, 1987-2002

Category			1987	1992	1997	2002	2007
Total Cropland		farms	584	592	554	556	4
		acres	56,527	56,407	50,928	54,430	2,330
	<i>Harvested Cropland</i>	<i>farms</i>	560	565	524	528	537
		<i>acres</i>	48,934	47,948	44,932	47,678	47,059
	<i>Cropland used only for pasture or grazing</i>	<i>farms</i>	100	124	112	100	70
		<i>acres</i>	2,345	2,263	1,849	1,334	1,711
	<i>Other Cropland</i>	<i>farms</i>	186	176	147	160	145
		<i>acres</i>	5,248	6,196	4,147	5,418	3,560
Total Woodland		farms	225	245	218	249	23
		acres	8,055	6,640	8,340	10,073	7,957
	<i>Woodland pastured</i>	<i>farms</i>	34	46	23	54	34
		<i>acres</i>	981	1,375	1,452	1,625	981
	<i>Woodland not pastured</i>	<i>farms</i>	202	220	200	211	202
		<i>acres</i>	7,074	5,265	6,888	8,448	7,074
Pastureland and rangeland (other than cropland and woodland)		farms	59	44	43	121	14
		acres	2,410	1,184	1,655	2,553	2,025

Source: USDA Census of Agriculture, 1987, 1992, 1997, 2002, 2007

The Census of Agriculture reports that the average age of farmers in Cumberland County was 55.9 in 2007. Of the 907 total farm operators in 2007, 293 (32%) were female. About 53 percent (324) of the principal operators of Cumberland County’s 615 farms consider farming to be their primary occupation, with the remainder having a primary employment other than farming. Individuals or families, rather than partnerships or corporations, owned 88 percent (513) of all farms in Cumberland County in 2007.

1.1.2 Upper Deerfield Township

Upper Deerfield Township consists of about 20,072 acres of land, of which 13,666 acres (68%) had Farmland Assessment in 2007. See **Appendix A: Inventory of All Farmland-Assessed Properties in Upper Deerfield Township**. Farmland-assessed land includes cropland and pasture, as well as non-agricultural land such as farm buildings. This acreage is found throughout the township, although some farm-assessed parcels had been approved for development as of December 2007. These developing parcels were largely located in the southwest section of the township. Agricultural use is found throughout the northern half of the municipality, along its eastern side, and down into its southeastern corner. The south central part of the community, along Route 77, still has considerable farmland along its length, but the area is zoned for commercial development. See **Map 4: 2002 Aerial & 2005 Parcel Data**, **Map 5: Land Use/Land Cover (2007)**, and **Map 9: Zoning**, which are in the Maps Section of this document.

Similar to countywide trends, the amount of farmland in Upper Deerfield Township remained relatively stable over the past two decades, as shown below in **Table 4**. The total amount of cropland in Upper Deerfield increased by nearly 690 acres (6.5%) between 1984 and 2007, while the amount of woodland and permanent pasture decreased during this time period.

Table 4: Types of Farmland in Upper Deerfield Township, 1984-2007

Category	Acreage					
	1984	1991	2001	2005	2006	2007
Total Cropland	10,513	11,211	11,439	12,018	12,302	12,201
Harvested Cropland	10,282	10,911	11,138	10,683	10,950	10,875
Cropland Pastured	232	300	301	335	352	326
Total Woodland	2,033	2,189	2,114	2,097	2,099	2,085
Unattached Woodland	(N)	77	319	323	416	403
Attached Woodland	(N)	2,112	1,795	1,652	1,563	1,422
Permanent Pasture	520	636	439	0	9	2
Equine Acres	(N)	(N)	19	27	30	23
Total Active Ag (all except Woodlands)	11,033	11,556	11,822	12,435	12,721	12,596
Total Ag Use	13,066	13,745	13,936	14,410	14,700	14,421
Total Non-Ag Use	425	527	324	0	1	5
Total Farm-Assessed	13,492	14,060	14,209	13,650	13,931	13,666
<i>(N) Not available</i>						

Source: NJ Dept. of Agriculture, 1984, 1991, 2001, 2005, 2006, 2007

Based on these farmland assessment statistics, Upper Deerfield has roughly 20 percent of Cumberland County's active agricultural lands. The township's importance to regional and statewide agricultural is demonstrated by the fact that it is the second largest municipality in the county and the seventh largest in the state in terms of active agricultural acreage.

1.2 SOILS

Upper Deerfield's soils are rich in agricultural value. In Upper Deerfield Township, the soils consist of 16 soil series types and 44 variations within those series, as identified by the Natural Resources Conservation Service. The majority of these township soils (81%) are considered Prime Farmlands (P-1). Prime Farmlands are lands that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. They can sustain high yields of crops when managed with correct farming methods. Prime Farmlands are not excessively erodible or saturated with water for long periods of time and do not flood frequently.

Table 5: Classification of Upper Deerfield Township Soils

Designation	Type	Acres	Percentage of Total Land
P-1 Pr	Prime Farmland	16,285	81%
S-1 St	Statewide Importance	2,446	12%
S-1	Statewide Importance, when drained	74	<1%
U-1	Unique, when drained	772	4%
Not Classified	Wet soils, pits, unclassified, etc.	371	2%
Water Water		124	1%
Totals		20,072	100%

Source: USDA Natural Resource Conservation Service, 2004

Another 12 percent of Upper Deerfield’s soils are classified as Farmland of Statewide Importance (S-1). Additionally, 73.9 acres (less than 1%) are hydric soils, but are classed as Farmlands of Statewide Importance when drained using tile drainage or other means. Statewide Importance soils are close in quality to Prime Farmland and can sustain high yields of crops when correctly managed with favorable conditions.

Of the remaining two classifications, 4 percent of Upper Deerfield soils are categorized as Unique Soils when drained, which are soils that can support the production of high value, regional crops like horticultural crops or indigenous foods. No soils are classed as Farmland of Local Importance (L-1). The balance of all soils (371 acres, or about 2%) is made up of soils that have not been classified.

These designations of soils within Upper Deerfield Township are shown on **Map 7: Soil Classifications**.

The complete list of Upper Deerfield soils is in the following table. All the soils named there are shown graphically on **Map 6: Soils**.

Table 6: Upper Deerfield Township Soils

Soil Code	Soil Name	Acres	% of All Soils	Designation
AtsAr	Atsion sand, 0 to 2 percent slopes, rarely flooded	0.1	0.0	H
AugB	Aura sandy loam, 2 to 5 percent slopes	29.8	0.1	P
AuhB	Aura gravelly sandy loam, 2 to 5 percent slopes	1950.8	9.7	P
BEXAS	Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded	174.3	0.9	H
ChsAt	Chicone silt loam, 0 to 1 percent slopes, frequently flooded	8.3	0.0	H
ChtA	Chillum silt loam, 0 to 2 percent slopes	1047.2	5.2	P
ChtB	Chillum silt loam, 2 to 5 percent slopes	2228.0	11.1	P
DocB	Downer loamy sand, 0 to 5 percent slopes	326.9	1.6	S
DocC	Downer loamy sand, 5 to 10 percent slopes	1007.4	5.0	S
DoeA	Downer sandy loam, 0 to 2 percent slopes	137.5	0.7	P

Soil Code	Soil Name	Acres	% of All Soils	Designation
DoeB	Downer sandy loam, 2 to 5 percent slopes	383.2	1.9	P
DouB	Downer-Urban land complex, 0 to 5 percent slopes	0.9	0.0	NC
EveB	Evesboro sand, 0 to 5 percent slopes	33.5	0.2	NC
EveC	Evesboro sand, 5 to 10 percent slopes	119.0	0.6	NC
EveD	Evesboro sand, 10 to 15 percent slopes	32.1	0.2	H/S (drained)
FamA	Fallsington sandy loam, 0 to 2 percent slopes	152.7	0.8	S
FodB	Fort Mott loamy sand, 0 to 5 percent slopes	183.7	0.9	S
HbmB	Hammonton loamy sand, 0 to 5 percent slopes	22.7	0.1	S
HboA	Hammonton sandy loam, 0 to 2 percent slopes	22.6	0.1	P
MakAt	Manahawkin muck, 0 to 2 percent slopes, frequently flooded	772.3	3.8	H/U (drained)
MbrA	Matapeake silt loam, 0 to 2 percent slopes	937.6	4.7	P
MbrB	Matapeake silt loam, 2 to 5 percent slopes	1546.4	7.7	P
MbrC	Matapeake silt loam, 5 to 10 percent slopes	316.8	1.6	S
MbuA	Mattapex silt loam, 0 to 2 percent slopes	438.5	2.2	P
MbuB	Mattapex silt loam, 2 to 5 percent slopes	329.5	1.6	P
OthA	Othello silt loam, 0 to 2 percent slopes	33.8	0.2	H/S (drained)
OTKA	Othello and Fallsington soils, 0 to 2 percent slopes	7.9	0.0	H/S (drained)
OTMA	Othello, Fallsington, and Trussum soils, 0 to 2 percent slopes	9.1	0.0	NC
PHG	Pits, sand, and gravel	24.7	0.1	NC
SacA	Sassafras sandy loam, 0 to 2 percent slopes	2833.0	14.1	P
SacB	Sassafras sandy loam, 2 to 5 percent slopes	1444.3	7.2	P
SacC	Sassafras sandy loam, 5 to 10 percent slopes	729.9	3.6	P
SadA	Sassafras gravelly sandy loam, 0 to 2 percent slopes	331.9	1.7	P
SadB	Sassafras gravelly sandy loam, 2 to 5 percent slopes	1723.5	8.6	P
SadC	Sassafras gravelly sandy loam, 5 to 10 percent slopes	435.6	2.2	S
SapB	Sassafras-Urban land complex, 0 to 5 percent slopes	0.6	0.0	NC
WATER	Water	124.1	0.6	
WoeA	Woodstown sandy loam, 0 to 2 percent slopes	121.1	0.6	P
WoeB	Woodstown sandy loam, 2 to 5 percent slopes	50.7	0.3	P
	TOTALS	20072.1	100.0	
Abbrevs:	P = Prime Farmland S = Statewide Importance U = Unique NC = Not Classified H = Hydric (part of Not Classified)	H/S (drained) = Hydric but classed as Statewide Importance when drained H/U (drained) = Hydric but classed as Unique when drained		

Source: NJDEP, 2004

1.3 WATER RESOURCES IN UPPER DEERFIELD TOWNSHIP

The average precipitation rate in New Jersey is 44 inches a year and, despite some minor variation, all parts of Upper Deerfield Township are near this amount. Some farmers rely solely on precipitation to nourish crops during the growing season. Others depend also on either surface or groundwater to meet their water needs.

Upper Deerfield is within Watershed Management Area 17 (WMA 17), which includes the Cohansey River, the Maurice River, and the Salem River, as well as others.

The principal aquifers underlying Upper Deerfield are the Kirkwood-Cohansey aquifer system, the Wenonah-Mount Laurel aquifer, the Englishtown aquifer, and the Potomac-Raritan-Magothy (PRM) aquifer system. The aquifers are recharged directly by precipitation in outcrop areas, by vertical leakage through confining layers, and from surface-water bodies. Upper Deerfield lies wholly within the outcrop area of the Kirkwood-Cohansey, which is a large unconfined aquifer composed of clay, sand, and quartz of fine to coarse grain size. Depths range from 20 to 350 feet moving from the western side of South Jersey towards the southeast and the Atlantic coast. The water is of good quality and is utilized by Upper Deerfield residents for their drinking water. Most farmers in Upper Deerfield who irrigate land from wells are tapping this aquifer for their irrigation water.

Irrigation

About one-third of all harvested cropland in Upper Deerfield is irrigated, according to Farmland Assessment data from tax year 2007. Out of 10,875 acres of harvested cropland, 3,403 acres are irrigated. The amount of irrigated land in Upper Deerfield in 2007 had increased from its 1984 total of 3,007 acres, and was nearly double the 1991 total of 1,820 acres. Half of all land used for growing vegetables is irrigated (338 acres of 682 acres total); 45 percent of land in nursery crops is irrigated (1,942 acres of 4,296 acres total); 21 percent of land in field crops is irrigated (1,108 acres of 5,355 total); and just 7 percent of land used for growing fruit is irrigated (15 acres of 213 total).

There are various ways to irrigate a farm. A farm pond may be dug to capture surface water from the surrounding area. The pond may also tap groundwater if the water table is close enough to the surface. Another method is to withdraw water from a stream, especially for irrigating land near the stream. Drilling one or more wells and pumping from groundwater is a more costly, but frequently used, method. Irrigation methods are also variable, with sprinklers



Source: DVRPC

Center Pivot Irrigation, a Type of Overhead Irrigation

distributing water in a variety of ways. Drip irrigation relies on more precise placement of the water and, combined with lower evaporation loss, is more efficient in water use.

According to Albert Jarrett of Penn State University, irrigating cropland by sprinkler requires supply rates as high as 10 gallons per minute (gpm) per acre. Drip irrigation requires three to seven gpm per acre. Farm ponds can lose 40 to 60 percent in volume through evaporation, so a farm pond requires roughly four acres of upland watershed to supply one acre-foot of usable water per year.

Water Allocation rules of the NJ DEP require that farmers obtain a water use registration or certification to withdraw surface or groundwater in large quantities for agricultural, horticultural, or aquaculture use. If an applicant has the capacity to divert and/or withdraw 100,000 gallons per day (equivalent hydraulically to 70 gallons per minute), whether the water is drawn or not, a water certification is required. Certification lasts for five years. If the amount is less than that, a water use registration is required. The forms for applying for these usages are submitted to the NJ DEP Bureau of Water Allocation with copies sent to the Rutgers Cooperative Agricultural Extension Agent in the County Extension office. Annual reporting of usage is also a requirement. The program includes the right to divert water for irrigation, frost protection, harvesting, and other agriculturally related purposes.

It is becoming more difficult to obtain permissions for water withdrawals, so it is important to keep current certifications active and not allow them to lapse. Competition from other land uses and strict environmental regulations are leading to reduced water diversions for agriculture, which is a source of concern to farmers.

Table 7: Water Certifications and Registrations in Upper Deerfield Township

Program Interest ID	Program Interest Name	Activity Number	Activity Type Description
CU0304	Ackleys Deerview Nursery	AGC040001	Agricultural Certification - Modification
CU0310	Ansink Farms	AGC020001	Agricultural Certification - New
CU0266	Casper Nurseries LLC	AGC020001	Agricultural Certification - Modification
CU0027	Centerton Nursery Inc	AGC040001	Agricultural Certification - Modification
CU0023	Coombs Farm	AGC050001	Agricultural Certification - Renewal
CU0284	D J Mccracken Nursery	AGC040001	Agricultural Certification - New
CU0296	Edgar Joyce Nursery	AGC050001	Agricultural Certification - Modification
CU0233	Fox Brothers Farm	AGC040001	Agricultural Certification - Renewal
CU0013	Garrison Farm	AGC050001	Agricultural Certification - Renewal
CU0243	George Woodruff Estate	AGC040001	Agricultural Certification - Renewal
CU0110	Hopewell Nursery	AGC030001	Agricultural Certification - Modification

Program Interest ID	Program Interest Name	Activity Number	Activity Type Description
CU0159	H & S Dubois	AGC020001	Agricultural Certification - Renewal
CU0160	H & S Dubois	AGC050001	Agricultural Certification - Renewal
CU0161	H & S Dubois	AGC050001	Agricultural Certification - Renewal
CU0300	H & S Dubois	AGC050001	Agricultural Certification - Renewal
CU0301	H & S Dubois	AGC050001	Agricultural Certification - Renewal
CU0305	H & S Dubois	AGC030001	Agricultural Certification - New
CU0307	H & S Dubois	AGC020001	Agricultural Certification - New
CU0277	H&S Dubois	AGC020001	Agricultural Certification - New
CU0204	Indian Mills Nursery Inc	AGC050001	Agricultural Certification - Modification
CU0182	Jerry Kristovich Farm	AGC050001	Agricultural Certification - Renewal
CU0078	Johnson Farms Ent	AGC040001	Agricultural Certification - Modification
CU0239	Loews Nursery LLC	AGC030001	Agricultural Certification - Modification
CU0327	Lynn Mooneyham Farm	AGC060001	Agricultural Certification - New
CU0155	Mooneyham Nursery	AGC060001	Agricultural Certification - Minor Modification
CU0003	Myers Farms	AGC060001	Agricultural Certification - Renewal
CU0024	Overdevest Nurseries	AGC050001	Agricultural Certification - Modification
CU153R	R J Mehaffey Nursery	AGR000001	Agricultural Registration - New
CU0088	Robert E Hluchy Farms	AGC040001	Agricultural Certification - Renewal
CU0131	Russo Farms Inc	AGC030001	Agricultural Certification - Renewal
CU0265	Russo Farms Inc	AGC040002	Agricultural Certification - Modification
CU105R	Russo Farms Inc	AGR980001	Agricultural Registration - New
CU329R	Schuler Farm	AGR060001	Agricultural Registration - Administrative Modification
CU0201	Tice Farms	AGC040001	Agricultural Certification - Renewal
CU0227	Woodruff Nursery	AGC030001	Agricultural Certification - Modification

Source: NJDEP, 2007

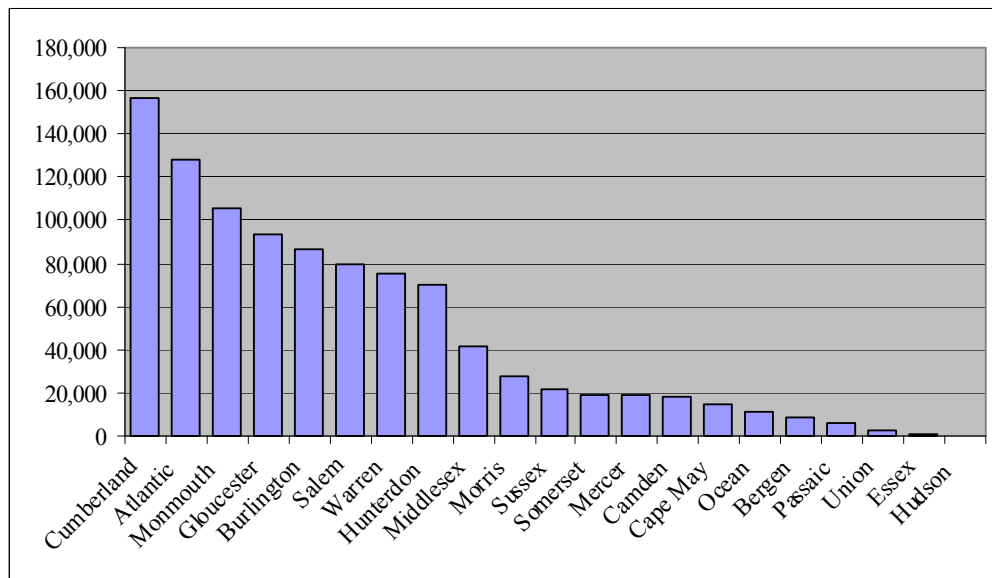
2.0 AGRICULTURAL INDUSTRY IN THE REGION

2.1 MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD

Data on market value of agricultural products sold is available from the US Census of Agriculture on the county level only, so specific data for Upper Deerfield is unavailable from that source. According to the 2007 Census of Agriculture, Cumberland is first among New Jersey counties in the value of its agricultural products, with a total sales value of nearly \$157 million, as seen below in *Chart 1: Agricultural Market Value (\$1,000) in New Jersey, 2007*. Cumberland County was also first in vegetable production in the state and had the highest total sale value of nursery, greenhouse, floriculture, and sod among all New Jersey counties. Cumberland was second in aquaculture. The County is also fifth in the United States for acreage devoted to nursery crops.

Farming and related businesses contributed over \$2 billion in sales, payroll, and expenditures to the county's economy in 2007, which constituted about one-third of the gross county product.

Figure 1: Agricultural Market Value (\$1,000) in New Jersey, 2007



Source: USDA Census of Agriculture, 2007

As seen in the table below, both the market value of agricultural products sold and the average market value per farm have steadily increased over the last twenty years, outpacing the rate of inflation. Of course, the cost of production during this time has increased as well, and so the rising market value does not necessarily indicate a comparable rise in profits.

Table 8: Market Value of Agricultural Products Sold in Cumberland County, 1987-2007

	1987	1992	1997	2002	2007
Market value of agricultural products sold, total sales (\$1,000)	58,235	72,993	94,152	122,672	156,939
Market value of agricultural products sold, total sales (\$1,000) - in 2007 \$, adjusted for inflation	92,745	93,431	104,801	122,672	156,939
Market value of agricultural products sold, total sales, average per farm (dollars)	95,155	9,857	164,315	199,143	255,186
Market value of agricultural products sold, total sales, average per farm (dollars) - in 2007 \$, adjusted for inflation	151,544	153,705	182,899	199,143	255,186

Source: USDA Census of Agriculture, 1987, 1992, 1997, 2002, 2007

Although the Farm Census data does not provide details about Upper Deerfield, the 2007 (Tax Year 2008) farmland assessment data does. Based on that, Upper Deerfield is the #2 municipality in the state in terms of Total Nursery acres (4,217 acres), just behind Upper Freehold, Monmouth County (4,369 acres). These 4,217 acres make up 36 percent of the Total Nursery acres in Cumberland County and 8 percent of the state’s total. The township also has 3,282 acres of Trees & Shrubs, which is 35 percent of the county acreage and 11 percent of the state acreage. There are 741 acres of Sod, which is 18 percent of the county acreage and 6 percent of the state acreage. Clearly, a very high percentage of Cumberland County’s market value of agricultural products sold must derive from Upper Deerfield farms, using percent acreage as a correlative for sales volume.

2.2 CROP AND PRODUCTION TRENDS IN UPPER DEERFIELD

According to farmland assessment data from tax year 2007, field crops occupy the greatest amount of acreage in Upper Deerfield, followed closely by nursery & sod. Vegetables, fruit and berries cover far less acreage in Upper Deerfield, as seen below in **Table 9**. Over the past two decades, the amount of land in Upper Deerfield used for growing vegetables has decreased by 78%, while the amount of land dedicated to nursery and sod has increased nearly five times in size. The number of acres that grow field crops, fruit and berries has increased only slightly over the past twenty years.

Table 9: Acres of Crop Types in Upper Deerfield, 1984 and 2007

Crop Type	1984	2007	% change
Total field crops	5,146	5,355	4%
Total vegetables	3,128	682	-78%
Total nursery & sod	752	4,296	471%
Total fruit & berries	185	213	15%

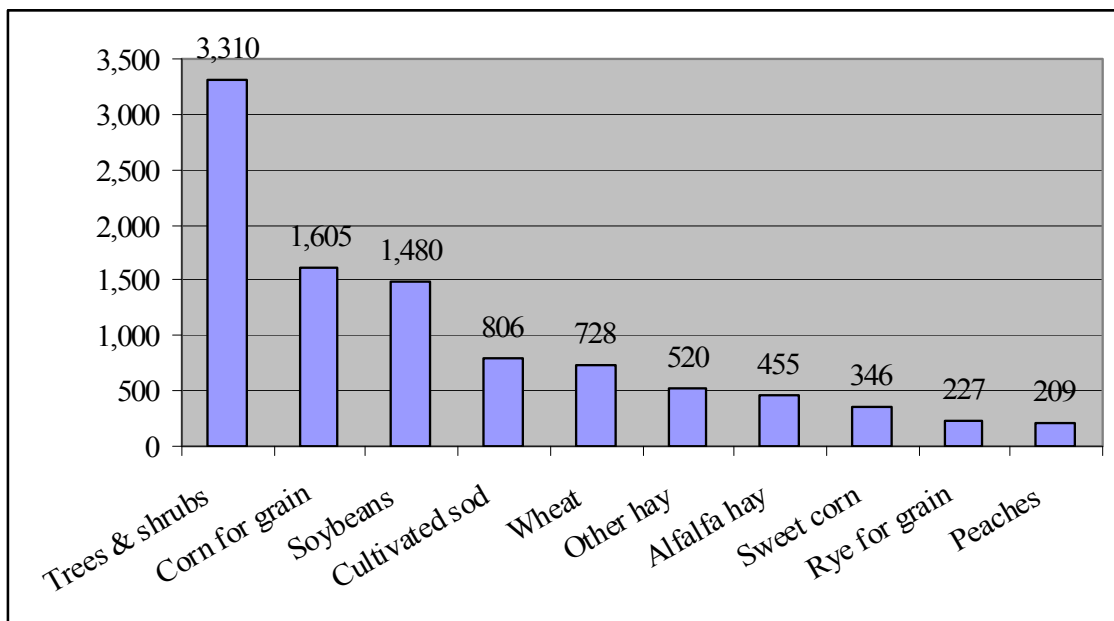
Source: NJ Dept of Agriculture, 1984, 2007

As seen below in **Chart 2: Dominant Crops in Upper Deerfield, 2007**, of the ten crops covering the greatest amount of acreage in Upper Deerfield, six were field crops: corn for grain, soybeans, wheat, other hay, alfalfa hay, and rye for grain. Trees and shrubs were by far the predominant crop in Upper Deerfield in 2007, covering 3,310 acres. Cultivated sod is another major nursery

crop, covering over 806 acres. Sweet corn is the dominant vegetable crop in Upper Deerfield, covering 346 acres, and peaches are the dominant fruit crop, covering 209 acres.

Most livestock inventories in Upper Deerfield decreased as well between 1984 and 2007. The number of beef cattle fell from 132 to 60, and the number of dairy cows plummeted from 783 to 177. Young dairy, sheep, swine, ducks, meat chickens, egg chickens, turkeys, and other livestock all fell during this time period. The number of horses, however, increased from 101 to 237, and the number of goats increased from 6 to 123 between 1984 and 2007.

Figure 2: Dominant Crops in Upper Deerfield, 2007



Source: NJ Dept of Agriculture, 2007

Crop data from farmland assessment records reveal a shift in Upper Deerfield farms over the past two decades to non-food agricultural products. There is less livestock and less county farmland used to grow vegetables, while more land has been dedicated to nursery products and potential sources of energy. The number one crop in the county, trees & shrubs, is primarily used in landscaping. Similarly, corn for grain and soybeans, the number two and three crops, are both edible but are also major sources of biofuel.

2.3 AGRICULTURAL SUPPORT SERVICES AND RELATED BUSINESSES

The agricultural industry in Upper Deerfield is well-served by a number of businesses offering agricultural supplies and services in Cumberland County and adjacent counties. Farmers depend upon these local stores for farming equipment and supplies, seeds, fertilizer, animal feed, irrigation systems, and other farming needs. See **Appendix C: Agricultural Support and Service Businesses in the Upper Deerfield Region.**

Residents of Cumberland County can purchase local produce, flowers, and other agricultural products at one of the 27 roadside markets in Cumberland County, or at one of the 12 farmers markets in Gloucester, Salem, or Camden counties. See **Appendix B: Agricultural Markets and Sales in the Upper Deerfield Region**. These direct markets attract customers from the entire region interested in purchasing fresh, locally grown produce, and are an important source of agritourism. Many of the roadside markets offer customers the opportunity to pick their own produce, such as apples or pumpkins, and may also include nonagricultural products, such as cookbooks or baked goods.

There are many food distributors and brokers in the region surrounding Upper Deerfield Township, as seen in **Appendix C**. A table of cold storage warehouses in southern New Jersey is also included as **Appendix C-3**. Because of its strategic location between major metropolitan areas in the Northeast, southern New Jersey has the greatest concentration of cold storage warehouses on the East Coast.

There are a number of major agricultural support service businesses located in Upper Deerfield that are of great significance to the region and to the agricultural industry in New Jersey. These include the Seabrook Brothers and Sons operation, the Clement-Pappas processing and packaging plant in the center of Upper Deerfield, and the Perdue Jersey Grain elevator and GROWMARK FS, LLC, which are both located on Lake Road. For additional information about these businesses, which serve both national and international markets, see **Section 6.2.3 Agricultural Support Businesses**.



Source: E. Overdeest

The Hubschmidt Farm, one of the remaining dairy farms in the region.

3.0 LAND USE PLANNING

3.1 STATE PLANS

3.1.1 New Jersey Development and Redevelopment Plan

The *New Jersey State Development and Redevelopment Plan* (the State Plan) is a policy guide to be used by state, regional, and local agencies to increase the consistency of planning efforts. Municipal, county, and regional plans may be reviewed by the State Planning Commission to evaluate consistency with the State Plan. Municipal Plan Endorsement is a voluntary review process designed to ensure that coordination and consistency. It is conducted with the assistance of the state's Office of Smart Growth, Department of Community Affairs. The focus of Plan Endorsement is on where and how new development and redevelopment can be accommodated in accordance with the goals of the State Planning Act and the State Plan, and it utilizes a capacity-based planning approach to plan for a sustainable future. If the Commission finds a plan to be consistent, then the plan will be eligible for priority assistance and incentives, including priority for a range of financial grants.

According to the State Plan, there are seven planning areas (excluding water) in Cumberland County in addition to four Pinelands Management Areas. Upper Deerfield Township contains six of the seven planning areas of the State Plan, excluding Parks. The part of the township that is within the Agricultural Development Area is designated as either Rural Planning Area (PA4) or Rural Environmentally Sensitive (PA4B). Along stream corridors, the land is designated as within the Environmentally Sensitive Planning Area (PA5). The area of the township that is also an approved sewer service area has three designations but most of it is in the Suburban Planning Area (PA2). Those areas that border on the City of Bridgeton are designated as Metropolitan (PA1). The area surrounding the intersection of Routes 606 and 617, which is also the County Secondary Agricultural Development Area, is within the State Fringe Planning Area (PA3). See **Map 8: State Planning Areas**, which depicts these planning areas graphically.

The State Plan also designated six existing Centers in Cumberland County, in addition to 23 proposed Centers. The five types of Centers in order of decreasing scale are Urban Centers, Regional Centers, Towns, Villages, and Hamlets. All of the Centers in Cumberland County are Villages or Hamlets with the exception of the two Regional Centers of Millville-Vineland and Bridgeton. Upper Deerfield contains part of the Bridgeton Regional Center, which also extends into Fairfield and Hopewell Townships. The Village of Deerfield located in Upper Deerfield is another center that has been proposed for inclusion in the State Plan.

3.1.2 Agricultural Smart Growth Plan for New Jersey

The state issued an *Agricultural Smart Growth Plan for New Jersey* in November 2003, which focuses on five components: farmland preservation, innovative conservation planning, economic development, natural resource conservation, and agricultural industry sustainability. Within these categories are a total of 13 specific objectives that are further broken down into specific

strategies. Although the Plan is designed to target actions by the state, it includes background information on various techniques and measures that can be used by municipalities.

3.2 CUMBERLAND COUNTY PLANNING

3.2.1 Cumberland County Farmland Preservation Plan

The *Cumberland County Farmland Preservation Plan*, published in 2005, was the official Cumberland County Farmland Plan and an implementing plan for the county's Open Space and Farmland Preservation Tax, which was approved by referendum in 1995. The plan provided data on farmland preservation in the county and described the various programs that were available to the county and its municipalities for preservation. It also identified measures and programs that support the farming industry within the county.

The plan was updated and expanded in 2008-2009, encompassing all the above information and adding considerably more. In addition, 14 project areas were delineated within the county and described and mapped in the updated Plan. The Plan and a Planning Incentive Grant application were submitted by Cumberland County to the State Agriculture Development Committee (SADC) in December 2008. An updated Planning Incentive Grant application was submitted in December 2009. The Plan was adopted by the County Agriculture Development Board on December 2, 2009 and approved by the SADC on December 10, 2009.

3.2.2 Western/Southern Cumberland Region Strategic Plan

The *Western/Southern Cumberland Region Strategic Plan* is a Smart Growth Plan, which was issued in 2005 and funded by the New Jersey Department of Community Affairs. Its goal is to address the balance between needed economic development and environmental protection for each community in the county except the urbanized centers of Millville and Vineland. It recommends strategies for focusing future residential and commercial growth in existing centers, such as the Bridgeton Regional Center, which includes part of Upper Deerfield Township. It also promotes intermunicipal agreements on implementing strategies to protect natural and historic/cultural resources, maintain agriculture, strengthen economic viability, and improve transportation, housing, and community facilities and services. Municipal revenue sharing is also addressed.

The *Western/Southern Cumberland Region Strategic Plan* has been adopted by Upper Deerfield Township but not yet by all of the other included municipalities. It has recently become part of a renewed regional planning process under the guidance of the Cumberland Development Corporation (CDC), which also includes some Delaware Bayshore areas of the county.

3.3 UPPER DEERFIELD TOWNSHIP PLANNING AND REGULATIONS

3.3.1 Municipal Master Plan

The *Upper Deerfield Township Master Plan* was adopted in 1988 and was updated in 1994, in June 2002, and again in July 2003 through the Reexamination Process, during which the earlier goals for the township were carried forward. Two of the major goals of the Master Plan relate to the preservation of farmland and the farming industry:

Goal #1 Preservation of the township’s character and the physical features, both natural and manmade, from which it [the community’s character] emanates and is derived.

Goal #2 Enhancement of the quality of life for all of the community’s residents through the improvement of the township’s ability to deal with development.

The Reexamination Reports all reaffirm these goals. The 2002 and 2003 Reexaminations also reaffirm specific objectives and actions that were articulated in 1994. These include:

Goal #1:

- The Planning Board should specifically review regulations aimed at preserving and protecting farming and farmland to see that they remain valid and fair to all.

Actions for Conservation and Open Spaces:

- The Planning Board should begin analyzing the effect of its zoning on landowners, farming, and residential land uses generally.... The objective should be reworded to read: To discourage residential uses and preclude land use conflicts within agriculturally productive areas and maximize agricultural uses and techniques that will promote and foster continued farming of prime agricultural soils through creative planning.

The 1988 Master Plan has a full chapter on “Agriculture” in the township and a “Conservation and Open Space Plan” with a map. It includes good information on some of the issues affecting farming and farmland then and now. It also lays out specific objectives for the preservation of agricultural resources and the agricultural industry, including:

- To concentrate development and avoid its intrusion into prime agricultural soils areas.
- To discourage and preclude residential uses within agriculturally productive areas and maximize agricultural uses and techniques that will promote and foster continued farming of prime agricultural soils through zoning regulations.
- To develop a policy of economic development that will truly consider agriculture as a business and industry that should be preserved, protected, and enhanced or made to grow.
- To change the outlook of the public on farming and its value to the community beyond the economic impact (i.e., open space and municipal character).

- To consider new approaches to farmland preservation when appropriate, such as the transfer of development rights, and to cooperate in efforts to assure the continued viability of farming.

3.3.2 Current Land Use

Land use within the township is over 60 percent agricultural, with urban areas covering less than 15 percent of the township. Urbanized areas are primarily divided between residential areas with small individual building footprints and commercial or warehousing buildings with large building footprints and accompanying parking lots. An additional five percent of the land area is wetlands, with the remaining areas classified as forested land. Total area for the township is approximately 31.8 square miles. See **Map 5: Land Use/Land Cover (2007)**.

3.3.3 Water and Sewer Infrastructure

Most farms in Upper Deerfield Township obtain drinking water from private wells and rely on private septic systems for sewage treatment. However, there is public water and sewer in the southern part of Upper Deerfield. Sewer service is available to farms on both sides of Route 77 below Northville Road and along both the north and south sides of Landis Avenue (Route 56), but these farms are outside the Agricultural Development Area (ADA). The ADA and the sewer service areas are delineated as opposites. That is, where sewer service is approved, the land is not in the ADA, and vice-versa. There are some minor exceptions to this where the borders overlap slightly and, also, sewer is available in one small region along Route 56 on the eastern side of the township that is also in the ADA. See **Map 10: Sewer Service Area**.

Public water supply is potentially available in the same area as the approved sewer service, although the piping infrastructure, as with sewer, does not extend throughout the approved area. Water availability is an issue in Upper Deerfield because the Upper Deerfield Township Water Department has insufficient capacity to meet peak demand. This has already hampered development of some residential housing in the municipality.

Residents within agricultural areas and farms rely on wells that tap the Kirkwood-Cohansey aquifer. This aquifer has abundant water in this part of southern New Jersey, although there are concerns about future supply. In addition, the unconfined nature of the aquifer makes it subject to potential contamination from both surface sources and septic systems. Recharge of the aquifer is also heavily dependent on the maintenance of open land that has high permeability. Such land also tends to be the best farmland in the municipality, which makes farmland preservation and protection of soils a particularly high priority.

3.3.4 Zoning

Various innovative zoning ordinances that provide incentives to preserve farmland can be adopted by a municipality. Upper Deerfield's current zoning corresponds to existing, county-

level planning, state planning areas, existing and potential infrastructure zones (the approved sewer service area), and the designation of both primary and secondary Agricultural Development Areas (ADA).

Agricultural zoning covers all areas of the county ADA, with the exception of the Deerfield Village area, where an R-1 zone on the western side of the village extends into the ADA. There are also two small areas along the eastern boundary with Deerfield Township that are zoned R-1 and R-2, and they encompass small amounts of acreage within the ADA. A small R-1 district extending north along Center Road (Route 663) from its intersection with Friesburg and Beals Mill Roads is also ADA land. Agricultural zoning extends beyond the boundaries of the ADA on the east side of Burlington Road above Big Oak Road, in the area bounded by Big Oak and Finley roads just west of Centerton Road, and in two areas adjoining the Cohansey River near Seeley Road.

Upper Deerfield's Agricultural Zone permitted density is 0.166 residential units per acre (six acres for each unit). There is also a minimum 500-foot road frontage requirement for each unit. This zoning reduces the attractiveness of farmland for development and is the principal strategy used by Upper Deerfield to maintain intact farming areas. Although a six-acre minimum seems small in comparison to agriculture zoning in central and northern New Jersey, it was a major step forward for a South Jersey municipality when it was adopted in Upper Deerfield. It has proven to be effective, perhaps especially because there was an area of the township where residential growth was encouraged by much higher density zoning.

The Redevelopment Area identified by the township occupies lands bordering Route 77 up to and including the Seabrook area. This region is somewhat smaller than the Bridgeton Regional Center delineated in the *Western/Southern Cumberland Region Strategic Plan*, which includes the redevelopment zone and residential and industrial growth areas in the southwest and south of Upper Deerfield.

The Redevelopment Area in central Upper Deerfield has both sewer service and a rail line. It is a prime area for agriculturally related businesses and, indeed, has some of Upper Deerfield's most important businesses located in it already. These include the Perdue Grain Elevator, which has a railroad spur connecting to the north-south line that runs along the western side of the Redevelopment Zone, and Seabrook Brothers & Sons vegetable processing plant (which is actually adjacent to but not in the Redevelopment Area). The Clement-Pappas fruit processing plant sits just above the northwestern boundary of the Redevelopment Area. In 2009, Upper Deerfield adopted an ordinance amending its Redevelopment Area to incorporate an Agricultural Business zone and a General Industry zone within it. Both zones sit along the rail line and have sidings to utilize the line. The General Industry zone, north of the Agricultural Business zone, terminates at the Clement-Pappas facility, to which the rail line runs.

See **Map 9: Zoning**, which shows the zones of the Upper Deerfield Redevelopment Area, and also **Map 11: County Agricultural Development Areas**. See **Section 6.2.3 Agricultural Support Businesses** for more information on the Redevelopment Area.

3.3.5 Innovative Planning Techniques

Cluster Zoning

A zoning ordinance may have a provision that allows residential development to be clustered on smaller lots than the ordinance allows by right, with the same number of units permitted as would be allowed under conventional development. Clustering involves a requirement to preserve a percentage of the site's land as open space or as farmland. Clustering protects farmland where development is inevitable and does so without the use of public funding. It does not reduce the number of residential units that are possible or direct their placement in planned growth areas, however. Clustering requirements need to be carefully constructed to get maximum open space and minimal impact on the landscape. It is helpful for Agricultural Advisory Committees to have a role in both ordinance design and review when preservation of farmland is the objective.

Conservation Design

Conservation Design is a form of site design that usually involves clustering, but that primarily requires careful analysis of the environmental resources and farming potential so that the housing layout is situated to protect these features. The Growing Greener model for conservation design, developed by planner and landscape architect Randall Arendt of the Natural Land Trust in Media, Pennsylvania, lays out a four-step process for such development. Key provisions are that the protection of open space/farmland is mandatory and that there must be at least 50 percent of open space/farmland retained. The number of units that can be built is determined by the underlying zoning for the site, after primary (nonbuildable) and secondary resources are deducted from the land area calculation. The placement of the housing and deed-restricted open space/farmland is designed through an interactive process with the town. A key element is that the open space/farmland must link to other land areas rather than being isolated.

Upper Deerfield adopted a cluster ordinance that offers an option, on residential parcels of 20 acres or more, that housing units in any subdivision or planned unit development may be clustered on lots of one-acre minimum size, with 20 percent of buildable land being preserved as open space and recreation. Upper Deerfield's cluster ordinance includes some of the provisions of the Growing Greener model, although it does not apply to agricultural areas and is not mandatory. Low-density zoning in agricultural areas and the higher densities allowed in residential zones have so far managed to contain development in Upper Deerfield. The municipality may wish to consider applying the clustering option (with a higher minimum acreage requirement) to agricultural areas as well. This would provide the municipality with the ability to negotiate density and placement away from prime soils and adjacent farm operations in any future applications for development on farmland.

Non-contiguous Cluster Zoning

Non-contiguous cluster zoning allows a parcel to be preserved by transferring its development potential to a non-contiguous parcel. This technique, first authorized in 1996 by the New Jersey Municipal Land Use Law, allows a "sending area" parcel to be preserved as open space or farmland, and the "receiving area" parcel is allowed to be developed at a higher density than would otherwise be permitted. It must be implemented through planned development or between properties otherwise under common ownership. The ability to focus development in designated

receiving areas, except if it is within a planned development, may be more limited than with TDR. This technique is much simpler to administer than conventional TDR programs since it can involve as little as two parcels. To date, it has not been used in Cumberland County.

Transfer of Development Rights

Transfer of Development Rights (TDR) is a municipal planning technique that allows for increased development while preserving farmland and is discussed in greater detail in **Section 4.3.7 Transfer of Development Rights (TDR)**.

Lot Size Averaging

Lot size averaging is a way to allow flexibility in lot sizes on parcels that are slated for subdivision and development. This technique allows some lots in a subdivision to be smaller than would be permitted by the zoning, provided that other lots are larger than the minimum lot size and conform to the intent of the zoning. Like cluster zoning, flexible lot sizes can situate development to allow for the greatest conservation of resources. Stow Creek is the only municipality in Cumberland County to have adopted lot size averaging.

Other Municipal Ordinances

Upper Deerfield Township has in place several ordinances and ordinance provisions that are designed to protect farming operations from undue constraint. A new Right-to-Farm ordinance was adopted in November 2005. Its provisions are very supportive of agriculture and it includes a requirement that a copy of the ordinance be provided by the Tax Assessor to all persons upon the filing of a deed of transfer of property. The ordinance does differ somewhat from the model ordinance recommended by the State Agricultural Development Committee. The Upper Deerfield ordinance is included here as ***Appendix F***.

Buffering requirements between agricultural lands and nonagricultural uses are fairly substantial in Upper Deerfield Township. Buffers between farmland and residential or other land uses must be 150 feet.

The Agricultural Advisory Committee may wish to review all of the innovative techniques described here and make suggestions about those that should be considered or reconsidered. However, Upper Deerfield has always had farmers serving on its official bodies and in elected offices. Farming concerns and needs are a regular part of the governance and land use dialogue in this township.

3.3.6 Township Development Pressures and Land Value Trends

Development pressure in Upper Deerfield is relatively high in comparison to other local townships. Within Cumberland County, Upper Deerfield authorized the fourth highest number of residential building permits between 2000 and 2006, after Vineland, Millville, and Bridgeton. The majority of these were single-family homes, although a number of multifamily units were authorized in 2005, 2006, and 2007 as shown below in *Table 10: Residential Building Permits Authorized in Upper Deerfield, 2000-2007*. Major subdivisions have not been very large in Upper Deerfield, but the steady growth of residential units along road frontage and the

development of smaller subdivisions in the township are a constant encroachment on farming operations and on the health of the farming industry in the township.

Table 10: Residential Building Permits Authorized in Upper Deerfield, 2000-2007

Type	2000	2001	2002	2003	2004	2005	2006	2007*	Total 2000-2007			
Total	16	17	23		21	20	60		57	57	271	
Single	16	17	23		21	20	41		40	37	215	
Multi	0	0	0		0	0	1	9	17	20	5	6

*As of November 2007

Source: US Census Bureau, Construction Statistics Division, 2000-2007

The easement value is the difference between the developable value of a parcel and the value of the raw land. Easement values in Upper Deerfield have generally increased in the past few years. For the 2005-2006 round of applications for the Farmland Preservation Program, the certified per-acre easement values of farms in Upper Deerfield ranged from \$2,500 to \$8,450, with an average value of \$4,990. For the 2006-2007 round, per-acre easement values increased greatly, ranging from \$6,650 to \$7,500, averaging \$7,050. Easement values were somewhat lower in the 2007-2008 round, when values ranged from \$5,100 to \$7,300, averaging \$6,350.

Raw land values, or the value of the land as strictly a farm without additional development, have also generally increased over the past few years. In the 2005-2006 preservation round, raw land values (from three different appraisers) in Upper Deerfield ranged from \$3,400 to \$7,500, with an average value of \$4,356. In the 2006-2007 round, raw land values were slightly lower, ranging from \$3,500 to \$4,250, averaging \$3,858. Raw land values increased in the 2007-2008 round, ranging from \$4,200 to \$5,200, averaging \$4,817. The average easement values in Upper Deerfield have increased at a faster rate than the raw land values, indicating the increasing development pressures in the township that have been driving up the value of development.



Source: DVRPC

The Edgar Joyce Nursery

4.0 FARMLAND PRESERVATION IN UPPER DEERFIELD TOWNSHIP

4.1 COUNTY AGRICULTURAL DEVELOPMENT AREA

The Agricultural Development Area (ADA) is the area within which farms in the county are eligible for preservation funding by the county and state. The ADA is an area of relatively contiguous productive agricultural land that has a strong potential for continued productive use in the future. On the county level, the County Agriculture Development Board (CADB) must approve the location of the land where agriculture is the preferred but not necessarily exclusive use. The statutory criteria for ADAs, described in N.J.S.A. 4:1C-18, include being relatively free of suburban and commercial development, but does not have other requirements.

County criteria adopted in 2004 include the following, in addition to the statutory criterion mentioned above:

- The ADA encompasses lands that 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 non-conforming use
- The ADA encompasses entire tax lots only, and if any part of the tax lot meets the criteria for the ADA, then the entire tax lot shall be included within the ADA;
- The ADA only incorporates tax parcels that are eligible for Farmland Tax Assessment;
- The ADA consists of those areas where a majority of the land has been classified by the USDA-NRCS as prime soils or soils of statewide importance and those that are located in State Planning Areas 3, 4, 4B or 5.

The ADA established by Cumberland County includes 10,831 acres in Upper Deerfield Township, which is 54 percent of the town's total acreage. See **Map 11: County Agricultural Development Areas** for a depiction of the ADA.

In Cumberland County, the ADA was originally divided into Primary and Secondary ADA areas based on location in State Planning Areas. Areas PA4 and PA4B were considered primary and farmland in PA3 and PA5 was secondary. The subdivision of the ADA was eliminated in 2004 when the county criteria were amended. **Map 11** shows no subdivision of the ADA.

Farms outside of the ADA can be preserved with state and county funds, but the ADA must first be amended to incorporate them. Amending the ADA for farms that are outside of but contiguous to ADA boundaries may be done as long as state and county criteria are met. The mapped ADA should reflect the most recent application of the criteria.

4.2 PRESERVED FARMLAND

4.2.1 Preserved Farmland in Upper Deerfield Township

A total of 12,398 acres in Upper Deerfield are farmland assessed (see *Appendix A*). Of that total, 3,584 acres have been permanently preserved. The majority of these properties – 3,382 acres – are located in the northern and northeastern areas of the township, flanking Route 77 and north of Big Oak Road. Another 137 preserved acres are found on the southeastern side of the township.

Two farms are enrolled in the eight-year preservation programs. Currently, there are seven farms that have applied for preservation through the county easement program but have not yet signed contracts (as of February 2008). These farms occupy a total of 362 acres, of which 183 acres (4 farms) are located within the Upper Deerfield Farmland Preservation Project Area and are “Target Farms” for preservation (see **Section 5.2: Project Area**). The remaining farms are located in the southeast section of the township.

All preserved farms are shown on **Map 14: Existing Open Space** and are listed in the following **Table 11** along with farms in the Eight-Year program.

Table 11: Properties Enrolled In Farmland Preservation Programs in Upper Deerfield Township

Block	Lot	Owners	Acres	Program	Total Cost	County Share
Permanent Preservation						
102	2	Joyce, E. + Son Inc A NJ Corp	27.12	County Easement	See 302/2 below	
102	3	Tice, Leon M & Arlene G. & Milton C.	90.80	County Easement	\$190,856	\$48,380
102	4	Ansink, Carroll J.	58.74	County Easement	\$119,088	\$29,110
102	7	Sloat, Robert K. + Frances C.	12.98	County Easement	See 301/21 below	
103	2	Myers, Harrison M. & Elizabeth C.	137.27	County Easement	\$630,264	\$162,818
201	1	Johnson Farm Enterprises	173.53	County Easement	\$551,826	\$140,465
201	4	Johnson Farm Enterprises	65.00	County Easement		
201	5	Garrison, Donald C. + Louise E.	27.42	County Easement	\$172,347	\$71,218
202	2	Johnson Farm Enterprises	58.35	County Easement	\$260,912	\$66,930
202	3	Johnson Farm Enterprises	68.60	County Easement		
202	4	Garrison, Donald C. + Louise E.	6.47	County Easement		
202	5	Garrison, Donald C. + Louise E.	22.80	County Easement		
301	3	Johnson Farm Enterprises	81.06	County Easement	\$594,113	\$152,403
301	4	Johnson Farm Enterprises	56.66	County Easement		
301	8	Scheese, Donald + Joan	49.60	County Easement	\$104,844	\$26,599
301	10	Eachus, T. Glenn + Ella Mae	86.78	County Easement	\$178,350	\$44,805
301	11	McCracken, Donald J. + Harriet G.	21.26	County Easement	\$60,265	\$16,801
301	18	Mehaffey, Gilmer C. Sr. & Jr. & Addiso	26.65	County Easement	\$197,269	\$47,577
301	19	Mehaffey, Coolidge	79.84	County Easement		
301	21	Sloat, Robert K. + Frances C.	42.67	County Easement	\$197,360	\$55,725
301	22	Indian Mills Nursery Inc	98.36	County Easement	\$174,920	\$42,758
302	2	Joyce, E. + Son Inc A. NJ Corp	56.54	County Easement	\$175,824	\$42,979
401	2	Griscom, John Thomas Est.	120.16	County Easement	\$217,625	\$53,197

Block	Lot	Owners	Acres	Program	Total Cost	County Share
404	35	Mehaffey, G. Douglas & Linda	117.75	County Easement	\$197,270	\$47,577
501	6	Brock, Ed Jr. Brock Farms Inc	62.43	County Easement	\$752,652	\$193,072
501	9	Brock, Edward + Angelina	116.27	County Easement		
501	9.04	Brock, Edward + Angelina	9.91	County Easement		
502	1.01	Brock, Edward + Angeline	47.38	County Easement		
502	1.02	Brock, Edward + Angeline	49.22	County Easement		
502	11	Brock, Edward + Angelina	41.12	County Easement		
502	16	Seabrook Investment Partners LP	132.69	County Easement	\$177,003	\$40,458
502	19	Dubois, Henry + Steven	101.46	County Easement	\$213,114	\$54,274
604	39.01	Chiari, Donald & Catherine	38.64	County Easement	\$54,723	\$12,769
604	39.02	Chiari, Brenda	14.59	County Easement	\$27,931	\$21,022
607	13	Palischak, Michael P.	47.36	County Easement	\$107,982	\$30,582
607	14	Orzechowski, Dorothy	28.00	NJCF non-profit easement	\$226,908	\$89,286
607	16.05	Mooneyham, Carl & Geraldine	23	County Easement	\$155,936	\$155,936
701	10	Hopewell Nursery	206.91	County Easement	\$655,528	\$146,233
705	3	Henry, John R., Jr. & Harriet A.	154.00	County Easement	\$1,161,803	\$441,485
708	5.03	Henry, John R., Jr. & Harriet A.				
801	10	Dubois, Henry + Steven	55.00	County Easement	See 502/19 above	
801	11	Dubois, Henry D. + Steven J.	67.36	County Easement		
801	12	Dubois, Steven J. + Henry D. Jr.	5.68	County Easement		
802	1	Wenger, James N. + Barbara J.	159.77	County Easement	\$315,714	\$78,098
822	6	Ceppaluni/Dubois, Steven Jr.	56.29	County Easement	\$143,396	\$0
822	6.14	Ceppaluni/Dubois, Steven Jr.	49.15	County Easement		
901	1	Hluchy, Robert F. & Joyce L.	68.99	County Easement	\$560,413	\$224,165
901	1.03	Hluchy, Robert E.	65.68	County Easement	\$560,413	\$224,165
901	10	Hluchy, Robert E.	109.28	County Easement		
1001	2	Coles, Frank S. & Hannah M.	85.04	County Easement	\$144,157	\$57,663
1001	2.01	Coles, Frank S. & Hannah M.	6.19	County		
2101	1	Creamer, Alice	5.78	SADC Direct	\$66,098	\$0
2101	2 01	Creamer, Alice 26.76		SADC Direct		
2401	47	Apel, Susan	36.00	SADC Direct	\$132,123	\$0
2701	19	E. Brock LP	33.26	SADC Fee Simple	\$210,000	\$0
2701	21	E. Brock LP	28.72	SADC Fee Simple		
Total Acres Permanently Preserved			3,518.34		\$9,689,027	\$2,818,55
Total Number of Parcels Permanently Preserved			55			
Total Farms Permanently Preserved			33			
8-Year Program						
				Expiration Year		
1102	2.01	Coombs, Alfred Jr & Katherine J.	6.74	2016		
1108	6	Overdevest, Edward J.	49.00	2012		
		Total Acres in 8-Year Program	55.74			

Source: Cumberland County Dept. of Planning and Development, 2008, 2010

4.3 DESCRIPTION OF FARMLAND PRESERVATION OPTIONS

4.3.1 Purchase of Development Easements

This most common of farmland preservation techniques entails the purchase from a landowner of the right to develop his or her land for nonagricultural purposes. Once those rights are purchased, the land is deed-restricted by a development easement while the land continues to be privately controlled. The easement value is determined by two independent professional appraisals and is the difference between the fair market development value of the land and the value of the land as farmland. The land continues to be farmed and can be sold to another farmer in the future at whatever market price is then current for preserved farmland in the area. Land must be farm-assessed to be eligible. Taxes continue to be paid on this privately held land.

Landowners may sell development easements through the Cumberland County program, which is administered by the County Agriculture Development Board (CADB), or directly to the State of New Jersey through the State Agriculture Development Committee (SADC). In both cases, the farmland is ranked on a number of criteria and high ranking farms are approved for the purchase of development easements. An offer is then made to the landowner, who can accept or reject it. State acquisition through the SADC may be done through the purchase of development rights (direct easement) or outright purchase (fee simple). County acquisition may also be done through the purchase of development rights (traditional county easement purchase), although currently the emphasis is on the county Planning Incentive Grant (PIG) program.

Within state and county programs, appraisal rules dictate that the value of an easement, and of land generally, is to be based on comparable recent sales of farmland in the area. This puts the preservation programs at a disadvantage in relation to the higher, speculative land offers made by developers. In addition, development easement offers are for only part of the value of the land—the easement value.

It can be difficult to compare the financial, as well as the more intangible, benefits of preservation versus development. The advantage of preserving farmland with the easement purchase method is that a landowner gets to continue living on his/her land and can sell it or leave it to heirs, knowing that it will remain open and in farming. The sale of development easements nearly always reduces estate taxes as well. None of this is true with a sale to a developer. A disadvantage of most developer land offers is that there tend to be “contingencies” attached to them – conditions that must be met, such as Planning Board approvals for a proposed development, before the offer



Source: E. Overdeest

The preserved Edgar Joyce Nursery

will be finalized. This can significantly delay a final sale.

The advantage that a developer has is that an offer for land can be above market value due to the speculative nature of development. The developer can offer more than land is currently selling for because the cost can be folded into each future residential housing unit and because the increased amount will not actually be paid out for a few years.

Almost all of Upper Deerfield's farmland preservation has been funded through the purchase of development easements using a combination of county and state money. See **Section 4.6: Farmland Preservation Funding** of this Plan for more details.

4.3.2 Planning Incentive Grants

The State Agriculture Development Committee (SADC) has established a farmland preservation Planning Incentive Grant (PIG) program to provide grants to eligible counties and municipalities as a means of supplementing current farmland preservation programs. This funding, referred to as the PIG program, has as its goal the protection of large areas of contiguous farmland on good soils to enhance the long-term viability of the farming industry in a given area. The SADC has recently transitioned away from its emphasis on the County Easement Purchase program, which preserves individual farms throughout the ADA. Instead, PIG grants are now the primary funding source for preserving farmland at the county level.

Through the PIG program, the county delineates Project Areas, which are regions with high concentrations of farm-assessed parcels, preserved farmland, and high-quality farmland. Within these Project Areas, targeted farms are identified and listed. The list of targeted farms is to be updated annually to reflect changes, such as additions of new farms or deletions of successfully preserved farms. The PIG process at the county level is to be done in coordination with township preservation efforts.

A municipality may also develop a Farmland Preservation Plan and apply for a municipal PIG grant. A community can receive up to \$1.5 million per year through this funding source, although new SADC rules require that a given year's appropriation must be spent within three years or the funding will be withdrawn. A municipality must generate some matching funds, although it can do so in partnership with the County Agriculture Development Board and through county funding. The new rules also include a provision that nonprofit organizations can obtain Planning Incentive Grants for farmland preservation, with the funding to be utilized within two years.

In order to be eligible for PIG funding, a municipality must adopt a farmland preservation plan element into its municipal Master Plan, appoint an Agricultural Advisory Committee (AAC), and delineate one or more project areas where farms are "targeted" for preservation if the owners are interested. Two other eligibility requirements for the municipal PIG program are a dedicated source of funding and a Right to Farm Ordinance consistent with the Right to Farm Act and the SADC model. In addition, the AAC is expected to promote measures that the township could take that would strengthen the farm industry and remove barriers to farming.

PIG funding allows a municipality to obtain its own state funding and promote preservation and farming within the community directly, as an addition to the state and county efforts. Targeted farms within the planning area are “preapproved” and do not undergo the ranking and competition for preservation dollars that are part of the direct state and county easement purchase program. The municipality can work more directly with farm landowners through its AAC. This tends to strengthen interest in preservation by landowners in the community.

PIG funding does impose a financial obligation on the municipality, since the state funds must be matched at a ratio of about 60 percent state to 40 percent municipal and/or county, depending on land values. A town needs a dedicated source of preservation funding to meet this requirement so that it can consider bonding for its share of the match and use the dedicated funds for bond financing. However, the PIG funding is like a line of credit from the state: only when a municipal commitment is made for an easement or fee-simple purchase does the funding come into use. It is at that point that municipal and county funding is also required.



Source: DCRPC

Casper Nursery

Overall, PIG funding increases farmland preservation in a community, but it does require additional effort and financing, especially at the municipal level. For Upper Deerfield Township, Cumberland County is in a position to fund at least half of the non-state share of any municipal PIG project, or up to 25 percent of the total cost, through its Open Space and Farmland Preservation Trust Fund. The County Open Space and Farmland Preservation Trust continues to grow substantially due to increased ratables and expanding assessment value of total county property.

Recently promulgated procedural rules for the SADC strongly support the use of PIG funding by both counties and municipalities in the future, along with the use of other techniques that will support maintenance of agricultural lands and industry viability.

4.3.3 Fee-Simple Acquisition

Farmland can be purchased outright through a fee-simple sale. This approach is sometimes used when a landowner wishes to retire but has no heirs to continue farming or does not want to go through the process of severing the development rights and then selling the land to another farmer.

Fee-simple acquisition is available through the Cumberland County program but since it is more expensive than the purchase of development rights, it has not been used due to limited financial resources. The State of New Jersey, through the SADC’s Fee Simple Program, does purchase

farmland outright, especially in cases where there is a threat from imminent development. After severing the development rights, the state then resells the land to an interested farmer through an auction. In Upper Deerfield, the Buono farm (now Brock) was preserved using the State Fee Simple program.

4.3.4 Installment Purchase

Development easements may be purchased through an installment purchase agreement that spreads payment over a period of time, typically 20 to 30 years. Payments to the landowner are semiannual, tax-exempt interest payments and the principal is due at the end of the contract term. A landowner may sell the installment purchase agreement at any time and thus recoup the principal.

There are considerable tax advantages to the installment purchase for a landowner. In addition, the installment purchase stretches county and other public funding dollars and allows more acquisitions. All farmland preservation purchases in Burlington County are done on an installment basis and Cumberland County is currently investigating the establishment of such a program.

Where possible, installment purchases of farms, where payments will occur over a five-year, a six-year, or a greater period, should be sought. This would allow the municipality to consider bonding for acquisitions through a capital budget. In addition, some landowners may prefer this method of payment for tax purposes or other reasons.

4.3.5 Donation

Land, or the development rights to the land, can be donated by a landowner to a public entity or a non-profit organization, either directly or by will. The contribution is tax-deductible and can be used effectively in estate planning. Such a donation will, of course, ensure that the land remains free from development.

4.3.6 Nonprofit Organizations

Some nonprofit land trusts are actively preserving farmland in southern New Jersey, either through fee-simple acquisition or through the purchase of development rights. SADC grants can provide up to 50 percent of the fee simple or easement value. Funding for nonprofit preservation has largely been for open space through Green Acres funding, but the SADC will also provide PIG funding to nonprofits for agricultural land preservation. The New Jersey Conservation Foundation (NJCF), for example, has a farmland project area that encompasses Piles Grove and Mannington townships in Salem County. NJCF was also responsible for funding one farm preservation project in Upper Deerfield Township, subsequently transferring ownership of the easement to the county. In addition, funding from nonprofit organizations could be found for the identified Important Bird Areas in southern New Jersey. The Cohansey River is such an area.

Discussions by Upper Deerfield with groups like the New Jersey Audubon Society and the New Jersey Conservation Foundation could be very beneficial to the township's land preservation efforts overall and farm preservation specifically.

4.3.7 Transfer of Development Rights (TDR)

In 2004, the New Jersey legislature authorized the establishment of TDR programs throughout the state. Prior to that, only Burlington County could preserve farmland through this market-based program. Six municipalities were selected by the state to develop their own TDR programs as demonstration projects.

A TDR program involves the establishment of a geographical sending area within a municipality where development is to be restricted, and of a receiving area where development is to be encouraged. Sale of the transferred development rights involves establishing a TDR bank or other financial mechanism by which landowners in a sending area are compensated for relinquishing their development rights and where development rights for the receiving area are purchased. The development rights generate greater density of development in the receiving area, which is the principal incentive for their purchase by a developer. Sending and receiving areas must be approximately equal in development potential for the TDR program to work, and the sending area generally needs water and sewer infrastructure in order to support the increased development density.

A TDR program has the distinct advantage of preserving land and containing sprawl development without any expenditure of public funds. It is complicated and somewhat expensive to establish, however, and does not reduce overall growth, although growth is directed to the most appropriate areas. For a town that has the proper infrastructure in place and a sufficiently sized, well-planned receiving area, a TDR program can generate significant land preservation and innovative development.

The Cumberland Development Corporation (CDC) is currently working on completion of a regional plan for part of the county. This plan encompasses the Western/Southern Cumberland Region Strategic Plan, which had stalled after its initial development, plus areas along the Delaware Bayshore. The regional plan will include an examination of TDR possibilities for each included municipality, which may reopen discussion and reconsideration of TDR in Upper Deerfield.

Upper Deerfield has the sending area resources and development infrastructure available to make some form of TDR a possibility, although the most logical receiving area for residential housing – the southwest section of the township – is nearly built out. Another opportunity is the Redevelopment Area in upper Deerfield along Route 77. The township has recently changed this from a general industry zone to an eco-industrial-agriculture zone, but it could be focused as a receiving area for a TDR program.

As in other towns in Cumberland County, Upper Deerfield officials have been following the progress of the TDR program in neighboring Hopewell Township, to determine whether and how

TDR might work for their own municipality. Results to date have not been encouraging. In addition, certain other measures may be needed to make TDR a reality. Such changes include amendments to the state TDR Act, expedited state approvals, greater grant funding, and increased development demand. In the case of Upper Deerfield, the current unavailability of public drinking water within a residential or commercial/industrial receiving area is also a consideration.

4.3.8 Regional Transfer of Development Rights Programs

The TDR legislation enacted by the state in 2004 allows for regional TDR programs involving more than one municipality. Such programs would be similar to the Pinelands program, where “growth areas” are equivalent to receiving areas and “Pinelands Development Credits” are the medium of transfer of development rights and the payment for severing those rights within sending areas.

No group of municipalities has yet developed a regional program, although this would address the difficulties in rural communities that lack infrastructure or that lack sufficient acreage for a receiving area. A regional program would also direct growth to those towns that need to grow and/or redevelop. The principal barriers to regional TDR pertain to the sharing of costs for the growth that would be borne by the receiving municipalities. The New Jersey legislature is considering an impact fee program that would offset these costs. New Jersey law does not permit a transfer of tax revenues between municipalities, which may be needed before such programs can be developed.

Another barrier to Regional TDR may exist in the nature and current status of municipalities that are logical receiving areas. That is, developers may not be attracted to these towns because of their declining infrastructure or services, especially pertaining to schools. Conversely, the increased density benefits, if shared revenues were possible, might offset and actually improve these communities to a degree that would make regional transfer highly attractive.

Upper Deerfield is located in a region with a logical receiving area in the City of Bridgeton, where the growth would be appropriate. Conversations with Bridgeton and other surrounding towns have been undertaken in the recent past but need to be continued and



Source: E. Overdevest

The Johnson Farms Nursery

expanded to determine if a regional approach could be made to work.

4.3.9 Agricultural Enterprise District

An agricultural enterprise district is similar to an Urban Enterprise Zone program, such as exists in Vineland, New Jersey, in that it is a designated area where businesses (farm operators) have the opportunity to voluntarily participate in the program and take advantage of important economic benefits. These can include benefits similar to those provided by the SADC eight-year preservation program, plus streamlined and expedited water allocation certification, cost-free business plans, management and training services, financial and estate planning, expedited approvals on government loans and costs shares, minimum wage offset grants, broader exemption from sales tax, and other incentives. In turn, the farm owner enters into a term agreement during which time the farm is preserved through an agricultural easement, and the program has right-of-first refusal if the owner chooses to sell the property.

The Cumberland County Board of Agriculture and the Cumberland County Agriculture Development Board proposed this concept in 1990 in a white paper produced by the two organizations. In 2006, a Pilot Agricultural Enterprise District was again proposed for the Gloucester, Salem, and Cumberland County region by the Tri-County Agricultural Retention Partnership (TARP), which is a collaboration of farmers and organizations working in support of agriculture and farm preservation in the area. Such a project requires state approval and allocation of funding similar to the state's eight-year preservation program. It also requires approval by the three counties. To date, Salem and Cumberland counties' Boards of Agricultural and County Agricultural Development Boards have approved the concept, and Gloucester County approvals are being sought. Such a proposal has been part of the Cumberland County Farmland Plan for some time. Municipalities could opt into such a program if it is approved at the state and county levels.

4.3.10 Eight-Year Program

Farmers can participate in an eight-year farmland preservation program to temporarily preserve their land for eight years. This program can serve as a trial period for farmers to see if preservation is the right choice for them. The program requires that the property remain in agricultural production and places restrictions on allowable nonagricultural development on the property during the eight-year period.

Although the program offers no direct compensation, farmers are offered a number of incentives to participate in the program, including grants covering up to 50 percent of the cost of approved soil and water conservation projects, use of farm structures without approval from an architect or engineer, and points toward the purchase of development easements. If a farm owner chooses to sell the farm during the eight-year period, the State Agriculture Development Committee (SADC) has the first right and option to match the conditions of any contract of sale and purchase the property itself.

Upper Deerfield currently has two farms totaling 58 acres that participate in the eight-year program. See *Table 11: Properties Enrolled In Farmland Preservation Programs in Upper Deerfield Township*.

4.4 CONSISTENCY WITH SADC STRATEGIC TARGETING PROJECT

The three primary goals of the Strategic Targeting Project of the SADC are

1. To coordinate farmland preservation / agricultural retention efforts with proactive planning initiatives.
2. To update/create maps used to target preservation efforts, and
3. To coordinate farmland preservation efforts with open space, recreation, and historic preservation investments.

These goals are realized through protection of large areas of reasonably contiguous farmland that will promote the long-term economic viability of the agriculture industry through the Planning Incentive Grant (PIG) program. The Strategic Targeting Project seeks to target farmland with high-quality soils outside of areas slated for growth by state and local planning efforts. To be eligible for the municipal PIG program, a municipality must establish an Agricultural Advisory Committee, maintain a dedicated source of funding for farmland preservation, establish a farmland preservation plan element, and adopt a right-to-farm ordinance. Upper Deerfield has satisfied all four requirements for the municipal PIG program.

The Upper Deerfield Township Committee established an Agricultural Advisory Committee (AAC) in September 2006 to oversee the development and implementation of a Farmland Preservation Plan and to recommend actions to the Township Committee that will support the agricultural industry. The AAC is composed of five members, including three farmers who farm lands that they own, one member who is the chairman of the township Environmental Commission, and one member who is a township committeeman. See the Acknowledgements page for a list of AAC members. All meetings of the AAC are open to the public and dates of two larger public meetings on development of this Farmland Preservation Plan were published in the newspaper of record for the township, *The Bridgeton News*.

As discussed below in **Section 4.6: Farmland Preservation Funding**, Upper Deerfield has a dedicated source of funding for farmland preservation from the Cumberland County Open Space and Farmland Preservation Trust Fund Tax. Upper Deerfield has also established an agricultural preservation element of its Master Plan and has passed a Right-to-Farm Ordinance, as discussed in **Section 8.1.1: Right-to-Farm Ordinance and Farm Buffers** on page 74.

4.5 COORDINATION WITH OPEN SPACE PRESERVATION PROGRAMS

Cumberland County has a great wealth of natural resources and thriving ecosystems, and preserving farmland is an essential element of planning that also helps to prevent development from encroaching on the habitat of threatened and endangered species. The *Cumberland County Farmland Preservation, Open Space, Parks, and Recreation Trust Fund Plan*, published in 1996, promoted purchasing easements to preserve farmland, adopting conservation design ordinances

by municipalities, increasing collaboration to strategically target preservation, creating a coordinated network of agriculture and open space, and cultivating a philosophy of preservation. These concepts were carried over into the 2009 Cumberland County Farmland Preservation Plan. Cumberland County Freeholders also recently embarked on development of a countywide Open Space Plan.

To date, the Cumberland County Open Space and Farmland Preservation Trust Fund Tax has been used solely for farmland preservation rather than for other open space purchases.

4.5.1 Upper Deerfield Open Space and Recreation Plan

In 2007, Upper Deerfield Township completed and adopted an *Open Space and Recreation Plan*, which laid out both a greenway system for potential preservation and also identified the importance of farmland preservation as a component of the greenway system. Because the farmland preservation plan was under development at the same time as the open space plan, ideas and decisions were coordinated between the two plans and the two committees. The *Open Space Plan* has provided a partial basis for determining the boundaries of the Project Area in this farmland plan.

Map 14: Greenways System shows the areas of focus for open space protection. These are concentrated near the Cohansey River, along tributary streams, and through connecting links. Some of these proposed linkages are across farmland, but there are no specific plans to create trails or other public access on farm properties. An old railroad bed is depicted as a potential trail in the Plan and on **Map 14** and is part of a current Cumberland County initiative to promote rails-to-trails in the county. This former rail route is under the ownership of many farm landowners but consists of a raised bed that is not cultivated land.

The *Open Space Plan* proposes the potential acquisition of agricultural lands as open space for this former railroad land, for some woodland sites that may be on farm-assessed land, and for possible greenway easements along streams. There is one 25-acre farmland-assessed parcel adjacent to the current recreational complex in Upper Deerfield that is of interest to the township for acquisition in order to expand the complex slightly, provided the owner is willing to consider a sale. Otherwise, no open space funds are proposed for use in acquiring farmland. Indeed, the goals of both the *Open Space Plan* and this Farmland Preservation Plan are consistent with each other and with the township's aims of maintaining a strong, active agricultural industry.

The Landscape Project, produced by the Endangered and Nongame Species Program of NJDEP's Division of Fish and Wildlife, was also consulted in determining where protective areas are most important and where the focus of preservation should occur. The description of the Project Areas in this Farmland Preservation Plan incorporates information drawn from that source. **Map 12: Landscape Project Habitat Priorities** is also included here as a reference.

4.5.2 Open Space Preservation Funding

Upper Deerfield's current open space acreage has been funded almost entirely by the township itself in conjunction with New Jersey's Green Acres Program. Funding for the Bostwick Lake property came from the Stewart Estate. There are also 25 acres of preserved land that were a noncontiguous open space transaction from a development project.

4.6 FARMLAND PRESERVATION FUNDING

Upper Deerfield's farmland preservation has been achieved through the efforts of Cumberland County and the State of New Jersey. The county's funds are generated by the Cumberland County Open Space and Farmland Preservation Trust Fund Tax, which is equal to one cent per \$100 of assessed property value and which generated \$786,912 in 2006. To date (end of 2007), 12,537 acres of farmland have been preserved in Cumberland County.

The county share of funding has ranged from 20 to 40 percent, depending on per acre value of a farm being preserved. The balance has come from the New Jersey Garden State Preservation Trust (GSPT), 40 percent of which was allocated to farmland preservation beginning in 1999 through the administration of the State Agriculture Development Committee (SADC). The SADC also reimburses the County Agricultural Development Board (CADB), which administers the county funding, for 50 percent of the costs for appraisals, title work, and surveying. As ***Table 11: Properties Enrolled in Farmland Preservation Programs in Upper Deerfield Township*** shows, over \$9.6 million has been spent to acquire farm easements in the township, of which over \$2.8 million was supplied by the Cumberland County Trust Fund.

GSPT was originally intended to continue until 2009, but funds from the Trust were expended at a more rapid pace. A resolution on the November 2007 ballot in which state preservation funding was proposed for a one-year period (fiscal year 2009: July 1, 2008 to June 30, 2009) was approved by the voters. This enabled passage of the Green Acres, Farmland, Blue Acres, Historic Preservation Bond Act of 2007, which provided a total of \$200 million, of which \$73 million was available for farmland preservation.

A resolution enabling the next round of funding, for a two-year period (July 1, 2010 to June 30, 2012), was approved by voters in November 2009. This established the Green Acres, Water Supply and Floodplain Protection and Farmland and Historic Preservation Bond Act of 2009, authorizing the state to bond for \$400 million, of which \$146 million is for farmland preservation. These dollars will be available after the legislature and governor appropriate the funds and the treasurer sells the bonds that the voters authorized.

Most farmland preservation in Cumberland is in the form of purchases of development easements, although farms can be bought outright through fee-simple acquisition by either the county or the state. Such farmland has its development rights permanently eased (removed) and is then resold to interested farmers through an auction. Due to the higher costs involved, Cumberland County has not yet purchased any farmland in fee simple. One farm has been purchased and preserved in this way by the State, and it was subsequently resold.

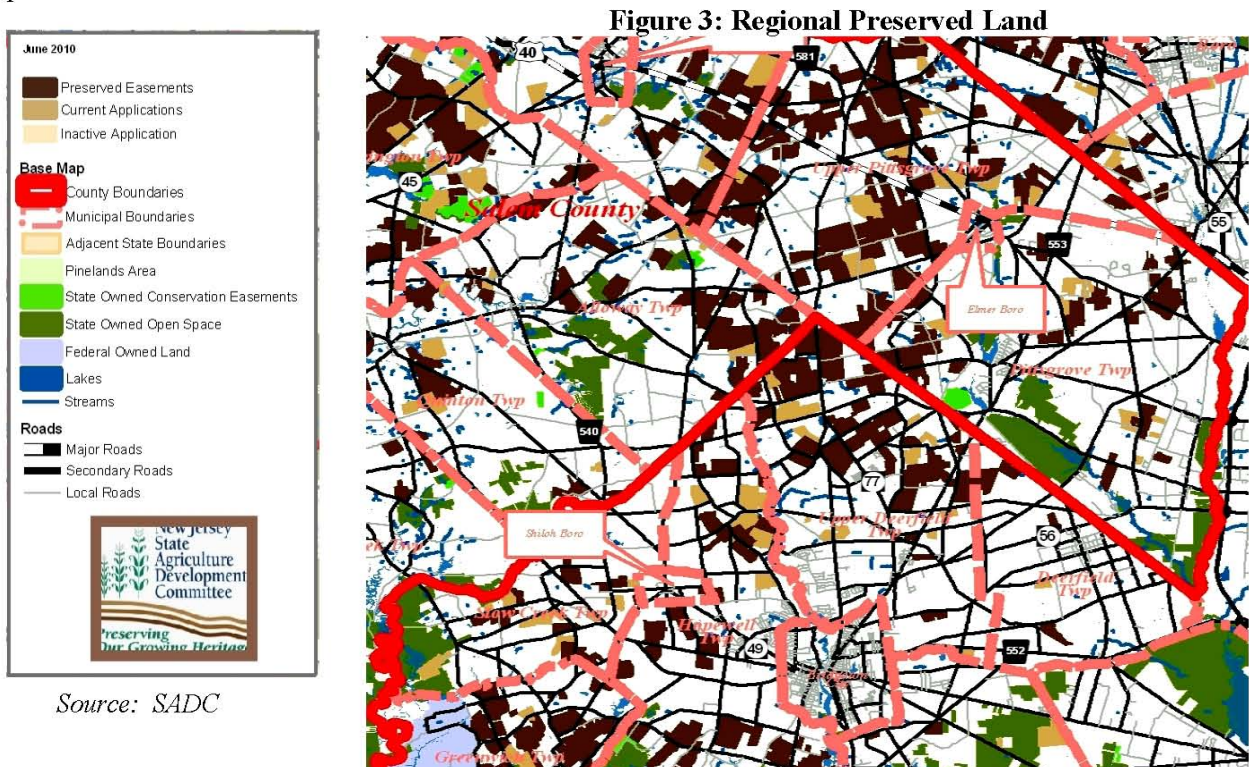
4.6.1 Municipal Funding

Many New Jersey communities have adopted a tax to support a local Open Space and Farmland Preservation Trust Fund. This typically begins as a one cent tax per \$100 of assessed property value, but can be as high as nine cents per \$100. These funds usually also support historic preservation. They can be used for direct acquisition or as the municipal match to county and state funding. Trust funds are the source of matching dollars for most active recreation land acquisitions, and their match to county funding for farmland preservation often increases the ranking level of a particular farm. If the tax impacts of expanded school enrollments due to increased development are compared to the preservation tax, the preservation tax will always be substantially less.

A community may choose to fund its Preservation Trust through a means other than a tax. Annual allocations from general funds or direct bonding are two means used by some New Jersey communities including Upper Deerfield, which has been allocating \$50,000 per year from its general fund to a Preservation Trust fund. The objective is to have a dedicated source of funding for preservation within the community.

In general, the amount of funding that a municipality can generate is not enough to accomplish much direct preservation of land. Municipal funding can, however, provide bond financing that will provide substantial dollars for the preservation effort. A municipal Preservation Trust can also fund the planning and other direct costs of the municipal preservation program.

Considerable farmland has been preserved in Upper Deerfield Township and in adjacent townships in Cumberland and Salem counties. Many preserved and unpreserved farms cross political boundaries.



The map in **Figure 3: Regional Preserved Land**, which is extracted from a larger regional map prepared by the SADC, shows this large cluster of farmland and the numerous farms sitting astride the borders of townships.

4.7 MONITORING PRESERVED FARMLAND

Upper Deerfield Township relies on the Cumberland County Farmland Preservation Program to conduct annual monitoring of preserved farmland through its regular monitoring program. The CADB is responsible for monitoring county-held easements and the SADC monitors state-held easements acquired through the SADC Easement Purchase and Fee Simple programs. Each farm that has been in the Farmland Preservation Program for at least 12 months is inspected to ensure compliance with the requirements of the program. The monitoring program checks to make sure that no new non-agricultural buildings have been constructed without prior approval, that pre-existing non-agricultural uses have not been expanded, and that the site appears to be a functioning and viable agricultural operation. Upper Deerfield Township and the Agricultural Advisory Committee will report suspected easement violations to the CADB and/or the SADC, as needed.



Source: E. Overdevest

Harmony Valley Nursery



Source: E. Overdevest

A Peach Orchard in winter

5.0 FUTURE FARMLAND PRESERVATION PROGRAMS

5.1 FARMLAND PRESERVATION PLANNING GOALS AND OBJECTIVES

5.1.1 Preservation Goals and Objectives

The Upper Deerfield Township Agricultural Advisory Committee established the following goals and objectives for its Farmland Preservation Plan and Program:

Goal 1: To retain viable farmland and a healthy agricultural industry in Upper Deerfield Township.

Objectives:

- To increase land preservation resources of all types that are devoted to protecting farmland and agriculture.
- To permanently preserve those farmlands that are essential to the maintenance and protection of the agricultural industry within Upper Deerfield Township, based on soil quality and land use planning criteria.
- To determine areas of the township where permanent preservation of farmlands would be enhanced by municipal programs and funding, in conjunction with and supplemental to state and county farmland preservation programs.
- To implement regulatory measures, policies, and programs that will protect and enhance agriculture and the agricultural industry within the township.

Goal 2: To educate Upper Deerfield residents about the benefits of farming in the community.

Objectives:

- To increase understanding of the role of farming in Upper Deerfield Township's history, economic well-being, and character as a community, so as to increase support for the farming industry and for farmland preservation.
- To advise residents, especially new residents, about the right to farm in the township, so as to reduce potential conflicts and misunderstandings.

5.1.2 Project Area - Goals

Acreage Goals

One-year goal = 412.6 acres

Five-year goal = 2,063 acres total

Ten-year goal = 4,126 acres total

To arrive at meaningful goals for municipal preservation efforts is difficult, given the entirely voluntary nature of the farmland preservation program. Nonetheless, the total area of target farms within the Project Area can be spread across a 10-year period of time. To the degree that Upper Deerfield Township can increase preservation above these goal levels in the earlier years,

when costs are presumably lower, it can maximize the benefits of the Planning Incentive Grant funding.

5.1.3 Open Space, Recreation, and Farmland Preservation Questionnaires

As part of the planning process for Farmland Preservation and for the township's Open Space and Recreation Plan, a short questionnaire was developed and distributed to township residents as an enclosure with tax bills being mailed in August 2006. The questionnaire was completed and returned by 236 residents. A copy of the 10-question document and a summary of the results are included as **Appendix I**.

In June 2007, a more targeted questionnaire about farming in Upper Deerfield was included with the farmland assessment applications mailed to all holders of farm-assessed land. A total of 90 of the "Future of Agriculture in Upper Deerfield Township" surveys were returned. The survey and a summary of results are included in **Appendix G**.

The farmer survey indicates that Upper Deerfield farmers generally support increased farmland preservation, although the respondents were split evenly as to whether they will preserve their own land. Approximately half thought that the farmland preservation program was a positive force, but the other half felt easement prices were too low, program funding was insufficient, or zoning in Upper Deerfield put them at a disadvantage regarding values. The majority of the farmer respondents plan to continue farming for many years, although there was not a lot of optimism about the future of farming. Very few of the farmers felt that there were problems with neighbors, financing, availability of labor, and other business factors, but the majority gave property taxes a low rating on this question. About one-third of respondents would support new restrictions that could help prevent developments from being built on farmland, but felt such a restriction might have a negative impact on farmland value. Another one-quarter answered this question by marking "depends on circumstances."

5.2 PROJECT AREA

The Agricultural Advisory Committee recommended the establishment of one Agricultural Project Area in the township, focusing on the area of farmland-assessed parcels within and above the broad ring of preserved farmland in the northern part of the township and extending down around other preserved farmlands on the eastern side of the township. The Project Area is described here and is depicted on **Map 1: Agricultural Project Area**, on **Map 2: Agricultural Project Area - Detail**, and on **Map 3: Soil Classification of Agricultural Project Area**.

5.2.1 Project Area – Description

The Project Area (PA) totals 9,233 acres and is located in the northern half of the township, spanning either side of Route 77 and down along the eastern side to Richards Road. Within the PA there are 7,303 acres of farm-assessed parcels, which is a density of farming to total land use

of 79 percent. Of these parcels, 130 are 20 acres or larger in size or part of a farm that is that size or larger. These parcels are operated as 58 farms and are the target farms within the PA. See **Table 14: Upper Deerfield Project Area and Target Farms**, located at the end of this Section.

Another 25 farms (53 parcels) on 3,390 acres are permanently preserved. That is, 36.7 percent of the PA is permanently preserved.

Soils in the PA are among the best in the region. Of all soils within the boundaries of the PA, 3,595 acres (87.15 %) are prime soils and 299.7 acres (7.26 %) are soils of statewide importance. On the target farms, 3,426 acres, or 88.9 percent, are classified as prime soils and 280 acres (7.6%) are soils of statewide importance.

Farmland in the PA has been ranked by the Landscape Project as critical or suitable for grassland-dependent species of rare animals. The Landscape Project, developed by the Endangered and Nongame Species Program of the NJDEP Division of Fish and Wildlife, documents the value of various types of habitats within New Jersey. It then ranks these habitats as to their importance. The highest ranking goes to habitat areas where there has been a documented occurrence of one or more species that are on either the federal or the state Threatened and Endangered Species lists, and where there is a sufficient amount of habitat type to sustain these species. Habitat without such documented occurrences, but which are of the type and size that could sustain these species, are ranked as “suitable.” **Map 12: Landscape Project Habitat Priorities** depicts the rankings and habitat types for all of Upper Deerfield Township.

Approximately half of the habitat in the PA is classed as “critical” for species of birds that are dependent on grasslands for nesting and foraging. Half is ranked as “suitable” and would support or could possibly support endangered reptiles such as bog turtles. Agricultural lands tend to fulfill these requirements for grassland-dependent species, especially if fields are of moderate size or are left in an uncut condition for part of the year (for bird species), or if there is some wetland or wet forest meadow habitat within cultivated fields (for bog turtles). In addition, two areas within the PA, one on the east side and the other on the west end, are ranked as critical upland forest habitat.



Source: E. Overdeest

Agricultural fields use water for irrigation, but also allow for groundwater recharge.

Groundwater recharge is an important issue in Upper Deerfield Township because of the dependence on the Kirkwood-Cohansey aquifer for drinking water supply and agricultural use. The New Jersey

Geological Survey has developed a methodology for mapping and ranking land as to groundwater recharge potential, using precipitation records, soil surveys, and land use/land cover data. Recharge is measured as the amount of precipitation that will reach the water table in one year. **Map 13: Groundwater Recharge** shows the recharge potential for all of Upper Deerfield Township.

In the PA, as in most of upland Upper Deerfield Township, the recharge potential is mixed. Approximately half of the area is measured as recharging rainwater at 11-12 inches per acre per year. The balance is shown on the map as recharging six to 10 inches per year, but a closer analysis shows it to be consistently at the upper end of this range, at 10 inches per year.

In general, on high recharge lands, the large amounts of paving and high impervious cover that come with development have the most detrimental impact, although they are often the places that are most suitable for building because they are well-drained, buildable soils. Conversely, these are regions where the dilution of substances from septic systems may be problematic because the soils are more “porous.” Maintaining farmland on these high recharge soils is obviously a better use for the land in protecting the quantity and quality of groundwater drinking supply.

5.3 MUNICIPAL AND COUNTY MINIMUM ELIGIBILITY CRITERIA

The SADC’s new rules at N.J.A.C. 2:76-6.20 set forth minimum eligibility criteria for all farms participating in the Planning Incentive Grant. Upper Deerfield’s Agricultural Advisory Committee and the Cumberland County Agriculture Development Board have recommended that the municipality’s eligibility match these criteria. That is,

For lands less than or equal to 10 acres in size:

- the land must produce agricultural or horticultural products of at least \$2,500 annually;
- at least 75 percent of the land, or a minimum of five acres, whichever is less must be tillable;
- at least 75 percent of the land, or a minimum of five acres, whichever is less, must consist of soils that are capable of supporting agricultural or horticultural production; and
- the land must exhibit development potential based on certain standards.

For lands greater than 10 acres in size:

- at least 50 percent of the land, or a minimum of 25 acres, whichever is less, must be tillable;
- at least 50 percent of the land, or a minimum of 25 acres, whichever is less, must consist of soils that are capable of supporting agricultural or horticultural production; and
- the land must exhibit development potential based on standards set forth in the rule.

In determining the target farms within the Project Area, Upper Deerfield has used a minimum farm size of 20 acres. This size relates development potential to the township’s Agricultural Zoning. However, for both the county and for Upper Deerfield, the eligibility criteria are somewhat flexible, and farms are considered on an individual basis. Waivers of minimum size,

for example, can be granted in certain circumstances, such as when a farm is surrounded by contiguous preserved farmland.

5.4 MUNICIPAL AND COUNTY RANKING CRITERIA

The Cumberland County Agriculture Development Board has developed an Easement Purchase Program Scoring Worksheet that ranks farms based on six criteria: soil quality, boundaries and buffers, local commitment, size and density, degree of imminence of change, and special considerations.

Upper Deerfield Township has elected to use a modified version of Cumberland County's ranking criteria as the basis for its own criteria, which does not include a local commitment score. The boundaries and buffers factor carries more weight in the ranking criteria of Upper Deerfield than in Cumberland County. The SADC's ranking criteria is similar to that of Upper Deerfield and Cumberland County, but it has an additional tillable criterion (included within the size and density criterion of the other scoring systems) and it weights soil quality lower and size and density higher. See **Appendix D: Upper Deerfield Farmland Preservation Program – Ranking Criteria/Scoring Worksheet.**

5.5 MUNICIPAL AND COUNTY HOUSING POLICIES

Upper Deerfield Township policies pertaining to housing opportunities, division of premises, and approval of exceptions will be modeled on those of Cumberland County and will accord with all state requirements.

5.5.1 Approval of Housing Opportunities

Agricultural labor housing must be approved by the SADC and the CADB, who both recognize the need to house those who work on farms. Agricultural labor housing provides onsite residential opportunities for farm workers and their immediate families who are employed full or part time on the farm in order to enhance the economic viability of the agricultural operation. As discussed in **Section 6.2.1: Farmer Support**, there are a number of financing opportunities to enable farmers to construct housing for agricultural labor. Such housing may not be used as a residence by the farm owner or his/her family, however.

Replacement housing must also be approved by the SADC and the CADB. The county has no additional policies on replacement housing beyond the state requirements, although consideration should always be given to minimizing impact on the agricultural operation. According to SADC Policy P-31, the intent of a Residual Dwelling Site Opportunity (RDSO) is to provide the limited future construction of a residential unit or units for agricultural purposes on presently preserved farms. RDSOs are allocated prior to preservation at a density not to exceed one housing unit per 100 acres, including existing units. Each request must first be approved by the CADB and then evaluated by the SADC. The landowner must complete a CADB/SADC application and adequately explain how the construction and use of the residential unit is for agricultural purposes. The residential unit must be occupied by at least one person

engaged in farming activities, including production, harvesting, storage, grading, packaging, processing, or sale of crops, plants, or animals. The location of the dwelling unit must be approved by both the SADC and the CADB, as well as by the municipal planning board. There are no restrictions on the relationship of the occupant(s) of the unit and the owner of the premises but the unit can be used only for agricultural labor housing. If approved, the applicant has up to three years from the date of approval to construct the residential unit.

5.5.2 Division of the Premises and Approval of Exceptions

Upper Deerfield Township has not developed specific policies pertaining to division of premises and approval of exceptions. For the present, the township will follow county practice regarding these situations and will accord with all state requirements.

As described in SADC Policy P-30-A, a landowner wishing to divide a permanently deed-restricted parcel must receive the joint approval to do so from the CADB and the SADC. This policy requires that the division be for an agricultural purpose. The SADC's main objective in preserving land is to retain large masses of viable agricultural land. Agricultural parcels become less viable if reduced in size. A landowner requesting a division of premises must answer a series of questions relating to the current and proposed lot lines of the parcel, the current and proposed agricultural use of the parcel, and future agricultural viability, such as access and soil quality, of the preserved parcel(s). If a landowner can satisfactorily demonstrate that the new parcels can support viable agricultural operations, the CADB and the SADC may approve the division.

The application for farmland preservation allows for a portion of the property to be excepted from (not included in) the preservation. This exception can be either severable or non-severable. A severable exception can be sold separately from the remainder of the premises and can be subdivided, neither of which is possible with a non-severable exception. If farmland that is being preserved does not have an attached dwelling, it may be advisable to require that a nonseverable exception be incorporated into the preservation application, in order to allow for a future dwelling to be built. However, this need varies with the size of the parcel being preserved and other conditions. In addition to dwelling opportunities, exceptions can be taken to maintain nonagricultural uses.



Source: DVRPC

Looking across a sod farm to Deerfield Street village

The Agricultural Advisory Committee of Upper Deerfield will examine the merits of such a requirement over the course of the next few months. Care will be taken to minimize the size and number of exceptions and their impact on agricultural operations. In the meantime, it will be

guided by the County Agricultural Development Board’s experience with exceptions.

5.6 FUNDING PLAN

The estimated cost to preserve farmland within the township’s Agricultural Project Area is shown in **Table 12** below. The cost estimate is based on a multiplication factor of \$6,008 per acre for purchase of development rights, which was provided by Matt Pisarski of the Cumberland County Farmland Preservation Program.

Table 12: Total Acreage and Cost of Targeted Project Area Farms

	Acreage of Unpreserved Farms	Total Cost
Total 4,12	6	\$24,789,008
75% of Total	3,094.5	\$ 18,591,756

Source: Cumberland County Dept. of Planning and Development, 2008

This figure is based on actual average appraisal values in 2006 in Upper Deerfield Township. The figure is an average amount for the acquisition of development rights, incorporating all types of land on all the farms that were appraised for consideration in 2006. In other words, some farm appraisals were higher in average value, and some were lower, depending on the amount of tillable land and other factors. The township recognizes that the actual cost for acquiring development rights or making fee-simple purchases, based on certified appraisals of farmland in Upper Deerfield Township in 2006 and after, will vary for individual farms and may be more expensive than this estimate.

Funding for this program is calculated for 75 percent of the cost of all acreage because it may be assumed that not all farms will be available for preservation and that other methods of preservation may offset the need for direct acquisition. In addition, the total cost is a decidedly theoretical amount, based on an estimated average price as of 2006 rather than on the actual cost of acquiring development easements.

As indicated in **Table 12**, a total of 3,094.5 acres of agricultural land is proposed for preservation through the acquisition of development rights within the township, at a total estimated cost of \$18,591,756.

5.6.1 Future Municipal Funding

Upper Deerfield Township’s governing body has opted to allocate \$50,000 per year from the township budget to the Open Space and Farmland Preservation Trust Fund as a dedicated source of funding for municipal land preservation. The township could generate its match to funding from the state through the issuance of a 20-year municipal bond. To finance this bond, the balance now in the municipal Trust Fund, with subsequent year additions and retained interest, would provide part of the bond financing. Upper Deerfield does not currently have any local

debt, so the cap on bonding would be less limiting to the township than for many other municipalities. Actual debt limits are regulated by a state statute that determines allowable debt for a municipality as a percentage of its total assessed value. Also, the township currently has no general purpose tax because of the revenue that Upper Deerfield receives annually from an Atlantic Electric Substation agreement.

If voters approve a one- or two-cent open space and farmland preservation tax, the trust funds would cover fully the bond debt service, while also allowing continued growth of the trust. The total amount that a one- or two-penny tax per \$100 of assessed value would generate in Upper Deerfield is \$43,500/annum and \$86,900/annum, respectively. See **Section 4.6.1 Municipal Funding** for additional background on this topic.

It is not unreasonable to believe that voters will approve a one- or two-penny tax for this purpose, based on results of the survey conducted for the Open Space and Recreation Plan (see **Appendix I**). An ongoing information campaign about the value and use of the trust funds and how much land is being preserved would help to assure that outcome.

5.6.2 County Funding

Cumberland County will continue to pursue its farmland preservation program, utilizing state funding and the County Trust Fund. In past years, substantial sums have been provided for acquisitions of Upper Deerfield Township farm easements. The County Trust Fund continues to grow, as was mentioned earlier (**Section 4.6 Farmland Preservation Funding**), due to increasing ratables, and the Farmland Preservation Program is likely to be able to support at least a 20 percent match to state PIG funding. There is no formal agreement of the 20 percent county match, and funding is determined on a case-by-case basis.

For purposes of this financial plan, it is assumed that the county program will provide \$371,835 annually for the 10-year period of a possible PIG grant to the municipality, for a total county contribution of \$3,718,351. **Table 13**, below, breaks down the components.

Table 13: Upper Deerfield Project Area Farmland Preservation – Cost Sharing

Year	Township	County	State	Total
2010	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
2011	\$371, 835	\$371, 835	\$1,115,505	\$1,859,175
2012	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
2013	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
2014	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
2015	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
2016	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
2017	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
2018	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175

Year	Township	County	State	Total
2019	\$371,835 \$	371,835 \$	1,115,505	\$1,859,175
Totals	\$3,718,351	\$3,718,351	\$11,155,054	18,591,756

Source: DVRPC, 2008

5.7 FARMLAND PRESERVATION PROGRAM ADMINISTRATIVE RESOURCES

Upper Deerfield Township's Planning Incentive Grant will be implemented by its Agricultural Advisory Committee (AAC). The township staff and administrator will provide support for these efforts. The township does not have GIS capability and relies on its engineer for mapping. Legal assistance will be provided by the township solicitor.

Over time, the township may need to enter into an agreement for services by a preservation coordinator consultant, or create a staff position that could handle the implementation of the current plan on at least a part-time basis. Towns that make this commitment find that they have much greater success with preservation generally, and that there is also a greater inclusion of agriculturally beneficial practices and efforts included in economic planning.

5.8 FARMLAND PRESERVATION PROGRAM LIMITATIONS

The primary limitations on the farmland preservation program in Upper Deerfield are funding and landowner interest. Farmland preservation depends upon the availability of adequate state funding and the local ability to leverage those funds. The current uncertainty of state funding is a major challenge that needs to be addressed if farmland preservation is to be successful in the years to come.

Another limitation on farmland preservation is the rising cost of the program. As development pressure and land values have increased over the past few years, the costs of easements have increased as well. At the moment, the development market is at nearly a standstill and prices for land have dropped to some degree. However, once the economic situation improves, development pressure can be expected to rise in this part of New Jersey, especially because of its lower land prices.

Landowner interest in farmland preservation is a major factor limiting the success of the program. Many landowners may be reluctant or unwilling to preserve their farms, especially if they do not feel that the final appraisal values for an easement are reasonable.

Although land supply may be a limitation in many counties in New Jersey, it is not a significant factor in Upper Deerfield due to the municipality's wealth of agricultural land. However, if the pace of development continues or accelerates, the availability of land may also become a limitation.

Table 14: Upper Deerfield Project Area and Target Farms

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
1	902	1	Achee, R. Gray	27.08	Parsonage Road			18.79	69.40	4.46	16.47
2	404	4	Ackley, Allen D. Jr. & Joan M. Ackley	11.05	W. Deerfield Road			11.05	99.96	0.00	0.00
	404	4.04	Ackley, David B. & Nancy J.	23.93	W. Deerfield Road			15.17	63.38	8.76	36.62
	404	5	Ackley, David B. & Nancy J.	22.48	W. Deerfield Road			15.95	70.94	6.53	29.05
	404	5.02	Ackley, David B. & Nancy J.	1.96	W Deerfield Road			1.05	53.66	0.90	46.09
	404	4.02	Ackley, Joan	23.67	W Deerfield Road			18.93	79.98	4.74	20.03
	404	4.03	Ackley, Lillian C/O David Ackley	24.05	W Deerfield Road			16.45	68.40	7.60	31.59
3	1001	4	Aldrich, Ronald & Sylvia	5.48	Cake Road			5.18	94.46	0.30	5.48
	1001	4.01	Aldrich, Ronald S.	23.64	Cake Road			16.38	69.30	7.26	30.70
4	404	31	Allison, Mary Emma W. Trust	43.57	Old Deerfield Pike			40.18	92.22	3.39	7.79
5	502	18	Arcoleo, Linda Brock Farms Inc	33.79	Polk Lane			25.15	74.44	8.64	25.57
6	602	1	Bacon, John F. Jr.	63.34	Old Burlington Road			49.66	78.41	4.19	6.61
7	701	11	Barber, George & Joan	5.51	Big Oak Road (Rear)			5.51	100.01	0.00	0.00
	703	2.01	Barber, George & Joan	6.63	Big Oak Road			6.63	100.05	0.00	0.00
	701	11.01	Barber, John & Angeline	7.53	Big Oak Road			7.53	99.94	0.00	0.00
	703	2	Barber, John A & Angeline M.	10.61	Big Oak Road			10.61	100.03	0.00	0.00
8	602	5	Berger, Peter & Kathleen	17.52	Deerfield Road			7.53	43.00	4.68	26.74
9	501	9.03	Bernstein, Michael & Lucinda	12.52	Polk Lane			12.52	100.00	0.00	0.00
	501	9.08	Bernstein, Michael & Lucinda	13.78	Polk Lane			13.78	100.01	0.00	0.01
10	704	2.01	Bianchi, Charles R. & Marilyn T.	16.64	Richards Road			16.64	100.00	0.00	0.00
	704	2	Bianchi, Marilyn & Sullo, John	5.96	Centerton Road			5.96	100.00	0.00	0.00
11	501	9.02	Brock, Edward M. Sr. & Angelina	63.73	Polk Lane			63.72	99.98	0.01	0.01
	501	7	E Brock Limited	21.24	Deerfield Road			6.68	31.44	0.00	0.00
	501	7.01	E Brock Limited LLC	20.99	Deerfield Road			7.57	36.04	0.00	0.00
12	601	1	Casper, Todd K. & Margret L.	6.97	Old Burlington Road	Applied-Co		5.81	83.34	0.00	0.00
	601	1.01	Casper, Todd K. & Margret L.	7.57	Old Burlington Road	Applied-Co		47.76	631.31	0.00	0.00
	501	17	Casper, Todd K. & Margret L.	5.81	Polk Lane			34.40	592.38	0.00	0.00
13	501	4	Cattell, Maillard Et. Al.	47.76	Deerfield Road			72.17	151.12	11.52	24.13
	501	5	Cattell, Maillard, Rhetta, Emily	34.40	Deerfield Road			22.69	65.97	0.00	0.00
14	701	10.01	Centerton Nursery Inc.	83.70	Woodruff Road			48.20	57.59	1.03	1.24

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
15	801	7	Chiari, John III & Ron Overstreet	22.69	Old Burlington Road			36.42	160.51	0.00	0.00
16	708	2.04	Comley, George E. & Helen	49.23	Weber Road						
17	103	1	Coombs, George A. & Son Inc.	36.42	Highway 77						
	101	1	Coombs, George A. & Son, Inc.	0.63	Highway 77			11.88	1886.05	0.00	0.00
	102	1	Coombs, George A. & Sons Inc.	11.10	Highway 77			0.86	7.70	0.00	0.00
18	801	5	Darick, Warren & Dorothy	11.88	Northville Road (Rear)			7.77	65.41	0.00	0.00
	801	9	Darick, Warren & Dorothy	0.86	Old Burlington Road (Rear)	Applied-Co		17.03	1991.56	4.21	492.53
	801	6	Darick, Warren H.	7.77	Old Burlington Road			13.40	172.44	7.58	97.56
19	404	32	Fox, Frank A.	58.43	Old Deerfield Pike			52.36	89.62	6.07	10.39
	703	21	Fox, Glendon & Harold	7.75	Richards Road			7.75	100.03	0.00	0.00
	703	21.01	Fox, Glendon W. Sr. & Grace Elizabeth	17.02	Richards Road			17.02	100.01	0.00	0.00
	705	13	Fox, Harold & Glendon	22.59	Centerton-Big Oak			22.59	99.99	0.00	0.00
20	703	1	Fox, Wilbert	24.92	Big Oak Road			24.92	100.00	0.00	0.00
	704	6	Fox, Wilbert	19.10	Big Oak Road			19.10	100.02	0.00	0.00
	704	7	Fox, Wilbert & Rose	34.54	Richards Road	Applied-Co		34.54	99.99	0.00	0.00
21	602	3	Garrison, Roger	17.42	Old Burlington Road	Applied-Co		16.77	96.28	0.00	0.00
	103	4	Garrison, Stella S.	100.40	Griers Lane	Applied-Co		100.33	99.93	0.00	0.00
22	603	8	Garton, Ella C J. Ciarleglio	35.03	Old Burlington Road			35.03	100.01	0.00	0.00
23	604	33	Garton, Jeffrey E. & Deborah L.	15.54	Northville Road			13.47	86.68	2.07	13.32
	604	34	Garton, Jeffrey E. Sr. & Deborah	6.97	Northville Road			6.97	99.96	0.00	0.00
	606	6	Garton, Jeffrey E Sr & Deborah	19.82	Weber Road			19.82	99.98	0.00	0.00
	603	9	Garton, Mrs Wilbert C/O J. Ciarleglio	1.78	Old Burlington Road			1.78	100.00	0.00	0.00
24	604	32	Gosbin, Charles & Sherry	26.22	Northville Road			20.31	77.47	5.91	22.54
25	402	3	Haines, Chas W 11t, Larchmont Farms	149.08	W Deerfield Road			122.99	82.50	26.09	17.50
	402	22	Haines, Chas W 11t, Larchmont Farms	0.52	W Deerfield Road			0.52	99.38	0.00	0.00
26	708	3	Hayes, Garrett P.	34.07	Husted Station Road			33.37	97.96	0.69	2.03
27 708		9	Hopewell Nursery	80.22	Weber Road			80.22	100.00	0.00	0.00
	604	28	Hopewell Nursery Inc	7.42	Northville Road			7.42	100.05	0.00	0.00
28	201	1.01	Johnson Farm Enterprises	11.66	Highway 77			11.66	100.04	0.00	0.00
	201	2	Johnson Farm Enterprises	126.63	Olivet Road			126.63	100.00	0.00	0.00
	202	1	Johnson Farm Enterprises	197.09	Highway 77			197.09	100.00	0.00	0.00

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
	403	1	Johnson Farm Enterprises	167.72	Center Road			151.06	90.06	3.84	2.29
	403	5	Johnson Farm Enterprises	61.32	Center Road			49.52	80.76	11.79	19.23
	404	1	Johnson Farm Enterprises	10.08	Center Road			10.08	99.97	0.00	0.00
	404	33	Johnson Farm Enterprises	42.02	Center Road			33.59	79.95	8.42	20.04
	202	8.01	Johnson Farms Enterprises	70.90	Deerfield Road			64.42	90.86	6.48	9.14
	202	10	Johnson Farms Enterprises	84.17	Deerfield Road			81.77	97.15	2.39	2.84
	301	3.01	Johnson Farms Enterprises	24.44	Tices Lane			23.31	95.38	1.13	4.62
29 301		1	Johnson, Albert	60.81	Highway 77			60.81	100.00	0.00	0.00
30	201	3	Johnson, Donald & Nancy	79.50	Griers Lane			73.64	92.63	2.84	3.57
	404	34	Johnson, Donald M. Jr. & David K.	33.48	Center Road			33.48	100.00	0.00	0.00
31	304	1	Joyce, George & Mary Ann Jr.	0.55	Friesburg Road			0.55	99.78	0.00	0.00
	302	13	Joyce, George E. Jr., & Mary Ann	5.56	Friesburg Road			3.62	65.10	1.94	34.94
	302	13.01	Joyce, George E. Jr., & Mary Ann	37.44	Friesburg Road			24.95	66.64	4.11	10.99
32	501	9.06	Keene, Lona	23.80	Old Burlington Road			23.80	99.99	0.00	0.00
33	707	2	Kim Sod Co	54.18	Centerton Road			45.11	83.26	9.07	16.74
34	1001	5.01	Loew, Frank E. & Linda S.	1.87	Cake Road			0.68	36.41	1.19	63.63
	1001	5.02	Loew, Frank E. & Linda S.	28.33	Cake Road			25.71	90.76	2.62	9.25
	1002	3.01	Loew, Frank E. & Linda S.	2.03	Cake Road			2.03	99.80	0.00	0.00
	1002	4	Loew, Frank E. & Linda S.	53.17	Cake Road			26.82	50.45	4.68	8.81
	1002	3	Loew, Frank E. & Linda S.	54.33	Cake Road			40.59	74.72	2.02	3.72
35	606	3	Marcus, David M. & Christopher	52.38	Husted Station Road						
36	706	1	Mccaffery, Thomas J. Jr. & Carmella T.	35.44	Big Oak Road			29.24	82.52	6.19	17.47
37	102	5	Mcnaughton, William J. & Gail A.	54.07	Tices Lane			51.86	95.90	0.67	1.24
38 302		1	Mehaffey, Carl	28.26	Center Road			22.25	78.72	5.99	21.20
	403	6	Mehaffey, Douglas & Michele	25.06	Center Road			25.06	100.01	0.00	0.00
	403	7	Mehaffey, Douglas G.	19.23	Harmony Road			19.23	100.00	0.00	0.00
	1003	1	Mehaffey, Douglas G.	55.23	Old Deerfield Pike			51.33	92.94	3.90	7.06
	1003	7	Mehaffey, Douglas G.	41.44	Old Deerfield Pike			37.28	89.97	4.15	10.02
	1003	7.04	Mehaffey, Douglas K. & Michele	32.21	Old Deerfield Pike			22.90	71.11	2.73	8.46
39	403	2	Mehaffey, Robert & Debra	73.40	Harmony Road			53.20	72.47	0.00	0.00
	403	3	Mehaffey, Robert & Debra	43.04	Harmony Road			43.04	100.00	0.00	0.00

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
	1002	2	Mehaffey, Robert & Debra	11.81	Harmony Road			8.78	74.37	3.03	25.62
	1002	2.04	Mehaffey, Robert & Debra	8.35	Harmony Road			1.76	21.08	3.79	45.39
40	502	3	Milliken, Robert & Dorothy	42.70	Northville Road			32.48	76.06	0.00	0.00
41	403	4	Mooneyham, Lynn & Shirley Ann	43.93	Harmony Road			43.93	100.01	0.00	0.00
	1001	3	Mooneyham, Lynn & Shirley Ann	15.63	Harmony Road			15.63	99.97	0.00	0.00
	1002	1	Mooneyham, Lynn & Shirley Ann	5.63	Harmony Road			5.63	100.06	0.00	0.00
42	202	8	Moore, John W.	49.44	Deerfield Road			43.87	88.73	5.58	11.28
43	706	4	Nicosia, Irene F.	31.30	Richards Road			31.30	99.99	0.00	0.00
44 707		6	Ondrush, Philip III	66.51	Centerton Road			52.88	79.50	13.64	20.50
45	801	3	Overstreet, Ronald J. & John Chiari	14.73	Old Burlington Road			14.73	99.97	0.00	0.00
	801	2	Overstreet, Ronald J. & Chiari, John	43.57	Weber Road		Not farm-assessed	43.02	98.75	0.55	1.25
46	602	4	Parkell, Linda Garrison	6.31	Deerfield Road			0.00	0.07	3.71	58.73
	602	7	Parkell, Linda Garrison	21.87	Deerfield Road			14.84	67.87	5.20	23.76
	602	8	Parkell, Linda Garrison	6.26	Deerfield Road			6.26	100.05	0.00	0.00
47 402		21	Petersen, Bradley G. & Dawn Marie/Haines, Chas W. III & Therese P.	71.80	W Deerfield Road			66.68	92.87	5.13	7.14
48	301	18.01	Rio, Nicholas & Sarilee	51.23	Center Road			46.71	91.18	0.08	0.16
	301	18.02	Rio, Nicholas J. & Sarilee R. Et. Al.	9.27	Center Road			9.27	99.98	0.00	0.00
49	301	11.01	Schnepp, Joseph A. III & Anna M.	20.41	Friesburg Road			5.34	26.15	11.35	55.64
50	1003	8	Seabrook Brothers & Sons Inc.	114.19	Seeley Road			97.78	85.63	1.59	1.39
51	502	16.02	Seabrook, William E. & Lou Ann	41.24	Polk Lane			26.67	64.72	14.54	35.28
52	703	15	Seel, Elfriede	21.50	Richards Road			18.10	84.20	3.40	15.80
53	604	36	Sepers, Louis Et. Al	5.44	Weber Road			5.44	99.99	0.00	0.00
	604	37	Sepers, Louis Et. Al	6.32	Weber Road			6.32	99.98	0.00	0.00
	801	1	Sepers, Louis L. & Janet M.	7.13	Weber Road			7.13	100.07	0.00	0.00
	801	1.01	Sepers, Louis L. & Janet M.	6.04	Weber Road			6.04	100.02	0.00	0.00
	801	1.02	Sepers, Louis L. & Janet M.	5.86	Weber Road			5.86	99.97	0.00	0.00
	801	1.03	Sepers, Louis L. & Janet M.	4.35	Weber Road			4.35	99.90	0.00	0.00
	604	35	Sepers, Louis L. Et. Al.	6.54	Weber Road			6.14	93.84	0.41	6.23
54	604	25	Tupper, Alma C/O K. Cass, Exec	11.79	Northville Road (Rear)			11.79	100.03	0.00	0.00

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
	606	2	Tupper, Alma C/O K. Cass, Exec	18.58	Husted Station Road		Prel. Appr.- Steliga Homes	18.58	99.98	0.00	0.00
55	402	6	Van Lier, Philip E.	54.52	Highway 77			40.84	74.92	13.68	25.09
	402	10	Van Lier, Philip E.	3.94	Highway 77			3.94	99.97	0.00	0.00
56	406	22	Wetherington, Jeffrey D. & Kathleen	1.56	Polk Lane			0.64	41.15	0.92	58.70
	406	20	Wetherington, Jeffrey D. & Kathleen	40.93	Old Deerfield Pike			27.17	66.38	13.76	33.63
	406	21	Wetherington, Jeffrey D. & Kathleen A	1.54	Polk Lane			0.86	55.68	0.68	44.19
57	303	1	Wicks, Stanley W. Jr.	16.52	Friesburg Road			16.14	97.69	0.38	2.32
	303	1.02	Wicks, Stanley W. Jr.	9.25	Friesburg Road			3.44	37.16	0.00	0.00
58	706	4.01	Yancoskie, Evelyn M.	24.50	Richards Road			24.50	100.00	0.00	0.00
			Total Acres	4,125.66				3,595.44	87.15%	299.68	7.26%
Nonprofit Organization Lands											
	604	31.01	Rutgers S.J. Research Ctr.	0.84	Old Burlington Road						
	603	2.02	Rutgers State University	0.78	Old Burlington Road						
	603	2	Rutgers State University	58.05	Old Burlington Road						
	603	2.01	Rutgers State University	4.41	Northville Road						
	603	3	Rutgers State University	51.91	Deerfield Road						
	604	31	Rutgers State University	27.76	Northville Road						
	502	2	Rutgers State University	43.41	Northville Road						
	502	2.01	Rutgers State University	0.84	Old Burlington Road						
	601	6	Rutgers State University	4.44	Old Burlington Road						
	603	1	Rutgers State University	34.04	Old Burlington Road						
	501	9.01	Seabrook House	36.46	Polk Lane						
			Total Acres	262.93							
Preserved Farms In Project Area											
	102	2	Joyce, E. & Son Inc. A. NJ Corp	27.12	Highway 77	Permanent					
	102	3	Tice, Leon M. & Arlene G. & Milton C.	90.80	Highway 77	Permanent					
	102	4	Ansink, Carroll J.	58.74	Tices Lane	Permanent					

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
	102	7	Sloat, Robert K. & Frances C.	12.98	Tices Lane	Permanent					
	103	2	Myers, Harrison M. & Elizabeth C.	137.27	Hwy 77	Permanent					
	103	3	Myers, Harrison M. & Elizabeth	131.67	Highway 77	Permanent					
	201	1	Johnson Farm Enterprises	173.53	Highway 77	Permanent					
	201	4	Johnson Farm Enterprises	61.18	Olivet Road	Permanent					
	201	5	Garrison, Donald C. & Louise E.	27.43	Olivet Road	Permanent					
	202	2	Johnson Farm Enterprises	58.35	Olivet Road	Permanent					
	202	3	Johnson Farm Enterprises	68.60	Olivet Road	Permanent					
	202	4	Garrison, Donald C. & Louise E.	6.47	Olivet Road	Permanent					
	202	5	Garrison, Donald C. & Louise E.	22.80	Old Burlington Road	Permanent					
	301	3	Johnson Farm Enterprises	81.06	Highway 77	Permanent					
	301	4	Johnson Farm Enterprises	56.66	Highway 77	Permanent					
	301	8	Scheese, Donald & Joan	49.60	Friesburg Road	Permanent					
	301	10	Eachus, T. Glenn & Ella Mae	86.78	Friesburg Road	Permanent					
	301	11	Mccracken, Donald J. & Harriet G.	21.26	Friesburg Road	Permanent					
	301	18	Mehaffey, Gilmer C. Sr. & Jr. & Addiso	26.65	Center Road	Permanent					
	301	19	Mehaffey, Coolidge	79.84	Tices Lane	Permanent					
	301	21	Sloat, Robert K. & Frances C.	42.67	Tices Lane	Permanent					
	301	22	Indian Mills Nursery Inc	98.36	Tices Lane	Permanent					
	302	2	Joyce, E. & Son Inc. A. Nj Corp	56.54	Center Road	Permanent					
	401	2	Griscom, John Thomas Est.	120.16	Center Road	Permanent					
	404	35	Mehaffey, G. Douglas & Linda	117.75	Seeley Road	Permanent					
	501	6	Brock, Ed Jr. Brock Farms Inc	62.43	Deerfield Road	Permanent					
	501	9	Brock, Edward & Angelina	116.27	Polk Lane	Permanent					
	501	9.04	Brock, Edward & Angelina	9.91	Polk Lane	Permanent					
	502	1.01	Brock, Edward & Angeline	47.38	Highway 77	Permanent					
	502	1.02	Brock, Edward & Angeline	49.22	Highway 77	Permanent					
	502	11	Brock, Edward & Angelina	41.12	Polk Lane	Permanent					
	502	16	Seabrook Investment Partners Lp	132.69	Northville Road	Permanent					
	502	19	Dubois, Henry & Steven	101.46	Polk Lane	Permanent					
	604	39.01	Chiari, Donald	29.60	Weber Road	Permanent					

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
	607	14	Orzechowski, Dorothy	29.97	Centerton Road	Permanent					
	607	16.05	Mooneyham, Carl & Geraldine	23	P	Permanent					
	701	10	Hopewell Nursery	206.91	Woodruff Road	Permanent					
	705	3	Henry, John & Harriet	19.21	Centerton Road	Permanent					
	708	5.03	Henry, John & Harriet	151.31	Centerton Road	Permanent					
	801	10	Dubois, Henry & Steven	55.00	Old Burlington Road	Permanent					
	801	11	Dubois, Henry D. & Steven J.	67.36	Fox Road	Permanent					
	801	12	Dubois, Steven J. & Henry D. Jr.	5.68	Old Burlington Road	Permanent					
	802	1	Wenger, James N. & Barbara J.	159.77	Big Oak Road	Permanent					
	901	1	Hluchy, Robert F. & Joyce L.	68.99	Highway 77	Permanent					
	901	1.03	Hluchy, Robert E.	65.68	Highway 77	Permanent					
	901	10	Hluchy, Robert E.	109.28	Old Deerfield Pike	Permanent					
	1001	2	Coles, Frank S. & Hannah M	85.04	Seeley Road	Permanent					
	1001	2.01	Coles, Frank S. & Hannah M	6.19	Seeley Road	Permanent					
	2101	1	Creamer, Alice	5.78	Finley Road	Permanent					
	2101	2.01	Creamer, Alice	26.76	Finley & Centerton Road	Permanent					
			Total Acres	3390.28							
Farms Under 20 Acres In Project Area											
	301	23	Ansink, Carroll J.	13.68	Tices Lane						
	606	4	Ball, Layne G. & Sandra Morrissey	7.85	Weber Road						
	404	6	Behnke, Carolyn	15.17	W Deerfield Road						
	704	5.04	Biederman, Clifton E. & Janet L.	9.97	Centerton Road						
	301	12.03	Blake, Stephen & Kathleen	3.27	Friesburg Road						
	401	3.02	Cailliau, Donna M.	15.67	W Deerfield Road						
	708	6.01	Camilli, Louis & Donna	11.26	Fox Road						
	708	6.03	Church, Robert G. & Kimberly A.	9.71	Fox Road						
	703	14.02	Colle, Anthony & Deborah D.	17.55	Richards Road						
	501	9.07	Comer, Robert L. & Dorothy A.	9.62	Polk Lane						
	101	1	Coombs, George A. & Son, Inc	0.63	Highway 77						
	102	1	Coombs, George A. & Sons Inc	11.10	Highway 77						

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
	202	6	Dickinson, Beverly Et. Al.	9.16	Old Burlington Road						
	103	5	Dubois, Henry & Steve	1.37	Griers Lane						
	201	6	Dubois, Henry D. & Steven J.	1.55	Griers Lane (Twp. Line)						
	401	3	Evanoski, David & Patricia	18.97	Center Road						
	406	25	Fox, Frank A.	2.07	Old Deerfield Pike						
	708	4	G & G Communications, Inc	14.96	Centerton Road						
	704	5.02	Good News Assembly Of God	11.01	Big Oak Road						
	708	6	Griffie, Frank F. Jr. & Melissa	8.19	Centerton Road						
	402	3.01	Griscom, John Thomas	0.59	Center Road						
	202	7	Hetzell, Neal L.	15.51	Old Burlington Road						
	703	18	Hicke, Konrad & Judith	17.33	Richards Road						
	703	2.02	Horowitz, Michael E. & Shelli L.	11.39	Big Oak Road						
	102	6	Indian Mills Nursery Inc	9.54	Tices Lane						
	404	29	Joyce, James O.	7.73	Old Deerfield Pike (Rear)						
	402	23	Kille, Helen Shiles	5.62	W Deerfield Road						
	703	12	Krupa, Gregory A.	3.90	Garton Road						
	302	9	Lang, Neil Sr.	9.26	Center Road						
	1001	5	Larue, Howard D. Ii	10.68	Seeley Road						
	303	4.01	Mccracken, Donald & Harriet	1.96	Friesburg Road						
	303	5.01	Mccracken, Donald J. & Harriet	4.24	Friesburg Road						
	801	10.01	Mokuau, Herman & Karen Hopfer	6.91	Old Burlington Road						
	301	12	Naabe, William C. Sr. & Sarah E.	8.03	Center Road						
	704	5	Paterno, Theresa A.	2.28	Centerton Road						
	704	5.03	Paterno, Theresa A.	7.13	Centerton Road						
	402	21.01	Russell, Beveran & Velan	8.59	W Deerfield Road						
	708	6.02	Saul, William & Joe Anne	7.73	Fox Road						
	402	4	Scheese, Donald	9.93	Friesburg Road						
	501	3	Stoms, Lewis M. Sr. & Dorothy T.	8.92	Highway 77						
	705	4	Tuccillo, Laura A. & Victor A. Schulz	11.96	Centerton Road						
	706	2	Uhland, Leo J. Jr. & Cheryl R.	16.51	Big Oak Road						
	301	12.01	Wesner, Marva E.	4.95	Center Road						

Farm #	Block	Lot	Owner	Area (Acres)	Parcel Address	Preserv Status	Notes	Prime Soils (Acres)	Prime Soils %	Statewide Imp Soils (Acres)	Statewide Imp Soils %
	705	15	Ziefle, William J. & Doris J.	11.50	317 Centerton Road						
			Total Acres	394.95							

Source: Cumberland County Dept. of Planning and Development, 2008

6.0 ECONOMIC DEVELOPMENT

6.1 CONSISTENCY WITH STATE AND COUNTY PLANNING EFFORTS

The agricultural industry is recognized in the *New Jersey State Development and Redevelopment Plan* as an important industry that has deservedly been enhanced and sustained through state and local policies and actions. Active and productive farming, not simply land preservation, has environmental, educational, and economic benefits. Additionally, the New Jersey Department of Agriculture (NJDA) has incorporated economic development concepts into nearly all of its programs and planning efforts. The 2006 *Agricultural Smart Growth Plan for New Jersey* recognized that economic development can stabilize the active agricultural community and foster new farms by facilitating farmer investments and creating new markets for goods.

Each year, the delegates of the State Agricultural Convention endorse economic development strategies for different sectors of New Jersey's food and agricultural industry. The latest document, *New Jersey Department of Agriculture 2008 Economic Development Strategies*, lists 15 general strategies and 87 specific strategies within 10 key sectors, including horticulture, produce, dairy, aquaculture, field crops, livestock, organic farming, equine, wine production, and agritourism. Many of the strategies involve enhancing promotional activities, ensuring the quality and health of agricultural and food products, and encouraging more direct marketing to shorten the chain between producer and consumer.

The strategies related to field crops and horticulture are particularly important to Upper Deerfield due to the municipality's concentration in those areas. For example, one of the strategies for enhancing the horticultural industry is for the state's Department of Agriculture to work with growers and independent garden centers and nurseries to strengthen their efforts to promote *Jersey Grown* products with advertising materials, such as point-of-sale materials. This strategy could be promoted from the growers' side by the Upper Deerfield Agricultural Advisory Committee. Among Field Crop strategies, one is to work with Rutgers Cooperative Extension and NRCS to provide regional producer workshops that will emphasize the benefits of good pasture and cropland management and preservation of water quality. Upper Deerfield would seem to be a prime location for such a workshop, which would also tie into the efforts the township has made toward water quality improvement through its greenways plan.

Within Cumberland County, the economic value of the agricultural industry is widely recognized. The 2001 Cumberland County Economic Development Strategy for Action plan identified the agricultural heritage and food processing facilities as two of the county's major strengths. This report also highlighted agribusiness and aquaculture as sectors of interest that would benefit from additional training and educational opportunities in the county.

6.2 EXISTING PROGRAMS

This section describes existing farm support and economic development initiatives that are undertaken by a multitude of organizations and agencies, including the NJDA, USDA, nonprofit and industry groups, and companies.

6.2.1 Farmer Support

Farm Link Program

The Farm Link Program is run by the New Jersey State Agricultural Development Committee and provides services and support to farmers at all stages. One of the program's objectives is to match farmers seeking access to land with landowners looking to lease or sell their farmland. Those looking for access to land are typically young or first-time farmers or experienced farmers seeking to expand or relocate their operations. The program also helps to arrange partnerships, apprenticeships, and work-in arrangements. Another service offered by the Farm Link Program is assistance in estate or farm transfer planning. The transference of a family farm or agricultural business can be a difficult task due to legal, tax, and other issues. The Farm Link Program provides a number of resources for estate and farm transfer planning and has developed a publication designed for farmers preparing to transfer farm ownership to the next generation, "Transferring the Family Farm: What Worked, What Didn't for 10 New Jersey Families."

New Farmers and Farmer Education

The goals of the Rutgers New Jersey Agricultural Experimental Station (NJAES) Cooperative Extension are to "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." The Cooperative Extension's Department of Agricultural and Resource Management Agents provides assistance, information, and consultation on issues related to agriculture, the environment, and natural resource management, as well as educational programs on increasing farm productivity. The New Jersey Farm Productivity Enhancement Classes operate through a grant from the New Jersey Department of Labor and address topics such as improving profitability and cost management, English as a second language (ESL), business communications, farm equipment and worker safety, computer skills, and estate planning (Rutgers NJAES Cooperative Extension, <http://njaes.rutgers.edu/extension>).



Source: DVRPC

Wine Grapes at the Rutgers Agricultural Experiment Station

Northeast Organic Farmers Association of New Jersey (NOFA-NJ)

The Northeast Organic Farmers Association of New Jersey (NOFA-NJ) is a nonprofit organization that promotes organic farming in the state. NOFA-NJ has certified agricultural products in the state since the 1990s, and it received accreditation to certify to USDA standards in 2002. In addition to third-party organic certification, NOFA-NJ promotes sustainable agriculture through outreach, research and advocacy, and education and development programs. Some of the organization's outreach programs include promotional exhibits at agricultural and environmental events, the publication of the *Organic News* quarterly newsletter, media outreach, public tours of organic farms, a *Garden to Table* conference for gardeners and the general public, and their informational website available at www.nofanj.org. NOFA-NJ's education and development activities include peer-to-peer educational meetings and an annual conference, a small grant program for farmer-led educational initiatives, a program for people aspiring to start a small farm, information and referral regarding sustainable agricultural practices, and scholarships and sponsorships of leadership development programs in agriculture. NOFA-NJ also conducts research and advocacy work in collaboration with foundations, institutes, universities, and other organizations (NOFA-NJ, <http://www.nofanj.org>).

The New Farm

The New Farm is a project of the Rodale Institute, an organization that encourages "regenerative agriculture" through research, outreach, and training. The New Farm website is an online magazine and resource inventory designed to provide organic and sustainable farmers with information on production, marketing, research, certification, weed and pest management, technology, and other resources. The website includes a number of content areas, such as a frequently updated organic price report; discussion forums; a directory of websites, publications, and agencies; a directory of farms, stores, buyers, and food businesses; classifieds; a directory of organic certifiers; a guide to research publications from the Rodale Institute; and online training programs (The New Farm, www.newfarm.org).

Financing Services and Loan Programs

Farmers need assistance in securing financing to invest in their businesses, buy equipment, expand land holdings, erect farm buildings, and supply housing. NJDA provides a list of grants and other financial assistance opportunities in the areas of agriculture, conservation, and rural development. These include Soil and Water Conservation Grants, Farmers Market Promotion Grants, New Jersey Junior Breeder Loans, and Value-Added Producer Grants. There are also a number of programs providing financial assistance for green energy initiatives, skills training, and environmental management (www.state.nj.us/agriculture/financialassistance.htm).



Source: E. Overdeest

T. Glenn Eachus Farm

USDA-Farm Service Agency

The USDA'S Farm Service Agency (FSA) works to stabilize commodity prices in the agricultural industry for both farmers and consumers by financially helping farmers adjust to demand. The FSA has offices on the federal, state, and county levels that administer and manage farm and conservation programs, support loans and payments, and provide disaster relief (www.fsa.usda.gov).

Additionally, local governments can increase the amount of quality affordable housing for those employed in agriculture by leveraging federal and state funding. For example, the USDA Rural Development Housing Program and the U.S. Department of Housing and Urban Development (HUD) offer a number of loan and grant programs for individuals and families in rural areas. One of these is the USDA's Farm Labor Housing Program, which provides low-interest loans and grants for the development or improvement of housing for those employed in agriculture (www.rurdev.usda.gov/rhs/mfh/brief_mfh_flh.htm).

The private sector has also recognized the importance of helping farmers find financing. Whole Foods Market has created the privately funded Local Producer Loan Program, from which \$10 million in low-interest loans will be awarded to farmers producing food near Whole Foods stores throughout the country.

Farm Credit East

Farm Credit East is a cooperative that offers loans, insurance, business consulting, and other financial services to people in the agricultural industry in six states in the Northeast, including New Jersey. In addition, the Farm Credit East lobbies for legislative and regulatory issues related to agriculture (www.farmcrediteast.com).

Agricultural Marketing Resource Center

Funded in part by USDA Rural Development, the Agricultural Marketing Resource Center (AgMRC) is a national virtual resource center providing the latest information on value-added agricultural enterprise development. The center has expertise in more than 150 different commodities and products. It also provides information on market trends in the food, fiber, pharmaceutical, energy, and tourism industries. Additionally, the website includes information on business creation and operation, current research, and other resources for value-added agriculture.

6.2.2 Agricultural Promotion, Markets and Sales

Jersey Fresh

The Jersey Fresh marketing campaign has existed for over 20 years and recently acquired a new slogan: "Jersey Fresh—as Fresh as Fresh Gets." The Jersey Fresh brand has been locally promoted in a number of ways, including a "Proud to Offer Jersey Fresh" signage program at participating restaurants. The program has been extended to include Jersey Grown, Jersey Bred, and Jersey Seafood brands. Point-of-sale promotional materials are available through the NJDA. The Jersey Fresh program should continue to be promoted on the local, state, and regional level.

Community Farmers Markets

Direct marketing through community farmers markets can be profitable and rewarding for farmers, while providing consumers with fresh, locally grown produce and other agricultural products. NJDA provides assistance for setting up farmers markets and maintains an online guide of their locations. Although New Jersey has very high rates of direct marketing compared with other states, these opportunities can be further expanded. Direct marketing allows proceeds to go directly to the farmer instead of to a chain of middlemen. It can also be very rewarding to the farmer to have immediate contact with the consumer. The creation of more farmers markets or the development of a central market place could expand the potential of direct marketing.

Cumberland County has three farmers markets, Camden County has six, Salem County has two, and Gloucester County has one, as listed below in **Table 15**:

Table 15: Farmers Markets in Gloucester, Salem, Cumberland, and Camden Counties

Market	Location	Open
Woodbury Farmers Market	Between Cooper & E. Barber St., Woodbury	June 21 - October 25, Thursdays, 3 pm - 7 pm
Cowtown	780 Rt. 40, Pilesgrove	Year round, Tuesdays & Saturdays, 8 am - 4 pm
Salem Farmers Market	West Broadway, Salem	June 7 - August 30, Thursdays, 10 am - 2 pm
Bridgeton Outdoor Market at the Riverfront/ A Community Farmers Market	Between Bridge & Commerce Streets, Bridgeton	June 8 - September 21, Fridays, 11 am - 6 pm
Millville Farmers Market	Corner of High & Sassafras Streets, Millville	June 9 - September 8, Saturdays, 8 am - 12 pm
Vineland Farmers Market	The 700 Block of Landis Avenue, Vineland	July 7 - September 29, Saturdays, 9am - 12pm
Camden Community Farmers Market	Walter Rand Transportation Center, Camden	June 19 - November 6,
Camden Community Farmers Market	Mickle & Broadway, Camden	June 15 - November 9, Fridays, 10 am - 5 pm
Collingswood Farmers Markets	PATCO Speedline Parking lot; Collingswood	May 5 - November 17, Saturdays, 8 am - 12 pm
Fairview Farmers Market	Yorkshire Square, Camden	July 11 - November 7, Wednesdays, 9am - 1 pm; all third Wednesdays 2pm - 6pm
Haddonfield Farmers Market	PATCO Speedline parking lot, Haddonfield	May 12 - October 27, Saturdays, 9am - 1pm
Our Lady of Lourdes Farmers Market	1600 Haddon Avenue, Camden	July 11 - November 7, Wednesdays, 2pm - 6pm

Source: NJ Dept of Agriculture, 2007

Agritourism, Roadside Markets, and Farm Stores

Agritourism involves establishing farms as tourist destinations with educational, recreational, and commercial potential. Agritourism can take on many forms, from to bed and breakfasts, U-pick farms, cider mills, corn mazes, hay rides, petting zoos, horseback riding, farm tours, wine

tasting, and farm festivals, to Monmouth County’s Farmland/Scenic Preservation Tour Guide, which points out nurseries, orchards, farm markets, preserved farmland, historic places, and scenic vistas on an approximate 60-mile route. Agritourism benefits farmers by supplying an opportunity for additional income, particularly during slower periods between harvests. Agritourism also serves to reinforce the agricultural identity and rural character of a place. Through agritourism, schoolchildren, as well as adults, can learn about the process of food production and the importance of protecting their local food resources. Roadside markets and farm stores are other ways that consumers can purchase locally grown produce, flowers, and other agricultural products directly from the farmers. See **Table B-1: Roadside Markets in Cumberland County, New Jersey** in **Appendix B**.

Direct Sales to Supermarkets

Several supermarket chains with stores in Cumberland County promote local produce, although definitions of “local” can range in meaning from “within a county” to “within 300 miles of New Jersey.”

A large barrier to providing local commodities to mainstream supermarkets is that farms must be willing to deliver products themselves and be able to provide quantities large enough to meet the needs of the supermarket. Brokers (middlemen) and distribution centers have traditionally filled this need, although a lack of “buy local” promotions has prevented higher profits from being passed on to the producers.

Direct to Restaurant Sales

The Jersey Fresh program links interested restaurants with local farmers through its Hospitality Industry Program (NJDA *Economic Development Strategies 2007*). The South Jersey Independent Restaurant Association, known as SJ Hot Chefs, promotes restaurants working with local farmers. This organization showcases local farmers working with restaurants to create unique dishes in the annual “Farm to Fork” event. Cumberland County farms that participate in the Farm to Fork event are listed in **Table 16** below. In addition, below in **Table 17** is a list of Cumberland County restaurants who regularly buy from local farms.

Table 16: Cumberland County Farms Participating in “Farm to Fork”

Farm	Location
Bisconte Farm Nate Bisconte	360 Morton Ave Millville, NJ 08332
Happy Valley Berry Farm Shirley Kline	157 Buckforn Rd Bridgeton, NJ 08302
Ingraldi Farms	Cedarville Rd & Rieck Ave Millville, NJ 08332
Laning Brothers Farms Inc Buddy Laning	175 Rockville Road Bridgeton, NJ 08302
Marlboro Farm Market	601 Route 49 Bridgeton, NJ 08302
Muzzarelli Farm Charles Muzzarelli	425 Route 47 North Vineland, NJ 08360
Nardelli Brothers Inc Bill Nardelli	54 N. Main Street Box 590 Cedarville, NJ 08311

Farm	Location
Paul Coia Sons Farms Inc Dave Coia	3670 East Oak Rd Vineland, NJ 08360
Ploch Farms Inc Ryan Ploch	1954 Pennsylvania Ave Vineland, NJ 08361
Rottkamp Farms Inc Thomas Rottkamp	780 Shiloh Pike Bridgeton, NJ 08302
Scapellato Farms Peter Scapellato	1928 Forest Frove Rd Vineland, NJ 08360
Sheppard Farms David Sheppard	340 Sayres Neck Rd Cedarville, NJ 08311
Sunny Slope Orchard Lisa Thomas	400 Greenwich Road Bridgeton, Nj 08302
Tolotti Farms Inc Lou Tolotti	2455 Cornucopia Ave Vineland, NJ 08361
Victoria Farms LLC Wayne Groetsch	1544 Sheridan Ave Vineland, NJ 08361

Source: South Jersey Independent Restaurant Association, 2007

Table 17: Cumberland County Restaurants That Directly Buy from Local Farms

Restaurant	Location
Bridge Town Restaurant	36 Laurel Street, Bridgeton
Carmelo's Ristorante	31 E Broad Street, Bridgeton
Toad Fish Bar & Grill	222 Bridgeton Farton Road, Bridgeton
Pete's Pizza	20 W Park Ave, Vineland
Tony's Lunch & Catering	1088 N Main Street, Vineland

Source: NJ Dept of Agriculture, 2007

Institutional Purchasing Programs

Institutional purchasing can provide a long-term contract, predictable demands, and higher profits to a local farmer. NJDA coordinates state purchases with local producers. The Department of Corrections and the School Lunch Program regularly purchase produce and goods from local producers. However, both NJDA and other state departments and programs can increase local purchasing by looking at other states' practices.

6.2.3 Agricultural Support Businesses

Southern New Jersey is well-served by agricultural support businesses, such as farm supply stores and product distributors and processors. Indeed, the number of businesses in Cumberland and adjoining counties that rely on agriculture or serve agricultural needs is quite astounding. Some of the economic value of these operations has been compiled by the federal and state Departments of Agriculture, but most information pertains to employment



Source: DVRPC

The Clement-Pappas Processing Plant

figures. A more comprehensive assessment of the significance of the non-producer agricultural industry in southwest New Jersey would be beneficial to understanding the value of farming more fully. Initial lists of these businesses are included here in **Appendices B** and **C**.

As mentioned in **Section 2.3 Agricultural Support Services and Related Businesses**, Upper Deerfield is home to some large agricultural support businesses that are of major significance to the region and to the agricultural industry in New Jersey. These include Seabrook Brothers and Sons operation, which is a third-generation family-owned and operated business that grows, processes, and freezes 150 million pounds of vegetables each year and ships to the entire United States, as well as to many overseas locations. Another large company is the Clement-Pappas processing and packaging plant. This 60-year-old company is the leading private label juice producer in the nation and includes organic cranberry juice and sauce among the products that it distributes worldwide.

The Perdue Jersey Grain Elevator is one of two large facilities for grain and oilseed in New Jersey and is operated by a division of the Perdue Company, better known to the general public for its chickens. It is part of a network of grain facilities on the East Coast that stores, processes, manufactures and ships to domestic and international markets. Adjacent to Perdue is another company, GROWMARK FS, LLC, which provides fertilizer, crop protection, seed, custom application, and agronomy services to farmers in the northeast U.S. The Upper Deerfield facility is part of the GROWMARK System, which is a federated cooperative network where individual farmers own local cooperatives that invest in GROWMARK, Inc. – the regional cooperative – which, in turn, invests in businesses supplying goods and services needed by farmers.

Upper Deerfield has established a Redevelopment Area at its center, in which some of these businesses sit. The zones within the Redevelopment Area are designed to encourage agricultural operations and the establishment of agricultural support businesses of all types, including processing, research, marketing, distribution, storage, manufacturing, management, and agritourism. See **Section 3.3.4: Zoning** for additional information on the Redevelopment Area. See also **Map 9: Zoning** for a depiction of the Redevelopment Area.

6.2.4 Research and Innovation

Rutgers New Jersey Agricultural Experiment Station

The New Jersey Agricultural Experiment Station (NJAES) is an institute of Rutgers University, which is New Jersey’s Land Grant college. NJAES works to enhance the state’s agriculture, environment, food safety, public health, and community and youth development. At its Agricultural Research and Extension Center in Upper Deerfield, researchers do trial plantings and other investigations on plant varieties, pest control, and many other agricultural management practices.



Source: DVRPC

The NJ Agricultural Experiment Station in Upper Deerfield is one of nine Rutgers off-campus research centers in the state.

The experiment and research stations are the locations for research. The Cooperative Extension Program of NJAES is the branch that serves as the educational resource for the agricultural industry and the public. The Rutgers Cooperative Extension program has offices in each of New Jersey's 21 counties that support the local agricultural industry through agricultural agents, along with staff that assist homeowners and the general public. The Cumberland County Cooperative Extension office is located in Deerfield Township and provides a wide array of services to farmers. It has one agent who specializes in nursery stock and another agent whose specialty is vegetable and herb growing, but agents of other offices who have differing expertise share services across the offices. The Cooperative Extension office also has staff that runs the County's 4-H Program.

Food Innovation Center

The Rutgers Food Innovation Center (formerly the Food Industry Research & Extension Center) was created in 2001 by the New Jersey Agricultural Experimental Station at Rutgers University. Its mission is "to stimulate and support sustainable economic growth and prosperity to the food and agricultural industries in the New Jersey region by providing businesses with innovative research, customized practical solutions, resources for business incubation, and a trusted source for information and guidance." A new 23,000 square foot facility was opened in 2008 in Bridgeton that includes state-of-the-art food processing, packaging and laboratory space. In addition, the Food Innovation Center offers informational seminars and consulting services to a wide range of food businesses.



Source: DVRPC

Some of the equipment available at the Food Innovation Center

Agricultural Innovation Fund

According to the NJDA *Agricultural Smart Growth Plan for New Jersey*, the Agricultural Development Initiative, implemented by the New Jersey Department of Agriculture, proposes the creation of an Agricultural Innovation Fund "for the marketing and development of the food and agricultural industry to ensure that it survives and grows in the rapidly changing marketplace, with participation in the fund tied to a commitment to continuing agricultural operations." This fund could help farmers faced with rising production costs by providing equity investment to fund large-scale projects, offering a revolving low-interest loan fund, providing a loan guarantee program, and acting as leverage for federal cost-share programs.

6.3 POTENTIAL STRATEGIES AND ANTICIPATED TRENDS

This section discusses new economic development strategies that Upper Deerfield Township could consider implementing or encouraging. Anticipated trends relevant to the future of agriculture in New Jersey, Cumberland County, and Upper Deerfield Township are also examined. A number of other farmland preservation plans and resources from departments of agriculture, including the NJDA *Economic Development Strategies 2007*, were consulted for these strategies, which are intended to enhance the economic strength of the agriculture industry.

6.3.1 Farmer Support

Tax Incentives for New Farmers

To make it easier for individuals to enter the agricultural industry, financial incentives and tax policies could be altered. For example, young farmers could be helped by tax incentives given to retiring farmers for the conveyance of land or farm equipment. Also, agricultural tax reform to address inflated land value and rental rates could help beginning farmers who have limited financial means. Some states, such as Nebraska and Iowa, offer tax incentives to landowners who rent to beginning farmers or ranchers. Cumberland County and its individual municipalities could support such changes at the state and federal levels.

Agricultural Training and Education

Training and technical assistance related to the agricultural industry could be created or expanded. The NJDA's Agriculture Development Initiative encourages the creation of labor resources and the training of those employed by agriculture. Agricultural education could be created or expanded at the secondary, county, college, and university levels. The development of a farm directory of those involved in agriculture could be useful as a tool for marketing and networking.

Promote the Value of Agriculture

Efforts could be made in schools and for the general public to inform residents of the value of agriculture for the local economy, environment, and quality of life. The creation of a farm festival to promote locally grown products could generate additional revenue, as well as instill pride in the area's agricultural heritage.

Land Use Regulations

Farmers can benefit greatly from a positive regulatory environment. The local agricultural industry could be enhanced and enlarged through simplifying the permitting, licensing, and land use planning and regulation processes to be sensitive to agricultural needs. This could include a streamlined and low-cost review process for new farm buildings. Cumberland County can discourage municipalities from adopting ordinances that impede farmers, such as restrictions on fences or limitations on operating at night. Ordinances that encourage a viable local farming industry include those allowing farmers to conduct on-farm and off-farm activities and businesses to supplement their agricultural operations. Agriculture-friendly zoning should allow practices such as increased lot coverage, housing for agricultural labor, reduced front setbacks, and less-restrictive signage regulations for agricultural enterprises.

Farmer Buying Cooperatives

The formation of farmer cooperatives has been useful in many places to increase financial security for farmers. Farmer cooperatives help their members through processing and marketing commodities, furnishing farm supplies, and offering credit and other financial services. In addition to strengthening farmers' economic viability and reducing financial risk, participation in farmer cooperatives provides greater control over the production and distribution system and increases the bargaining power of farmers.

6.3.2 Direct Marketing

Marketplace Changes

New and emerging trends in agricultural markets should be identified to respond to changing opportunities. For example, evolving demographics in the state have created a marketplace for new ethnic crops, such as bok choy and edamame, or tomatillos and jalapeno peppers. Grain alternatives to wheat, such as spelt or kamut, are also increasing in market demand. These innovations could be expanded through coordination with research through Rutgers Cooperative Extension and by better communication between the farm community and vendors about the availability of or need for new crops.

Value-added Products

The development or expansion of value-added specialty goods, such as cheeses, cultured or heirloom vegetables, wine, micro-brewed beer, soap, woven goods, or other niche products, can be promoted to local markets in New Jersey and the adjacent metropolitan areas. The NJDA also recommends the evaluation of CO₂ flash freeze applications for vegetable and fruit products and their potential for institutional markets.

Community Supported Agriculture

Community Support Agriculture (CSA) allows a consumer to buy a share, or prepay, to receive a weekly or biweekly supply of produce. A CSA enables a farmer to operate within a known cash flow, predetermine a customer base, diversify crops, reduce waste, reduce risk, and avoid going into debt at the beginning of a season. Customers can benefit not only from the interaction with a local farmer, but also with understanding how food is grown. Because CSA customers come to the farm to pick up weekly or biweekly shares of food, farmers can enjoy some of the benefits of participating in a farmers market, like interacting with customers and obtaining higher profits from direct marketing, without losing money to transportation and spoiled and bruised produce. Additionally, a small amount of land can yield many customer shares.

Thus far, there are no CSAs in Cumberland County. There are two CSAs in Salem County (Philly Chile Company Farm in Monroeville and Adi Farms in Pittsgrove) and two in Gloucester County (the Muth Family Farms in Monroe Township and Red Oak Ranch in Franklin Township). The Muth Family Farms has about 250 members in its CSA program, with 150 people on a waiting list.

Institutional Purchasing

Sales directly to institutions, such as schools, hospitals, correctional facilities, restaurants, hotels,

or other public or private institution, need to be encouraged. The State Department of Corrections and the School Lunch Program has purchased New Jersey produce every year from 2001 to 2007. State purchases of produce grown in New Jersey totaled \$3 million in 2006.

6.3.3 Identifying Emerging Trends

Promote Agricultural Management Practices

By encouraging agricultural management practices and assisting farmers with the development and implementation of conservation plans, townships can assist profitable farming operations while protecting their valuable natural resources.

Organic Farming

Organic foods represent one of the fastest growing and most profitable segments of agriculture, although the actual total dollar volume is quite small, relative to other types of agriculture. For produce, organic means farming without the use of conventional pesticides, radiation, or additives, and for livestock, organic signifies that the animals did not receive growth hormones or antibiotics. Organic farming can be encouraged both for responding to growing consumer demand as well as for promoting more environmentally sustainable farming practices. The affluent market in New Jersey and its surrounding metropolitan areas provides a wide market for organic products, particularly locally grown ones.

The NJDA recommends the branding of *Jersey Organic* to promote the higher value of locally grown organic food. The USDA regulates the certification of organic products, and farms in New Jersey may receive USDA organic certification through NOFA-NJ, as previously described. There are federal funds available through the USDA to help farmers offset the cost of certification by up to 75 percent. For farmers in the process of switching to organic methods but who have not completed the three-year qualifying period for certification, the NJDA offers a state program that can label products “transitional sustainable” so farmers can begin benefiting from the higher market value of organic foods.

According to NOFA-NJ, two farms in Cumberland County had organic certification as of October 2007—Catbird Naturally Organic in Bridgeton and Sheppard Farms, Inc. in Cedarville.

Alternative Energy

The NJDA’s Agriculture Development Initiative encourages the production of alternative fuel sources, such as ethanol, biodiesel, biogas, and biomass. To refine these fuels from agricultural products, such as soybeans, corn, and waste stream products, local facilities would need to be established. Currently, there are efforts in the state to construct an ethanol plant and biodiesel production facility, which would open major markets for corn and soybean production and increase the selling price for these commodities. The potential for wind or solar energy production on agricultural land could also be explored.

6.4 ACTIONS FOR UTILIZING ECONOMIC DEVELOPMENT INITIATIVES

Agriculture Advisory Committee

A stronger connection and increased communication could be encouraged between Upper Deerfield's Agriculture Advisory Committee and the Cumberland County Board of Agriculture, the County Agriculture Development Board, and the Cumberland County Planning and Development office, as well as the SADC, to represent the agricultural community of Upper Deerfield. Thus far, the county has taken the lead on encouraging new agribusiness. The Upper Deerfield Agricultural Advisory Committee needs to identify the township lead(s) for similar efforts from the local industry.

Economic Development Planning

The agricultural industry should be incorporated in the economic development plans of all municipalities, counties, and other state agencies. Members of the agricultural industry can also be included in local and regional business organizations and economic development agencies. Traditional business support systems can also be enlarged to integrate agriculture.

The presence of farmers on the Upper Deerfield Township Economic Development Committee has helped promote the importance of agriculture for Upper Deerfield's economic base. Upper Deerfield is in close touch with its major agriculturally-related businesses, such as Seabrook Bros. & Sons, the Clement-Pappas Processing Plant, KMT Freezer Cold Storage, Perdue Grainaries, and GrowMark, all of which are located in the township. Officials contact these businesses every year to discuss needs and other issues that will promote retention/expansion of these significant operations.

Legislative and Regulatory Initiatives

The NJDA's Agriculture Development Initiative proposes that municipalities and local agencies attempt to influence legislative and regulatory initiatives that impact the bottom line of farmers and other producers, such as taxes, income averaging, and other issues, particularly in the regulatory arena where farming costs are affected.



Source: DVRPC

The Brock Farms Nursery



Source: E. Overdevest

Harmony Valley Nursery

7.0 NATURAL RESOURCE CONSERVATION

7.1 NATURAL RESOURCE PROTECTION COORDINATION

Several organizations exist, both public and private, that administer, fund, and provide technical guidance for farmers and communities in Cumberland County. These organizations are in place to assist with natural resource conservation issues and are assets for farmers to assist in the management of the land and water upon which their farms depend.

7.1.1 Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS), formerly known as the Soil Conservation Service (SCS), provides technical assistance to private land owners and managers to conserve their soil, water, and other natural resources. A relatively small government agency in the US Department of Agriculture, its mission is to improve, protect, and conserve natural resources on private lands through voluntary cooperative partnerships with local and state agencies. The NRCS has broad technical expertise in animal husbandry, ecological sciences, engineering, resource economics, and social sciences. The agency also provides expertise in soil science and the leadership for soil surveys and for the National Resources Inventory, which assesses natural resource conditions and trends in the United States.

NRCS's assistance is fitted to the natural resource needs of the farmer. Staff members are available to work with farmers to help identify their conservation goals and then craft appropriate conservation plans to meet those goals. NRCS also provides cost-sharing and financial incentives for programs, such as the Wildlife Habitat Incentive program (WHIP) and the Environmental Quality Incentive program (EQIP), both of which are discussed below.

The NRCS field office that serves Atlantic, Cape May, and Cumberland counties is located at 1317 S. Main St. in Vineland.

7.1.2 Soil Conservation District

The State Soil Conservation Committee (SSCC), a part of the New Jersey Department of Agriculture's Division of Agriculture and Natural Resources, is another relevant organization. It strives to increase voluntary conservation practices among farmers, ranchers, and other land users. Among other responsibilities, the SSCC administers natural resource conservation programs and provides technical information on best management practices for farmers, ranchers, and other conservation-minded agricultural producers. The programs are implemented by local Soil Conservation districts. These are special-purpose political subdivisions of the state charged with implementing natural resource conservation and assistance programs. The districts' jurisdictions follow county boundaries and they are locally governed, although they are not county government agencies.

The role of the Cumberland-Salem Soil Conservation District, which serves Upper Deerfield Township, is to oversee a range of soil conservation and water quality actions, prevent flooding, safeguard streams and reservoirs, foster wildlife habitat, and address natural resource impacts from urban growth. Detailed advice on planning and establishing agricultural best management practices (BMPs), such as terraces and grassed waterways to help control erosion and protect water quality, is at the core of its mission.



of

Source: E. Overdeest

Signage located on the Edgar Joyce Nursery

The organization regulates certain construction activities by reviewing and certifying plans for soil erosion control on residential and commercial construction sites and for grading and demolition and other projects that disturb more than 5,000 square feet of soil. Districts conduct inspections and have various regulatory and enforcement powers to ensure that these sites are maintained in compliance with the certified erosion control plan.

7.2 FEDERAL AND STATE CONSERVATION PROGRAMS FOR FARMERS

Several financial and economic incentive programs and technical assistance are available to help farmers plan and use conservation practices on their farms. See **Appendix E** for a complete list. The United States Department of Agriculture Natural Resources Conservation Service (NRCS) has a Farm Service Agency office in Woodstown, Salem County, which serves Cumberland County. NRCS staff members are available to work with farmers to help identify their conservation goals and then craft appropriate conservation plans to meet those goals.

Numerous programs provide financial incentives to help farmers voluntarily engage in these practices. Financial incentives can include rental payments to farmers for reserved land, easement payments, and cost-sharing—up to 100 percent for some programs—to develop and follow conservation plans.

It would be helpful to know how well acquainted farmers in Upper Deerfield are with all the programs listed below and in **Appendix E**, how much they do or do not meet farmer/landowner needs and environmental objectives, and whether certain programs are more important to Upper Deerfield Township and its farmers than others. A survey on this topic conducted by the township and the Agricultural Advisory Committee could be a real benefit to the agricultural industry in the township and beyond.

The 2007 Farm Bill increased funding for conservation programs by \$7.9 billion. Among the many conservation initiatives is the extension of and increased funding for the Farm Protection

Program (FPP), which was allocated \$773 million. The Environmental Quality Incentives Program (EQIP) received an additional \$3.4 billion in funding in the 2007 Farm Bill. EQIP is a voluntary program administered through the NRCS that offers financial and technical assistance to farmers wishing to implement conservation practices in their management and operations. Some of the qualifying practices include integrated crop management, well sealing, erosion control systems, agrichemical handling facilities, and irrigation systems. The Conservation Security Program (CSP) was provided an additional \$1.1 billion in the 2007 Farm Bill. CSP offers annual payments and increasing financial incentives to farmers who are currently incorporating methods to protect soil, water, and other natural resources.

7.3 WATER RESOURCES

The protection of water resources is a fundamental issue for agriculture and farmland preservation. Without a consistent, plentiful, and relatively clean water source, agriculture is simply not viable. Farms, due to their high surface area and limited impermeable surface cover, are also critical in maintaining aquifer recharge. Steps can be taken at the farm level to preserve water quality. These include:

- Minimizing the use of chemicals, such as fertilizers, herbicides, pesticides, and fungicides, based on sustainable agricultural practices, so as to lessen impacts to groundwater. Farmers should also coordinate timing of chemical application to minimize its runoff into water bodies.
- Providing riparian buffers along bodies of surface water so as to protect surface water bodies from chemicals and organic byproducts and from soil erosion. These buffers ideally take the form of a line of trees and shrubs, followed by a strip of native grass.
- Practicing water conservation techniques, such as drip irrigation and the reuse of water for certain farming types where it is viable.

The New Jersey Department of Agriculture (NJDA), through its Agricultural Smart Growth Plan, encourages farmers to: “work to accelerate the use of efficient water conservation technologies, such as drip irrigation, and to identify and promote new and efficient methods to conduct water distribution on farms, utilizing farm ponds and water reuse options.”



Source: E. Overdeest

Irrigation equipment on Johnson Farms' field

Farmers can obtain assistance with irrigations and water quality enhancement projects through the U.S. Department of Agriculture-National Resource Conservation Service (USDA-NRCS). The NRCS prepares conservation plans for both preserved

and non-preserved farm owners. These plans may identify water use needs and delivery systems as well as conservation practices. The NRCS and the Farm Service Agency can help landowners obtain cost-share grants to implement these plans.

See **Section 1.3: Water Resources in Upper Deerfield Township** and **Table 7: Water Certifications and Registrations in Upper Deerfield Township** for a discussion and listing of agricultural use of water resources in the township.

7.4 WASTE MANAGEMENT AND ENERGY CONSERVATION

7.4.1 Waste Management

The management of livestock waste has serious implications for the quality of ground and surface waters. Unrestricted, these wastes can cause serious water-quality problems by spreading harmful microorganisms into water sources to the detriment of humans, farm animals, and the ecosystem as a whole.

Of particular concern are Animal Feeding Operations (AFOs) and Concentrated Animal Feeding Operations (CAFOs). AFOs include all facilities where animals are stabled or confined and fed or maintained for a total of 45 days per year. CAFOs are classified as any operations with more than 1,000 nondairy cattle, 700 dairy cattle, 2,500 swine, 500 horses, or other animal populations. An AFO operation, even if it does not reach this size threshold, can also be considered a CAFO if it discharges waste into state waters or ecologically sensitive areas. CAFOs are more likely to cause water pollution than other types of operations due to their size alone.

Mismanagement of animal waste has the potential to cause large amounts of soil and groundwater contamination via introduction of bacteria, such as fecal coliform, a known contaminant from animal farming operations. Some waterborne pathogenic diseases include ear infections, dysentery, typhoid fever, gastroenteritis, and hepatitis A.

The New Jersey Department of Agriculture (NJDA) has developed Animal Waste Management Rules to address the issue of nonpoint source pollution emanating from animal wastes. Under these rules, any farm with at least eight Animal Units (AU) [1 AU = 1,000 pounds of live animal weight], or any farm that receives or applies at least 142 tons of animal waste annually, must develop and implement a self-certified Animal Waste Management Plan. Operations with Animal Densities (ADs) greater than one AU per acre will be required to develop and implement a high-density Animal Waste Management Plan and have it reviewed to ensure conformance with the New Jersey Field Office Technical Guide (NJ-FOTG). Operations with 300 or more AUs, regardless of animal densities, will need to develop and implement a Comprehensive Nutrient Management Plan (CNMP) and be certified by the NJDA. Operations with one to seven AUs or those receiving or applying less than 142 tons of animal waste per year, are encouraged, but not required, to develop a self-certified Animal Waste Management Plan.

7.4.2 Recycling

Some recycling programs of benefit to farmers, specifically to nurseries and horticultural operations, are described below.

Nursery Pot/Plug Trays/Flat Recycling

A program exists that enables farmers to recycle nursery pots, plastic flats, trays, and cell packs. The cost of disposing of HDPE #2 nursery pots can be up to \$580 per 20,000 pounds at a landfill. Plastics recyclers are looking for these materials and are offering to pay for the plastic scrap. The program is open to all commercial nurseries and growers in Maryland, Virginia, North Carolina, Delaware, Pennsylvania, New Jersey, West Virginia, and Ohio. Material is shipped via truck to centers in Ohio and Delaware.

Nursery and Mulch Film

The New Jersey Department of Agriculture administers a nursery and greenhouse film recycling program. Film is accepted at two regional collection sites, which each have their own tipping fees. Film is accepted year round at the Cumberland County Solid Waste Complex in Deerfield and at the Occupational Training Center in Mount Holly, Burlington County.



Source: E. Overdeest

A container nursery

Other Agricultural Plastics - Drip Irrigation Tape

New Jersey farmers may recycle drip irrigation tape year round at the Cumberland County Solid Waste Complex. In 2005, the New Jersey Department of Agriculture and the Cumberland County Improvement Authority (CCIA), with a grant from the New Jersey Department of Environmental Protection, initiated a pilot program to collect and recycle other agricultural plastics generated by Garden State farmers. Only drip irrigation tape proved economically viable and was the only aspect of the program to be continued. Nevertheless, this represents about a 50 percent savings in landfill tipping fees.

Pesticide Containers

The New Jersey Department of Agriculture, in partnership with the Cumberland County Improvement Authority, offers free recycling of empty plastic pesticide containers on specific collection dates. The collection program is held at the Cumberland County Solid Waste Complex in the Township of Deerfield. This is a free program and can save pesticide license holders in excess of \$61 per ton in landfill tipping fees.

Currently, nonrefillable, high-density polyethylene # 2 (HDPE #2) containers used by agricultural, professional, and commercial pesticide applicators are accepted at the collection sites. Containers must be no larger than 55 gallons and must be properly rinsed. The program is open to anyone

who holds a New Jersey Department of Environmental Protection pesticide license and to state, county, and municipal government agencies. Participants must follow the processing guide or the material will be rejected.

Wood Recycling

There are two wood and stump recycling facilities that are fairly close to Upper Deerfield. They are Stellas Recycling in Upper Pittsgrove and Winzinger Recycling in Franklin Township, Gloucester County.

7.4.3 Energy Conservation

Promoting increased energy conservation and renewable, local energy is one of the emerging priorities of New Jersey. Rising energy costs and continued improvements in technology have renewed interest in finding alternatives to supplement electric use on farms. As new energy technologies develop, incentive programs become available to help make these alternatives more mainstream.

With respect to energy generation on farms, Chapter 213 of P.L. 2009, adopted in early 2010, outlines policy for energy generation on preserved farms and on farms as businesses that have farmland tax assessment. It stipulates that energy through solar, wind, or biomass development is allowed on a preserved farm, but is limited to the needs of the agricultural operation plus 10 percent additional generation or, alternatively, that the amount of land devoted to structures supporting energy generation is limited to one percent of the total farm acreage, including preserved and unpreserved acres. For preserved farms, any development of alternative energy must be preapproved by the SADC. If the easement is held by a county, municipality, or nonprofit, that entity gets to comment on the application. Other requirements are that the energy facilities cannot interfere with the use of the land for agriculture and must be used to provide energy to the farm directly or indirectly or to reduce its energy costs. If a farm was preserved using federal funds, it may not develop energy facilities on its land.

For commercial farms generally, Chapter 213 amends the Right-to-Farm statute to include the right to engage in the generation of power or heat from biomass, solar, or wind energy, provided that it is consistent with specific rules to be adopted by SADC (sometime in 2011). To retain farmland tax assessment, the amount of acreage on a farm devoted to energy-generating facilities cannot exceed a ratio of one to five acres. That is, one acre of solar facilities requires five acres of land in agricultural production. In addition, no more than 10 acres can be used for the installation and no more than two megawatts of power can be generated on those 10 acres. The farm must also meet all the basic requirements for farmland assessment and a conservation plan must be filed with and approved by the Soil Conservation District, covering the aesthetic, impervious coverage, and environmental impacts of the project. Additional rules pertaining to buffers and setbacks also exist.

A variety of farm-related programs exist to assist with solar energy development. The ***Environmental Quality Incentives Program (EQIP)*** includes cost-sharing for conservation practices, including solar. Grants and technical assistance can also be found via the US Department of Energy's ***Solar Energy Technology Program***, and the New Jersey Board of Utilities' ***Solar Energy for New Jersey Agriculture Program***.

The ***Biodiesel Rebate Program for Farmers*** is a statewide incentive program that will reimburse farmers for the incremental cost of using biodiesel fuel in their vehicles, or for using a 5 percent blend of biodiesel instead of 100 percent petroleum heating oil.



Source: DVRPC

Tractors on the Johnson Sod Farm

Biomass Research and Development Initiative Grants are provided by the US Department of Agriculture. These grants seek to foster research, development, and demonstrations of bio-based products, biofuels, and bioenergy under the aegis of making biomass a more competitive energy source.

The ***Renewable Energy Systems and Energy Efficiently Improvements Program*** is authorized through the 2007 Farm Bill. It provides competitive grants and loan guarantees to agricultural producers to aid with purchasing renewable energy systems and making energy efficiency improvements. The program defines renewable energy as energy that derives from a wind, solar, biomass, or geothermal sources, or hydrogen derived from biomass or water using a wind, solar, or geothermal energy source.

The ***New Jersey SmartStart Buildings Program*** is a statewide energy efficiency program approved by the New Jersey Board of Public Utilities (BPU) and administered in a joint effort by several of New Jersey's electric and gas utilities. It includes incentives, technical assistance, and other services. The incentives are available to qualified agricultural and other customers in the state who are planning to construct, expand, renovate, or remodel a facility, or to replace electric or gas equipment. Projects located on property where electricity is provided by a municipal utility are eligible for those portions of the program that address the energy efficiency of natural gas equipment. Customers planning to construct a building are eligible for services under this program if constructing within a designated smart growth area.

7.5 OUTREACH AND INCENTIVES

The township plans to work on promoting to farmers the conservation enhancement programs that are available through the Natural Resource Conservation Service and the New Jersey Agriculture Department, including the Conservation Reserve Enhancement Program (CREP) and the Wildlife Habitat Incentives Program (WHIP). The WHIP program could be highly beneficial on farmland in environmentally sensitive areas. It is important that Upper Deerfield farmers understand what benefits they can derive from these programs. Such programs will link Upper Deerfield's environmental protection goals to those of the farming community. **Appendix E Conservation Programs for Farmers** lists all current programs.

Upper Deerfield Township may wish to utilize the services of a consulting municipal farmland preservation coordinator, who could work with farmers who are interested in preserving land under the Municipal Planning Incentive Grant Program. Such a coordinator could also possibly act to promote the use of conservation programs for farmers. Currently staff of farm support agencies are extremely engaged with existing programs and cannot reach out as actively as the township may wish, although they are responsive to farmer inquiries. An active outreach program developed by New Jersey Audubon in Mannington Township, Salem County, has demonstrated that direct assistance to farmers helps to promote conservation. However, most nonprofits that work with farmers have even less staff than farming agencies and cannot easily foster such programs.

A consulting municipal farmland preservation coordinator engaged by the township could work on promoting farm conservation programs. In addition, this person would annually update the Planning Incentive Grant application and would interact closely throughout the year with the SADC, the County Agricultural Development Board, and the County Farmland Preservation Coordinator on projects that strengthen Upper Deerfield's efforts at farm preservation.



Source: DVRPC

Looking across the broad farmland expanses of Upper Deerfield

8.0 AGRICULTURAL INDUSTRY SUSTAINABILITY, RETENTION, AND PROMOTION

8.1 EXISTING AGRICULTURAL INDUSTRY SUPPORT

8.1.1 Right-to-Farm Ordinance and Farm Buffers

Upper Deerfield has two parts to its Right-to-Farm Ordinance. The first is a section of Ordinance No. 360, which supports the right to farm all land that is considered a farm, and specifically identifies six uses. It also requires developers of major subdivisions to provide prospective purchasers with a written notice that Upper Deerfield Township has a right-to-farm ordinance.

The second ordinance, #564, spells out the meaning of “right to farm” more fully and specifically states that this right applies throughout the township unless specifically prohibited by the zoning ordinances, and that it applies to all days of the week. There is also a provision requiring that a copy of the ordinance be provided by the Upper Deerfield Township Tax Assessor to all persons or entities upon the filing of a deed of transfer of property, in order that residents will be aware of the ordinance. These Right-to-Farm Ordinances are included here as **Appendix F**.

Some further amendments to the Right-to-Farm ordinance could be considered. These include adding a “grandfather” provision for farms that already exist in areas where zoning prohibits farming, and actually removing any zoning prohibition against right-to-farm protection for all existing farms. Some other needed changes pertain to listing additional permitted activities that are not specifically referenced in the existing ordinance, but which are common farming practices and, also, possibly modifying the restrictions on fowl and swine.

The SADC offers an Agricultural Mediation Program to assist communities in resolving right-to-farm conflicts at no charge. Through this program, a trained and impartial mediator facilitates discussions between the two parties to arrive at a mutually agreed upon solution.

Buffers between farmland and other land uses in Upper Deerfield Township are fairly substantial, at a minimum of 150 feet. According to the township planner, these buffers have been effective. In part, this is due to there being few residential developments adjacent to farmland in Upper Deerfield.

8.1.2 Farmland Assessment Act

The New Jersey Farmland Assessment Act of 1964 allows eligible farmland to have a reduced tax assessment. To be eligible, the property must have a minimum of five acres that has been actively devoted to agriculture or horticulture for at least two years. Land beneath or pertaining to the farmhouse is ineligible, and there are also requirements for the amount of gross sales accumulated from the property. The Farmland Evaluation Advisory Committee evaluates the fair value for assessment based on each property’s land use class.

Landowners who rent land to farmers must be careful to get documentation from those renters as to the value of crops raised on the rented parcels, if the landowner is to substantiate and retain the farmland assessment. Horse farms have special requirements that must be fulfilled in order to qualify for farmland assessment and retain it. More information on farmland assessment is available at www.state.nj.us/agriculture/FarmlandAssessmentGuide.pdf. The township tax assessor is a valuable source of information on meeting current requirements. It is the tax assessor's office that is responsible for confirming the accuracy of farmland assessment applications and usage of the land.

8.2 OTHER STRATEGIES

8.2.1 Regulatory Constraints

Township leaders are also reviewing other ordinances with the Agricultural Advisory Committee (AAC) to eliminate any barriers to farming and to add measures that make farm operations easier and farm preservation more amenable. This could include amending zoning and subdivision regulations, revising fees, and streamlining permits. **Appendix H** is a sample assessment tool, "Is Your Town Farm Friendly?" to facilitate this review.

8.2.2 Agricultural Vehicle Movement Routes

To promote awareness among neighbors and out-of-town drivers and to protect slow-moving agricultural vehicles and drivers, Pennsylvania has established agricultural vehicle movement routes and identified these routes with highly noticeable road markers. This signage is also found in some parts of New Jersey. Most farm vehicles, like harvesters and tractors, do not travel faster than 40 miles per hour. Like wildlife crossings or school zones, vehicular movement route signs can signify to drivers to drive slower or pass with care. Such signage also helps to alert drivers that they are traveling in an agricultural area.



Source: DVRPC

A slow cart with a load of brush

8.3 AGRICULTURE EDUCATION AND PROMOTION

The Upper Deerfield Township Agricultural Advisory Committee (AAC) is attempting to improve the agricultural industry through a combination of measures. An important step that the township will take is to incorporate greater farming industry promotion into its economic planning. Although most current farmers are not serving local food markets, there may be actions that the

township could take that would improve marketing or operations of current or future farmers. The recognition of a responsibility to the industry, and to its success, is already a component in township planning.

The New Jersey Agricultural Experiment Station's Food Innovation Center is located in nearby Bridgeton. The Center's mission is to "revitalize the Bridgeton and surrounding southern New Jersey economy by developing and implementing a unique research, outreach, and education center that will bring needed solutions to challenges facing the ailing food industry in the region." This Center, and the Agricultural Experiment Station itself, located in Upper Deerfield, may be resources that the AAC can tap for assistance with its municipal farm industry economic planning.

The AAC has also determined that a means of enhancing and supporting the farm industry in the township is to provide education to residents about farming and its importance to the community. This would help to prevent potential conflicts and would lay the groundwork for possible marketing enhancements and economic supports. It would also be helpful for increasing support by residents of any future proposed dedication of funds or possible establishment of a dedicated tax to fund an Open Space, Farmland, Recreation, and Historic Preservation Trust.

Education of the public could include development of literature about the role of farming in Upper Deerfield and its importance in the history of the township. A pamphlet, aimed especially at new residents, will promote the recognition that Upper Deerfield is a farming community and address some of the coexistence issues that are most difficult for farmers. The pamphlet could be distributed when home sales occur, along with the already-required Right-to-Farm ordinance. Also, a harvest festival might be considered as a public event, or a larger farming focus could be added to the township's spring community day.



Source: DVRPC

Cumberland Regional High School

Cumberland County has strong 4-H programs, and the Future Farmers of America program is quite active as part of the agricultural program offered by Cumberland Regional High School.

Township educational efforts could involve encouragement of more farming-related programs within all the schools and the promotion of greater interaction between residents and the high school’s Future Farmers of America program.



Source: DVRPC

An Irrigation Hose Reel and a Cultivator

9.0 AGRICULTURAL VISION FOR UPPER DEERFIELD

The Township of Upper Deerfield is committed to maintaining, protecting, and strengthening its farmland resources and its active agricultural industry. The vision of the community is one in which rich soils and productive farmland are retained and where regulations, programs, and growth enhance productivity and the commercial success of farms and farm-related operations on a sustainable basis. Upper Deerfield values its agricultural heritage, its economically successful businesses, its diversity both of people and of farming operations, and the natural resources on which these all depend. Preservation and conservation of farming and farmland is considered essential to achieving this vision.



Source: Ed Overdevest

Looking across a sod farm



Source: DVRPC

Soybeans and Sod

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Source: DVRPC

Equipment on the Johnson Farm

APPENDICES

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**Appendix A Inventory of All Farmland-Assessed Property in Upper Deerfield Township
PART A-1 – Breakdown of Land Use Classes**

Identification Information							Breakdown of Land Use Classes									
Block	Lot	Owner	Land Location	Farmed By Solely By Owner	Rented To Farmer	Farmed By Owner And Tenant	Total Acres Of All Land	Cropland Harvested	Cropland Pastured	Permanent Pasture	Non-Appurt. Woodland	Appurt. Woodland	Boarding - Rehab- Training	Connection with Farm House	Devoted to Agricultural use	Not Devoted to Agricultural Use
101	1	Coombs, George A. & Son, Inc	1774 Highway 77	1			1.40	1.00				0.40				
102	1	Coombs, George A. & Son, Inc	1764 Highway 77	1			12.00	11.00				1.00				
102	2	Joyce, E. & Son Inc - A NJ Corp	1754 Highway 77	1			31.20	23.00	3.80			4.40				
102	3	Tice, Leon M. & Arlene G. & Milton C.	1714 Highway 77	1			92.45	84.50	5.00					0.50		2.49
102	4	Ansink, Carroll J.	31 Tices Lane 1				53.30	52.30						1.00		
102	5	McNaughton, William J. & Gail A.	49 Tices Lane		1		51.80	46.80				5.00				
102	6	Indian Mills Nursery Inc	75 Tices Lane	1			8.24									
102	7	Sloat, Robert K. & Frances C.	85 Tices Lane	1			13.69	3.00		4.00		6.69				
103	1	Coombs, George A. & Son, Inc	1775 Highway 77	1			22.50					1.00				
103	2	Myers, Harrison & Elizabeth	1739, 1741, 1743 Hwy. 77	1			266.00	266.00								
103	4	Garrison Stella S.	75 Griers Lane 1				88.22	87.22						1.00		
103	5	DuBois, Henry & Steve	111 Griers Lane	1			1.30	1.30								
201	1	Johnson Farm Enterprises	Highway 77	1			365.02	359.02			1.00	5.00				
201	1.01	Johnson Farm Enterprises	1633 Highway 77	1			11.64	4.00								7.64
201	3	Johnson, Donald & Nancy	100 Griers Lane		1		76.00	76.00								
201	5	Garrison, Donald C. & Louise E.	Olivet Road	1			26.00	26.00								
201	6	DuBois, Henry & Steve	Griers Lane - TWP. Line	1			1.00	1.00								
202	1	Johnson Farm Enterprises	Highway 77	1			369.56	349.56			2.00					
202	4	Garrison, Donald C. & Louise E.	Olivet Road	1			6.40	6.40								
202	5	Garrison, Donald C. & Louise E.	350 Old Burlington Road	1			21.98	21.98								
202	6	Dickinson, Beverly	340 & 342 Old Burlington Road	1			7.00	3.00	4.00					1.90		1.90
202	7	Hetzell, Neal L.	320 Old Burlington Road	1			14.00	1.00		12.00				1.00		

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202	8	Moore, John W.	129 Deerfield Road	1			49.01	47.00						2.00		
202	8.01	Johnson Farm Enterprises	155 Deerfield Road	1			48.30	43.30			5.00					
202	8.02	Moore, John W.	145 Deerfield Road				21.12	21.12								
202	10	Johnson Farm Enterprises	97 Deerfield Road	1			84.93	80.00				4.00		0.93		
301	1	Johnson, Albert	1686 Highway 77	1			55.50	50.00		5.00				0.50		
301	3	Johnson Farm Enterprises	1642 Highway 77	1			89.30	87.30		1.00						
301	3.01	Johnson Farm Enterprises	82 Tices Lane	1			24.55	20.55				4.00				
301	4	Johnson Farm Enterprises	1624 Highway 77	1			56.45	46.45		6.00	4.00					
301	8	Scheese, Donald & Joan	21 Friesburg Road	1			53.03	53.03								
301	10	Eachus, T. Glenn & Ella Mae	67 Friesburg Road	1			87.00	80.00		3.00	2.00			2.00		
301	11	McCracken, Donald & Harriet G.	97 Friesburg Road	1			19.26	13.00				5.76		0.50		
301	11	Schnepp, Joseph A. III & Anna M.	Friesburg Road		1		19.87	13.50			6.37					
301	12	Naabe, William C. Sr. & Sarah E.	225 Center Road	1			9.00	7.00								
301	12	Wesner, Marva E.	219 Center Road			1	5.51	5.00						0.51		
301	12	Blake, Stephen & Kathleen	Friesburg Road	1			5.52			5.52						
301	18	Mehaffey, Gilmore & Addison	275 Center Road	1			76.99									
301	18	Rio, Nicholas & Sarilee	237 Center Road			1	49.00	33.00				15.00		1.00		
301	18	Rio, Nicholas & Sarilee	Center Road		1		10.90	10.90								
301	19	Mehaffey, Coolidge	86 Tices Lane	1			31.10									
301	21	Sloat, Robert K. & Frances C.	90 Tices Lane	1			45.48	45.48								
301	22	Indian Mills Nursery Inc	62 Tices Lane	1			96.00	96.00								
301	23	Ansink, Carroll J.	24 Tices Lane	1			13.50	12.00		10.00						
302	1	Mehaffey Carl	273 Canhouse Road	1			25.60	25.60								
302	2	Joyce, E. & Son Inc - A NJ Corp	260 Center Road	1			68.08	58.08	5.00			5.00				
302	9	Lang, Neil G.	Center Road	1			10.26	8.26					2.00			
302	13	Joyce, George E. Jr. & Mary Ann	147 Friesburg Road	1			5.50	5.00						0.50		
302	13	Joyce, George E. Jr. & Mary Ann	210 Friesburg Road	1			29.89									
303	1	Wicks, Stanley W. Jr.	144 Friesburg Road		1		18.00									
303	1.02	Wicks, Stanley W. Jr.	154 Friesburg Road		1		9.10					9.10				
302	13	Joyce, George E. Jr. & Mary	Friesburg Road	1			2.07		2.07							

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501	9.03	Bernstein, Michael & Lucinda	111 Polk Lane		1		12.81	12.81								
501	9.04	EMB Deerfield Associates, LLC	95 Polk Lane		1		10.00	10.00								
501	9.05	Casper, Todd & Margret	Polk Lane	1			27.20	27.20								
501	9.06	Keene, Lona	300 Old Burlington Road			1	24.00	15.00					9.00			
501	9.07	Comer, Robert L. & Dorothy Polk	Polk Lane	1			9.00	7.00			2.00					
501	9.08	Bernstein, Michael & Lucinda	105 Polk Lane		1		1.50	8.00				5.50				
501	17	Casper, Todd & Margret	181 Polk Lane	1			5.21									
502	1	Flood, Edward T. Jr. & Ann Deborah	Highway 77	1			16.00	16.00								
502	1.01	EMB Deerfield Associates, LLC	1447 Highway 77		1		48.06	48.06								
502	1.02	EMB Deerfield Associates, LLC	1429 Highway 77		1		49.95	49.95								
502	3	Maxwell, Christopher	39 Northville Road	1			38.19	30.00			8.19					
502	11	EMB Deerfield Associates, LLC	100 Polk Lane		1		52.86	52.86								
502	16	Seabrook, James M.	81 Northville Road		1		131.09	78.00				53.09				
502	16	Seabrook, William E. & Lou Ann	152 Polk Lane		1		41.93	20.00			19.93		2.00			2.00
502	18	Arcoleo, Lina c/o Brock Farm Inc	50 Polk Lane		1		33.25									
502	19	DuBois, Henry & Steve	170 Polk Lane	1			101.70	101.70	100.00	1.70						
601	1	Casper, Todd & Margret	311 Old Deerfield Road	1			7.18	7.18								
601	1.01	Casper, Todd & Margret	303 Old Burlington Road	1			7.18	7.18								
602	1	Bacon, John F. Jr.	331 Old Burlington Road	1			65.00	47.40				13.50	60.90	2.00	2.10	4.10
602	3	Garrison, Roger	365 Old Burlington Road	1			18.20	18.20								
602	4.01	Garrison, Donald C. & Louise E.	Old Deerfield Pike (Rear)	1			1.71	1.71								
602	4.02	Garrison, Donald C. & Louise E.	Deerfield Road	1			2.00	2.00								
602	5	Berger, Peter & Kathleen	Deerfield Road 1				20.33			5.00	13.83		0.50	1.00		1.00

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607	14	Orzechowski Dorthy	Centerton Road	1			27.65			27.15				0.50		
607	16	Exel, David & Terry L.	Centerton Road	1			12.00							1.00		
607	16	Mooneyham, Carl & Geraldine	Centerton Road	1			11.19	10.19					10.19	1.00		
607	16	Gerber, William J. & Cecilia	Centerton Road	1			8.94			8.94						
607	16	Mooneyham, Carl & Geraldine	504 Centerton Road	1			6.52	5.52						1.00		
607	16.1	Mooneyham, Carl & Geraldine	Centerton Road	1			22.45	12.45						1.00	9.00	10.00
607	18	Garrison Stella S.	520 Centerton Road	1			13.00	8.00				5.00				
701	10	Hopewell Nursery, Inc	309 Woodruff Road	1			214.20	210.00				4.20				
701	10	Centerton Nursery Inc	345 Woodruff Road	1			80.66	79.00								1.66
701	11	Barber, George & Joan	Big Oak Road (rear)		1		4.35									
701	11	Barber, John & Angeline	201 Big Oak Road	1			8.00	8.00								
703	1	Fox, Wilbert	150 Big Oak Road	1			24.00	14.50	8.00			1.50				
703	2	Barber, John & Angeline	Big Oak Road		1		11.25	11.25								
703	2.01	Barber, George & Joan	160 Big Oak Road		1		7.53	7.53								
703	2.02	Horowitz, Michael & Shelli	Big Oak Road		1		10.29	10.29								
703	12	Krupa, Gregory	Garton Road		1		3.75	3.75								
703	14	Colle, Anthony & Deborah D.	Richards Road	1			17.18									
703	15	Seel, Elfreide	155 Richards Road		1		22.87	20.87						1.60		
703	18	Hicke, Konrad & Judith	141 Richards Road	1			18.50	17.75				0.25		0.50		
703	21	Fox, Glendon & Harold	111 Richards Road	1			6.75			6.75						
703	21	Fox, Glendon W. Sr. & Betty	123 Richards Road 1				17.50	11.00		5.50				1.00		1.00
704	2	Bianchi, Marilyn & Sullo, John	251 Centerton Road	1			5.07	5.07								
704	2.01	Bianchi, Charles R. & Marilyn	91 Richards Road	1			15.70	14.75								
704	5.02	Good News Assembly of God	Big Oak Road	1			11.16	11.10								
704	5.03	Andricola, Michele	Centerton Road		1		6.96	6.96								
704	5.04	Biederman, Clifton E. & Janet L.	Centerton Road	1			10.57	0.57		9.00				1.00	1.00	
704	6	Fox, Wilbert	138 Big Oak Road 1				20.00	7.00	11.50			1.25		0.25		0.25
704	7	Fox, Wilbert & Rose	103 Richards Road 1				35.00		10.00	23.25		1.50		0.25		0.25
705	3	Henry, Harriet ET. AL.	Centerton Road	1			21.54									
705	4	Tuccillo, Laura A. & Victor A. Schultz	Centerton Road	1			6.40	5.40						1.00		

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801	9	Daricks, Dorothy	Old Burlington Road		1		4.10	4.10								
801	10	DuBois, Henry & Steve	111 Old Burlington Road	1			57.83	57.83								
801	10	Mokuau, Herman & Karen Hopfer	117 Old Burlington Road	1			5.16						5.16			
801	11	DuBois, Henry & Steve	Fox Road	1			70.95	70.95								
801	12	DuBois, Henry & Steve	79 Old Burlington Road	1			5.17	5.17								
802	1	Wenger, James & Barbara	Big Oak Road	1			181.10	170.00				11.10				
803	5.01	Chiari, John III & Ron Overstreet	1321 Old Burlington Road	1			39.76	19.00				20.76				
803	5.03	Bench Realty	Highway 77		1		34.90	32.00				29.00				
813	5	Hoogendorn, John E.	1393 Highway 77		1		7.05	7.00								
813	10	Ott, Harold	24 Northville		1		11.99	11.24						0.75		0.75
820	1	Land Partners of NJ LLC	McArthur Drive	1			28.00	28.00								
822	5.02	Trout, William D. Jr. & Sharon J.	Old Burlington Road		1		6.81	6.81								
822	6	DuBois, Steven Jr.	Northville Road		1		55.68	50.68				5.00				
822	6.14	DuBois, Steven Jr.	Hoover Road		1		46.40	24.72				21.68				
823	4.02	Stone, Sharon L.	Northville Road		1		5.34	5.34								
823	4.03	Stone, Ollie	Northville Road		1		5.48	3.48		2.00						
901	1	Hluchy, Robert & Joyce	1410 Highway 77		1		69.61	60.00				9.61				
901	1.03	Hluchy, Robert E.	1450 Highway 77		1		67.00	60.00				7.00				
901	1.05	Gunnison Village, Inc	1370 Highway 77		1		14.70	9.80				4.90				
901	10	Hluchy, Robert E.	484 Old Deerfield Pike	1			109.15	94.00		8.00		7.15				
902	1	R. Gray Achee	1092 Parsonage Road		1		44.81	21.00				23.81				
904	2	Seabrook Bros. & Sons, Inc	Old Deerfield Pike		1		193.76	156.00				37.76				
904	5	Seabrook Bros. & Sons, Inc	111 Finley Road		1		2.00	2.00								
904	7	Seabrook Bros. & Sons, Inc	366 Old Deerfield Pike	1			4.00	4.00								
905	4	Pappas Properties LLC	Highway 77		1		17.19	15.52							1.67	1.67
905	6.01	Major Petroleum Industries	1360 Highway 77		1		8.45	8.45								
905	9	Seabrook Bros. & Sons, Inc	85 Finley Road		1		77.36	48.00				14.36			15.00	15.00
905	10	Seabrook Bros. & Sons, Inc	53 Foster Road		1		30.55	8.00				22.55				

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1001	2	Coles, Hannah M.	135 Seeley Road			1	46.24	38.00				7.00		1.24	7.00	8.24
1001	2.02	Mehaffey, G. Douglas	Center Road	1			40.00	25.00	15.00							
1001	3	Mooneyham, Lynn & Shirley Ann	540 Harmony Road	1			16.43	15.80				0.63	16.63			
1001	4	Aldrich, Ronald & Sylvia	31 Cake Road	1			6.01	6.01								
1001	4.01	Aldrich, Ronald	21 Cake Road	1			24.04	23.54						0.50		
1001	5	Larue, Howard D. II	91 Seeley Road	1			11.90	9.00				1.40				
1001	5.01	Loew, Frank E. & Linda S.	9 Cake Road	1			2.00	2.00								
1001	5.02	Loew, Frank E. & Linda S.	11 Cake Road	1			27.80	27.80								
1002	1	Mooneyham, Lynn & Shirley Ann	548 Harmony Road	1			5.07	4.69				0.38				
1002	2	Mehaffey, Robert & Debra	568 Harmony Road	1			12.05	8.00				4.05	12.05			
1002	2.04	Mehaffey, Robert & Debra	Harmony Road	1			5.90	5.90								
1002	3	Loew, Frank E. & Linda S.	24 Cake Road	1			50.60	40.00				10.60				
1002	3.01	Loew, Frank E. & Linda S.	20 Cake Road	1			1.50	1.50								
1002	4	Loew, Frank E. & Linda S.	18 Cake Road	1			52.60	30.00				22.60				
1002	6.02	Carvonneau, Joseph & Barbara	23 Seeley Road	1			6.68			4.50		1.18		0.50	0.50	1.00
1002	6	Aldrich, Ronald & Sylvia	21 Cake Road	1			3.90	2.00				1.90				
1002	6.04	Aldrich, Ronald & Sylvia	35 Seeley Road	1			4.02	3.00				1.02				
1003	1	Mehaffey, G. Douglas	509 Old Deerfield Pike	1			114.53	50.00	50.00			14.53				
1003	2	Seabrook Bros. & Sons, Inc	225 Finley Road		1		250.79	46.00				204.79				
1003	5	Terrizzi, Urania	167 Finley Road		1		8.32	8.00				0.32		0.50		0.50
1003	6	Seabrook Bros. & Sons, Inc	177 Finley Road	1			5.67					5.67				
1003	7	Mehaffey, Douglas	479 Old Deerfield Pike	1			43.99	20.00	20.00			3.99	43.99			
1003	7.03	Mehaffey, Douglas & Michele	435 Old Deerfield Pike	1			20.36	14.00				6.36				
1003	7.04	Mehaffey, Douglas & Michele	Old Deerfield Pike	1			28.62	23.00				5.62				
1003	8	Seabrook Bros. & Sons, Inc	100 Seeley Road		1		109.14	92.70				16.44				
1003	8.08	Mehaffey, Linday C. Colson	50 Seeley Road	1			8.00	7.50						0.50		
1003	15	Dolson, Charles	251 Finley Road 1				6.00			5.00		0.25		0.75		
1003	16	Seabrook Bros. & Sons, Inc	235 Finley Road		1		160.58	19.20				141.38				
1101	5.03	Heiny, Kip	90 DuBois Road	1			7.02	7.02								
1101	8	Smith, Opal	223 Silver Lake Road		1		23.21	10.00				13.21				

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1207		Dalessio, Mary Anne J.	Highway 77 & Love Lane	1			125.77	125.77								
1208	1	Provident Development LLC	Highway 77 & Love Lane	1			108.57	108.57								
1208	1.02	Bench Realty	Cornwell Drive		1		54.50	27.00				27.50				
1301		Bench Realty	Love Lane		1		222.35	202.35				20.00				
1301	1.07	Immaculate Conception Church	70 Love Lane		1		20.03	20.03								
1504	5	Rogers, Donald & Urve	231 Old Deerfield Pike	1			12.73	8.30						4.43		
1701	12	Mensh, Raymond & Judy	W Sunset Pine Drive	1			121.67				121.67					
1708	19	Hasher, Rovert W. Jr.	Old Deerfield Pike	1			6.42									
1708	21	Davis, Joan L.	81 Old Deerfield Pike		1		8.46	8.46								
1708	22	Davis, Joan L.	83 Old Deerfield Pike		1		8.00	8.00								
1808	18	Davis, Joan L.	149 Laurel Heights Drive	1			15.00	15.00								
1808	25	Davis, Joan L.	82 Old Deerfield Pike		1		0.80			0.80						
1901	15	Matzel Development at UD	65 Cornwell Drive		1		34.67	34.67								
1903	2.01	Chiarelli, Gianfranco & Valentina	1740 S. Burlington Road	1			5.00	5.00								
2012	1	DuBois, Jeffrey, Gary & David	Finley Road		1		14.54	14.54								
2101	1	Phelps, Lacy & Percy	15 Finley Road	1			7.00	7.00								
2101	2.01	Phelps, Lacy & Percy	Finley & Centerton Road	1			27.00	27.00								
2102	1	Chiarelli, John & Val	Centerton Road		1		37.02	37.02								
2102	1.05	Chiarelli, Ubaldo & Sandra	105 E Finley Road		1		5.00	5.00								
2102	2	Fox, Wilbert & Rose	186 Woodruff Road 1				46.54	27.29	17.00			2.00		0.25		
2102	4	Chiarelli, Paolo & Dianna	160 Woodruff Road		1		11.50	11.50								
2102	4.01	Borton, Brad & Corrine	178 Woodruff Road	1			16.37	10.00		6.37				1.00		
2102	4.02	Sheppard, Lenora	172 Woodruff Road	1			6.00			5.00				1.00		
2102	4.03	Chiarelli, John	166 Woodruff Road				11.31									
2201	1	Lupton, Ronald & Janice	Woodruff Road		1		48.80	44.00			4.80					
2201	2	Fox, Harold & Martha	120 Richards Road 1				17.50	6.50	10.00					1.00		
2201	3	Fox, Wilbert	130 Richards Road	1			19.24	16.48				2.76				
2201	4.02	Hobbs, Mary E.	142 Richards Road	1			10.08	4.00				5.08		1.00		

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2501	103	Woodruff, J. Allen & Grace E.	S Woodruff Road		1		55.29	55.29								
2501	104	Woodruff, Robert & Morrell, J. Allan	S Woodruff Road		1		14.00	14.00								
2602	5	Woodruff, Robert & Allen	Rosenhayn Ave (Rear)		1		51.01	51.01								
2602	7	Morris, John	58 S Woodruff Road 1				70.68	43.88		22.00		4.30		0.50		
2602	13	Gianaris, George & Carol	341 Rosenhayn Avenue	1			7.56	7.56								
2602	14	Edwards, Jean	301 Rosenhayn Avenue	1			19.74	18.74				1.00				
2602	14	Gianaris, George & Carol	106 S. Woodruff Road	1			7.64	7.00				0.64				
2602	14	Gianaris, George	325 Rosenhayn Avenue	1			11.50	9.00	2.00						0.50	
2602	14	Tkaczynski, Bernard	84 S. Woodruff Road	1			12.49	12.49								
2602	14	Whitesell, Sandi Lee & Teresa	S Woodruff Road	1			7.27	7.27								
2602	14.1	Edwards, Jean	311 Rosenhayn Avenue	1			18.24	18.24								
2602	14.1	Tkaczynski, Bernard	285 Rosenhayn Avenue	1			37.97	37.97								
2602	14.1	Tkaczynski, Bernard	275 Rosenhayn Avenue	1			20.00	20.00								
2602	15	Tkaczynski, Bernard	267 Rosenhayn Avenue	1			19.37	19.37								
2602	16	VanMeter, Kenneth A.	261 Rosenhayn Avenue	1			13.22	12.72						0.50		0.50
2602	17	Martorana, Joseph P.	249 Rosenhayn Avenue	1			46.20	30.50			15.20			0.50		0.50
2602	18	Sprouse, Paul & Fairy	229 Rosenhayn Avenue	1			6.09	6.09								
2603	1	Woodruff, Robert A. Sr. & J. Alan	45 S. Woodruff Road		1		52.20	52.20								
2604	4	Woodruff, Robert & Alan	67 S. Woodruff Road		1		22.42	22.42								
2604	4.01	Woodruff, Robert ET. AL.	George's Lane		1		12.50	12.50								
2604	7	Chew, Robert & Nellie	S Woodruff Road	1			8.49	4.19				3.30		1.00		1.00
2604	8	Chew, Robert & Nellie	97 S. Woodruff Road			1	13.50	5.50		3.50		3.50		1.00		1.00

Block	Lot	Owner	Land Location	Farmed By Solely By Owner	Rented To Farmer	Farmed By Owner And Tenant	Total Acres Of All Land	Cropland Harvested	Cropland Pastured	Permanent Pasture	Non-Appurt. Woodland	Appurt. Woodland	Boarding - Rehab- Training	Connection with Farm with House	Devoted to Agricultural use	Not Devoted to Agricultural Use
2604	10	Regalbuto, Samuel R. III & Caryn M.	Rosenhayn Ave (Rear)	1			41.00	20.00		6.00		15.00				
2604	11	Pisarski, Mary S.	Garton Road (Rear)		1		18.90	14.40				4.50				
2604	12	Pisarski, Mary S.	George's Lane			1	16.00		3.46	3.46		12.60				
2701	1	Marino, Earl & Everett	172 Rosenhayn	1			5.00	5.00								
2701	2	Marino, Earl & Everett	178 Rosenhayn	1			6.00	6.00								
2701	3	Marino, Earl & Everett	184 Rosenhayn	1			5.00									
2701	4	Lupton, Ronald & Janice	Rosenhayn Ave	1			9.00	8.00						1.00		1.00
2701	5	Lupton, Ronald & Janice	Rosenhayn Ave	1			4.50	3.50						1.00		
2701	14	Petrunis, John & Lisa	218 Rosenhayn Ave	1			18.59		10.00	7.59				1.00		1.00
2701	19	E. Brock LP	240 Rosenhayn Ave		1		66.21	63.00				3.21				
2701	20	Marcantonis, Lisa	Rosenhayn Avenue 1				10.53			8.98			0.55	1.00		1.00
2701	23	Clark, Rodger & Arlene	302 Rosenhayn Avenue	1			5.00	5.00								5.00
2701	23	Clark, Rodger & Arlene	308 Rosenhayn Avenue	1			5.00	5.00								
2701	24	Adams, Ellen	320 Rosenhayn Avenue	1			5.00	5.00						1.00		
2701	24	Pizzo, Dominic & Elsie	144 S. Woodruff Road	1			20.16	13.16				7.00				7.00
2701	25	Blair, George & Joan	344 Rosenhayn Ave	1			9.80	6.60		1.20		1.00		1.00		1.00
2701	31	Lawrence, Shirley Ann	57 Lebanon Road		1		12.63	12.63								
2701	31	Piccioni, Louis & Bonnie	85 Lebanon Road	1			13.33									
2701	31	Piccioni, Louis & Bonnie	71 Lebanon Road	1			16.18									
2701	33	Kristovich, Jerry Blaise & Shirley	298 Rosenhayn Avenue	1			114.94	99.00				14.00		1.94		1.94
2701	36	Hamidy, Frances	27 Lebanon Road		1		7.25	7.25						1.00		
2701	37	Romer, Robert & Pamela	9 Lebanon Road	1			14.00					4.32		2.00		19.50
2701	38	Carr, John G. & Jennifer A. Allen	23 Lebanon Road	1			42.21	9.00			32.21			1.00		1.00
2701	43	Table, Edward Paul	591 Irving Avenue 1				29.00	20.00	7.00					0.50	1.50	
2701	47	Table, Edward Paul	Irving Avenue (Rear)	1			5.70	5.70								
2701	51	Bruck, William W. & Brenda P.	563 Irving Avenue	1			28.70	20.00				8.45		0.25		

Block	Lot	Owner	Land Location	Farmed Solely By Owner	Rented To Farmer	Farmed By Owner And Tenant	Total Acres Of All Land	Cropland Harvested	Cropland Pastured	Permanent Pasture	Non-Appurt. Woodland	Appurt. Woodland	Boarding - Rehab- Training	Connection with Farm House	Devoted to Agricultural use	Not Devoted to Agricultural Use
2803	7	Pipitone, Salvatore A. Jr. & Deborah	Carmel Road	1			12.67	12.67								
2803	8	Reed, Patricia Anne & J. Woodruff	161 S. Woodruff Road		1		28.63	28.63								
2803	10	Nestler, Steven & Annette	177 S. Woodruff Road	1			6.00	5.00						1.00		
2803	10	Russo, James J. & Doris T.	193 S. Woodruff Road		1		11.52	9.00			2.52					
2803	10	Pipitone, Salvatore	135 Lebanon Road		1		46.40	30.00			16.40					
2803	11	Russo, James	193 S. Woodruff Road	1			4.53	3.00			0.53		1.00			
2804	1.02	Gianaris, George & Carol	Rosenhayn Avenue	1			40.08	12.00	3.08		25.00					
2804	2	Castellini, Rick	155 Carmel Road			1	49.91	20.00			15.91	13.50	0.50			0.50
2804	3	Miller, Thomas B.	179 Carmel Road 1				2.60			1.60			1.60	1.00		1.00
			2006 TOTALS	239	174	17	13481.14	10274.02	395.2	389.9	361.77	1400.43	79.862	98.535	111.77	200.68
				Grand Total:	430											

Source: Wrrgt 'F ggt hgrf 'Vqy puj kr. '4229

**Appendix A Inventory of All Farmland-Assessed Property in Upper Deerfield Township
PART A-2 – CROPS**

Identification Information				Field Crops		Fruit Crops		Vegetable Crops		Ornamental Crops				
Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
101	1	Coombs, George A. & Son, Inc	1774 Highway 77						1.00					
102	1	Coombs, George A. & Son, Inc	1764 Highway 77		11.00				11.00					
102	2	Joyce, E. & Son Inc – A. NJ Corp	1754 Highway 77		-				-	23.00	23.00			
102	3	Tice, Leon M. & Arlene G. & Milton C.	1714 Highway 77		84.50				-		-	All Beef Cattle - 10 Horses & Ponies - 5		
102	4	Ansink, Carroll J.	31 Tices Lane		52.30				-		-			
102	5	McNaughton, William J. & Gail A.	49 Tices Lane		-				-		51.80			
102	6	Indian Mills Nursery Inc	75 Tices Lane		-				-		8.24			
102	7	Sloat, Robert K. & Frances C.	85 Tices Lane		3.00				-		-			
103	1	Coombs, George A. & Son, Inc	1775 Highway 77		-				-		21.50			
103	2	Myers, Harrison & Elizabeth	1739, 1741, 1743 Hwy. 77	256.00	266.00				-		-			
103	4	Garrison Stella S. 75	Griers Lane	87.22	87.22				-		-			
103	5	DuBois, Henry & Steve	111 Griers Lane	1.30	-				-		-			
201	1	Johnson Farm Enterprises	Highway 77		-				-	359.02	359.02			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
201	1.01	Johnson Farm Enterprises	1633 Highway 77		-				-	4.00	4.00			
201	3	Johnson, Donald & Nancy	100 Griers Lane		-				-		76.00			
201	5	Garrison, Donald C. & Louise E.	Olivet Road	26.00	26.00				-		-			
201	6	DuBois, Henry & Steve	Griers Lane - TWP. Line	1.00	1.00				-		-			
202	1	Johnson Farm Enterprises	Highway 77		-				-	349.56	349.56			
202	4	Garrison, Donald C. & Louise E.	Olivet Road		-				6.40		-			
202	5	Garrison, Donald C. & Louise E.	350 Old Burlington Road		-			21.98	21.98		-			
202	6	Dickinson, Beverly	340 & 342 Old Burlington Road		3.00				-		-	All Beef Cattle - 35		
202	7	Hetzell, Neal L.	320 Old Burlington Road		31.00				-		1.00	All Beef Cattle - 25		
202	8	Moore, John W.	129 Deerfield Road		37.00				-		-			
202	8.01	Johnson Farm Enterprises	155 Deerfield Road		-				-	43.38	43.38			
202	8.02	Moore, John W.	145 Deerfield Road		21.12				-		-			
202	10	Johnson Farm Enterprises	97 Deerfield Road		-				-	80.00	80.00			
301	1	Johnson, Albert	1686 Highway 77		-				-		50.50			
301	3	Johnson Farm Enterprises	1642 Highway 77		-				-	87.30	87.30			
301	3.01	Johnson Farm Enterprises	82 Tices Lane		-				-	20.55	20.55			
301	4	Johnson Farm Enterprises	1624 Highway 77		-				-	46.45	46.45			
301	8	Scheese, Donald & Joan	21 Friesburg Road		53.03				-		-			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
301	10	Eachus, T. Glenn & Ella Mae	67 Friesburg Road		80.00				-		-	Dairy - 165 Dairy (young) - 130		
301	11	McCracken, Donald & Harriet G.	97 Friesburg Road	4.00	4.00				-	9.00	9.00			
301	11.01	Schnepp, Joseph A. III & Anna M.	Friesburg Road		13.50				-		-			
301	12	Naabe, William C. Sr. & Sarah E.	225 Center Road	7.00	-				-		-			
301	12.01	Wesner, Marva E.	219 Center Road		-		0.25		0.50		4.00			
301	12.03	Blake, Stephen & Kathleen	Friesburg Road		-		-		-		-	Horses & Ponies - 4		
301	18	Mehaffey, Gilmore & Addison	275 Center Road		-		-		-		76.99			
301	18.01	Rio, Nicholas & Sarilee	237 Center Road		23.00		-		-		10.00			
301	18.02	Rio, Nicholas & Sarilee	Center Road		10.90		-		-		-			
301	19	Mehaffey, Coolidge	86 Tices Lane		-		-		-		31.10			
301	21	Sloat, Robert K. & Frances C.	90 Tices Lane		45.48		-		-		-			
301	22	Indian Mills Nursery Inc	62 Tices Lane		-		-		-		96.00			
301	23	Ansink, Carroll J.	24 Tices Lane		12.00		-		-		-			
302	1	Mehaffey Carl	273 Canhouse Road		-		-		-	25.60	25.60			
302	2	Joyce, E. & Son Inc - A NJ Corp	260 Center Road		-		-		-	58.08	58.08			
302	9	Lang, Neil G.	Center Road		-		-		-		8.26			
302	13	Joyce, George E. Jr. & Mary Ann	147 Friesburg Road		-	5.00	5.00		-		5.00			
302	13.01	Joyce, George E. Jr. & Mary Ann	210 Friesburg Road		-		-		-	29.89	29.89			
303	1	Wicks, Stanley W. Jr.	144 Friesburg							18.00				

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
			Road		-		-		-		-			
303	1.02	Wicks, Stanley W. Jr.	154 Friesburg Road		-		-		-		-			
302	13.02	Joyce, George E. Jr. & Mary Ann	Friesburg Road		-		-		-		-			
304	1	Joyce, George E. Jr. & Mary Ann	106 Friesburg Road		0.48		-		-		-			
401	2	Griscom, John Thomas	190 Center Road		-		-		100.00		-	Dairy - 12 Dairy (young) - 8		
401	3	Evanoski, David & Patricia	W Deerfield Road		12.50		-		-		-			
401	3.02	Cailliau, Donna M.	139 W Deerfield Road		12.50		-		-		-			
402	3	Haines, Chas W. Larchmont Farm	63 W Deerfield Road		-		134.00		-		-			
402	3.01	Griscom, John Thomas	179 Center Road		-		-		-		-			
402	4	Eachus, Timothy G. Jr. & Dacialea	56 Friesburg Road		7.00		-		-		-			
402	4.01	Lang, Carl D.	80 Friesburg Road		-		-		-		8.00			
402	5.06	Taylor, George M. Jr. & Evelyn	34 Friesburg Road		12.00		-		1.00		-			
402	6	Van Lier, Philip E.	1590 Highway 77		46.49		-		-		-			
402	10	Van Lier, Philip E.	1574 Highway 77		2.80		-		0.50		-			
402	21.01	Russell, Beveran & Velan	21 W. Deerfield Road		-		-		-	4.96	4.96			
402	21.02	Haines, Chas W. III & Therese P.	W Deerfield Road		-		68.00		-		-			
402	23	Kille, Helen Shiles	109 W Deerfield Road		-		-		-		-			
403	1	Johnson Farm Enterprises	132 Center Road		-		-		-	144.50	144.50			
403	2	Mehaffey, Robert & Debra	575 Harmony Road		-		-		-		4.00			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
403	3	Mehaffey, Robert & Debra	567 Harmony Road		20.00		-		-		16.00			
403	4	Mooneyham, Lynn & Shirley Ann	545 Harmony Road		20.00		-		-		22.00			
403	6	Mehaffey, Douglas & Michele	86 Center Road		5.50		-		-		23.00			
403	7	Mehaffey, Douglas G.	511 Harmony Road		-		-		-	9.00	9.00			
404	1	Johnson Farm Enterprises	131 Center Road		-		-		-	9.00	9.00			
404	4	Ackley, Allen D. Jr. & Joan M. Ackley	92 W. Deerfield Road		-		-		-		10.00			
404	4.01	Ackley, Lillian S. c/o David Ackley	40 W. Deerfield Road 0.50		0.50		-		-	1.50	1.50			
404	4.02	Ackley, Joan	80 W. Deerfield Road		-		-		-	24.11	24.11			
404	4.03	Ackley, Lillian S. c/o David Ackley	70 W. Deerfield Road	2.50	2.50		-		-	24.11	27.00			
404	4.04	Ackley, David B. & Nancy J.	50 W. Deerfield Road 5.11		5.11		-		-	20.00	20.00			
404	5	Ackley, David B. & Nancy J.	W Deerfield Road	4.85	4.85		-		-	17.00	17.00			
404	5.02	Ackley, David B. & Nancy	36 W. Deerfield Road		-		-		-	1.00	1.00			
404	6	Ellis-Behnke, Rutledge	12 W. Deerfield Road		-		-		-	14.00	-			
404	24	Casper, Todd & Margret	593 Old Deerfield Pike		-		-		-		-			
404	29	Joyce, James O.	Old Deerfield Pike (Rear)		7.78		-		-		-			
404	31	Allison M. Est c/o Mickey Allison	575 Old Deerfield Pike		27.00		-		-		-			
404	32	Fox, Frank A.	565 Old Deerfield Pike		46.00		-		-		2.80	Horses & Ponies		
404	33	Johnson Farm Enterprises	103 Center Road		-		-		-	40.60	40.60			
404	34	Johnson, Donald M. Jr. &	89 Center Road							30.60				

Block	Acres	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
		David K.			-		-		-		30.60			
404	35	Mehaffey, G. Douglas & Linda	157-159 Seeley Road		-		-		-	75.00	75.00			
406	13	Casper, Kenneth & Jacqueline	1500 Highway 77	3.18	-		-		-		-			
406	18.01	Casper, Kenneth E.	566 Old Deerfield Pike		-		-		-	8.64	-			
406	20	Wetherington, Jeffrey D. & Kathleen	554 Old Deerfield Pike		15.72	0.25	0.25		-		22.25	Chickens (layers) - 20 - Turkeys - 1		
406	21	Wetherington, Jeffrey D. & Kathleen	19 Polk Lane		1.69		-		-		-			
406	22	Wetherington, Jeffrey D. & Kathleen	13 Polk Lane		-		-		-		-			
406	25	Fox, Frank A.	534 Old Deerfield Pike		-		-		-		1.47			
501	3	Stoms, Lewis M. Sr. & Dorothy T.	1535 Highway 77		9.60		-		-		-			
501	4	Cattell, Maillard ET. AL.	28 Deerfield Road		47.42		-		-		-			
504	5	Tirelli, Cynthia	54 Deerfield Road		31.23		-		-		-			
501	5.01	Uhland, Kevin L. & Gaye A.	54 Deerfield Road		18.73		-		-		-			
501	6	EMB Deerfield Associates, LLC	80 Deerfield Road		-		-		-		59.00			
501	7.01	E. Brock Limited LLC	110 Deerfield Road		-		-		-		21.00			
501	7	E. Brock Limited	124 Deerfield Road		-		-		-		18.00			
501	9	EMB Deerfield Associates, LLC	55 Polk Lane		-		-		-		115.75			
501	9.02	EMB Deerfield Associates, LLC	155 Polk Lane		-		-		-		61.98			
501	9.03	Bernstein, Michael & Lucinda	111 Polk Lane		12.81		-		-		-			
501	9.04	EMB Deerfield Associates, LLC	95 Polk Lane		-		-		-		10.00			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
501	9.05	Casper, Todd & Margret	Polk Lane		-		-		-	27.20	-			
501	9.06	Keene, Lona	300 Old Burlington Road		15.00		-		-		-			
501	9.07	Comer, Robert L. & Dorothy	Polk Lane		5.00		-		1.00		1.00			
501	9.08	Bernstein, Michael & Lucinda	105 Polk Lane		8.00		-		-		-			
501	17	Casper, Todd & Margret	181 Polk Lane		-		-		-	5.21	-			
502	1	Flood, Edward T. Jr. & Ann Deborah	Highway 77		16.00		-		-		-			
502	1.01	EMB Deerfield Associates, LLC	1447 Highway 77		-		-		-		48.06			
502	1.02	EMB Deerfield Associates, LLC	1429 Highway 77		-		-		-		49.95			
502	3	Maxwell, Christopher	39 Northville Road		30.00		-		-		-			
502	11	EMB Deerfield Associates, LLC	100 Polk Lane		-		-		-		52.86			
502	16	Seabrook, James M.	81 Northville Road	51.00	78.00		-		-		-			
502	16.02	Seabrook, William E. & Lou Ann	152 Polk Lane		20.00		-		-		-			
502	18	Arcoleo, Lina c/o Brock Farm Inc	50 Polk Lane		-		-		-		33.25			
502	19	DuBois, Henry & Steve	170 Polk Lane		-		-	100.00	100.00		-			
601	1	Casper, Todd & Margret	311 Old Deerfield Road		-		-		-	7.18	-			
601	1.01	Casper, Todd & Margret	303 Old Burlington Road	7.18	-		-		-		-			
602	1	Bacon, John F. Jr.	331 Old Burlington Road		47.40		-		-		-			
602	3	Garrison, Roger	365 Old Burlington Road	18.20	18.20		-		-		-			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
602	4.01	Garrison, Donald C. & Louise E.	Old Deerfield Pike (Rear)		1.71		-		-		-			
602	4.02	Garrison, Donald C. & Louise E.	Deerfield Road		2.00		-		-		-			
602	5	Berger, Peter & Kathleen	Deerfield Road		-		-		-		-	Horses & Ponies - 4 Sheep - 1 Goats - 8 Chickens - 2	4.00	
602	7	Parkell, Linda Garrison	215 Deerfield Road		11.10		-		-		-		10 CD	
602	4	Parkell, Linda Garrison	Deerfield Road		3.98		-		-		-		10 CD	
602	7.01	Arnold, Allen W. & Patricia Ann	299 Deerfield Road		-		-		-		-		13.00	
603	8	Garton, Mrs. Wilbert J. Ciareglio	235 Old Burlington Road		35.68		-		-		-			
604	25	Tupper, Alma c/o K. Cass, Exec	Northville Road (Rear)		14.09		-		-		-			
604	28	Hopewell Nursery, Inc	Northville Road		-		-		-		7.00			
604	32	Gosbin, Charles & Sherry	144 Northville Road		-		0.50		2.00		14.00			
604	33	Garton, Jeffrey E. & Deborah L.	Northville Road		13.92		-		-		-			
604	34	Garton, Jeffrey E. & Deborah L.	Northville Road		6.65		-		-		-			
604	35	Sepers, Louis I ET. AL.	87 Weber Road		6.01		-		-		-			
604	36	Sepers, Louis I ET. AL.	91 Weber Road		6.00		-		-		-			
604	37	Sepers, Louis I ET. AL.	95 Weber Road		6.02		-		-		-			
604	39.01	Chiari, Donald	65 Weber Road		27.03		-		-		-			
604	39.02	Chiari, Brenda J.	Old Burlington Road		14.70		-		-		-			
605	3	Tupper, Alma c/o K. Cass, Exec	309 Deerfield Road		0.20		-		-		-			

Block	Acres	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
606 2		Tupper, Alma c/o K. Cass, Exec	120 Husted Station Road		21.50		-		-		-			
606	3.11	Hopewell Nursery, Inc	Husted Station Road		-		-		-		45.00			
606 4		Ball, Layne G. & Sandra Morrissey	Weber Road		-		-		-		-		12.00	
606 6		Garton, Jeffrey E. & Deborah L.	115 Weber Road		21.25		-		-		-			
607	2	Kandle, Warren E. Jr.	286 Deerfield Road		5.48		-		-		-			
607 3		Tupper, Alma c/o K. Cass, Exec.	121 Husted Station Road		35.90		-		-		-			
607 4		Mitchell, Joseph	Woodruff Road (Rear)		26.00		-		-		-			
607	13	Palischak, Michael P.	63 Husted Station Road		19.80		-		-		-			
607	13.05	Trueland, Ervin & Cheryl	Husted Station Road		14.00		-		-		-			
607	14	Orzechowski, Dorthy	Centerton Road		-		-		-		-	Horses & Ponies - 30		
607	16	Exel, David & Terry L.	Centerton Road		11.00		-		-		-			
607 16.01		Mooneyham, Carl & Geraldine	Centerton Road		-		-		-	10.19	-			
607 16.03		Gerber, William J. & Cecilia	Centerton Road		-		-		-		-	Horses & Ponies - 8		
607 16.04		Mooneyham, Carl & Geraldine	504 Centerton Road		-		-		-	5.52	-			
607 16.05		Mooneyham, Carl & Geraldine	Centerton Road		-		-		-	12.45	-			
607 18		Garrison Stella S.	520 Centerton Road		8.00		-		-		-			
701	10	Hopewell Nursery, Inc	309 Woodruff Road		-		-		-		210.00			
701	10.01	Centerton Nursery Inc	345 Woodruff Road		-		-		-	78.00	78.00			

Block	Acres	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
					10.00		-		-		-			
705	3	Henry, Harriet ET. AL.	Centerton Road		21.54		-		-		-			
705	4	Tuccillo, Laura A. & Victor A Schultz	Centerton Road		2.40		-		3.00		-			
705	4.04	Lee, Joseph T. & Ella	345 Centerton Road		-		1.00		1.00		3.00			
705	13	Fox, Harold & Glendon	Centerton-Big Oak		16.00		-		-		-			
706	4.01	Yancoskie, Evelyn M.	47 Richards Road		-		-	26.74	26.74		-			
706	11	McCaffery, Thomas J. Jr. & Carmella T.	Big Oak Road		-		-		-		-			
706	12	Uhland, Leo J. Jr. & Cheryl R.	280 Big Oak Road		16.05		-		-		-			
706	14	Nicosia, Irene E.	55 Richards Road		-		-	29.00	29.00		-			
707	2	Kim Sod Co	340 Centerton Road		55.00		-		-		-			
707	6	Ondrush, Philip III	Centerton Road		58.00		-		-		-			
708	2.04	Comley, George E. & Helen	Weber Road		8.00		-		-		-	All Beef Cattle - 2 Horses & Ponies - 9		
708	3	Hayes, Garrett P.	10 Husted Station Road		10.91		-		-		-			
708	3.02	Hayes, Garrett P.	410 Centerton Road		6.00		-		-		-			
708	3.03	Hayes, Garrett P.	400 Centerton Road		6.01		-		-		-			
708	4	G & G Communications, Inc	382 Centerton Road		10.50		-		-		-			
708	5.03	Henry, Harriet ET. AL.	370 Centerton Road		101.50		-		-		-			
708	6	Griffie, Frank F. Jr. & Melissa	Centerton & Fox Rds		2.00		-		-		-	Horses & Ponies - 5.74		
708	6.01	Camilli, Louis & Donna	Fox Road		-		-		-		-	Sheep - 3		

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
					170.00		-		-		-			
803	5.01	Chiari, John III & Ron Overstreet	1321 Old Burlington Road		39.76		-		-		-			
803	5.03	Bench Realty	Highway 77		-		-		-		32.00			
813	5	Hoogendorn, John E.	1393 Highway 77		7.00		-		-		-			
813	10	Ott, Harold	24 Northville		11.24		-		-		-			
820	1	Land Partners of NJ, LLC	McArthur Drive		28.00		-		-		-			
822	5.02	Trout, William D. Jr. & Sharon J.	Old Burlington Road		6.81		-		-		-			
822	6	DuBois, Steven Jr.	Northville Road	50.68	50.68		-		-		-			
822	6.14	DuBois, Steven Jr.	Hoover Road		24.72		-		-		-			
823	4.02	Stone, Sharon L.	Northville Road		5.34		-		-		-			
823	4.03	Stone, Ollie	Northville Road		2.48		-		-		-	All Beef Cattle - 3		
901	1	Hluchy, Robert & Joyce	1410 Highway 77		-		-		-		60.00			
901	1.03	Hluchy, Robert E.	1450 Highway 77		-		-		-		60.00			
901	1.05	Gunnison Village, Inc	1370 Highway 77		9.80		-		-		-			
901	10	Hluchy, Robert E.	484 Old Deerfield Pike		-		-		-		94.00			
902	1	R. Gray Achee	1092 Parsonage Road		4.00		-		-		17.00			
904	2	Seabrook Bros. & Sons, Inc	Old Deerfield Pike	156.00	156.00		-		-		-			
904	5	Seabrook Bros. & Sons, Inc	111 Finley Road	2.00	2.00		-		-		-			
904	7	Seabrook Bros. & Sons, Inc	366 Old Deerfield Pike	4.00	4.00		-		-		-			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
905	4	Pappas Properties LLC	Highway 77		-		-		-		-			
905	6.01	Major Petroleum Industries	1360 Highway 77		8.45		-		-		-			
905	9	Seabrook Bros. & Sons, Inc	85 Finley Road		-		-	48.00	48.00		-			
905	10	Seabrook Bros. & Sons, Inc	53 Foster Road	8.00	8.00		-		-		-			
1001	2	Coles, Hannah M.	135 Seeley Road		8.00		-		-		30.00			
1001	2.02	Mehaffey, G. Douglas	Center Road		15.00		-		-	25.00	25.00			
1001	3	Mooneyham, Lynn & Shirley Ann	540 Harmony Road		8.50		-		-		7.00			
1001	4	Aldrich, Ronald & Sylvia	31 Cake Road		-		-		-		-			
1001	4.01	Aldrich, Ronald	21 Cake Road		-		-		-		23.54			
1001	5	Larue, Howard D. II	91 Seeley Road		-		-		-		9.00			
1001	5.01	Loew, Frank E. & Linda S.	9 Cake Road		-		-		-	2.00	2.00			
1001	5.02	Loew, Frank E. & Linda S.	11 Cake Road		-		-		-	27.80	27.80			
1002	1	Mooneyham, Lynn & Shirley Ann	548 Harmony Road		-		-		-		4.69			
1002	2	Mehaffey, Robert & Debra	568 Harmony Road		8.00		-		-		-			
1002	2.04	Mehaffey, Robert & Debra	Harmony Road		-		-		-		5.90			
1002	3	Loew, Frank E. & Linda S.	24 Cake Road		-		-		-	40.00	40.00			
1002	3.01	Loew, Frank E. & Linda S.	20 Cake Road		-		-		-	1.50	1.50			
1002	4	Loew, Frank E. & Linda S.	18 Cake Road		-		-		-	30.00	30.00			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
		Partnership			65.46		-		-		-			
1102	103	Jarve, Mati & Constance L.	35 DuBois Road		-		-		-		-	Horses & Ponies - 9		
1102	1.1	Gappo, Elwood R.	53 DuBois Road		5.00		-		-		-			
1102	1.11	Smith, Roger A.	47 DuBois Road		5.00		-		-		-			
1102	1.12	Bork, Steven & Lisa	41 DuBois Road		-		-		-		-	Horses & Ponies - 3		
1102	2	Tharp, Richard & Carol Sue	Finley Road		-		-		-		-	Horses & Ponies - 2		
1102	201	Coombs, Alfred & Kathern J.	220 Finley Road		-		4.00		2.50		-			
1102	2.02	DeMaio, Ronald J. Jr.	Finley Road		-		-		-		6.40	Horses & Ponies - 1		
1102	7	Terrizzi, Urania	180 Finley Road		1.50		-		-		-			
1108	6	Overdevest, Edward	294 Old Deerfield Pike		20.00		-		-	2.00	2.00			
1108	7	Seabrook Bros. & Sons, Inc	Finley Road	74.00	74.00		-		-		-			
1108	7.02	Robbins, George E. Hester	148 Finley Road		1.00		-		2.50		1.00			
1109	2	Chiarelli, Gianfranco & Valentina	66 Old Deerfield Pike		15.49		-		-		-			
1110	1	Turner, E. Judson & Verna	Old Deerfield Pike		30.00		-		-		-			
1201	1	Ench, Robert & Benjamin Kasper	1274 & 1276 Highway 77		-		-		-		99.25			
1201	3	Ench, Robert & Benjamin Kasper	1262 Highway 77		-		-		-		2.00			
1202	1	Wenger, James & Barbara	Highway 77	100.00	126.00		-		-		-			
1205	1	Sasso, Vincent & McCusker, Peter	Highway 77		67.46		-		-		-			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
1205	102	Sasso, Vincent & McCusker, Peter	Finley Road		7.17		-		-		-			
1206	1	Galetto Realty Co, LP	1147 Highway 77		7.68		-		-		-			
1206	1.01	Galetto Realty Co, LP	1167 Highway 77		26.14		-		-		-			
1206	1.03	Galetto Realty Co, LP	1137 Highway 77		7.06		-		-		-			
1206	104	Upper Deerfield Leasing, LLC	1127 Highway 77		5.55		-		-		-			
1207	1	Dalessio, Mary Anne J.	Highway 77 & Love Lane		128.00		-		125.77		-			
1208	1	Provident Development, LLC	Highway 77 & Love Lane		-		-		-		-			
1208	1.02	Bench Realty	Cornwell Drive		-		-		-		27.00			
1301	1	Bench Realty	Love Lane		-		-		-		202.35			
1301	107	Immaculate Conception Church	70 Love Lane		-		-		-		20.03			
1504	5	Rogers, Donald & Urve	231 Old Deerfield Pike		8.30		-		-		-			
1701	12	Mensh, Raymond & Judy	W Sunset Pine Drive		-		-		-		-			
1708	19	Hasher, Rovert W. Jr.	Old Deerfield Pike		-		-		-		6.42			
1708	21	Davis, Joan L.	81 Old Deerfield Pike		8.46		-		-		-			
1708	22	Davis, Joan L.	83 Old Deerfield Pike		8.00		-		-		-			
1808	18	Davis, Joan L.	149 Laurel Heights Drive		15.00		-		-		-			
1808	25	Davis, Joan L.	82 Old Deerfield Pike		-		-		-		-			
1901	15	Matzel Development at UD	65 Cornwell Drive		34.67		-		-		-			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
1903	2.01	Chiarelli, Gianfranco & Valentina	1740 S. Burlington Road		5.00		-		-		-			
2012	1	DuBois, Jeffrey, Gary & David	Finley Road		14.54		-		-		-			
2101	1	Phelps, Lacy & Percy	15 Finley Road		7.00		-		-		-			
2101	2.01	Phelps, Lacy & Percy	Finley & Centerton Road		27.00		-		-		-			
2102	1	Chiarelli, John & Val	Centerton Road		-		-		37.02		-			
2102	1.05	Chiarelli, Ubaldo & Sandra	105 E Finley Road		5.00		-		-		-			
2102	2	Fox, Wilbert & Rose	186 Woodruff Road		27.29		-		-		-			
2102	4	Chiarelli, Paolo & Dianna	160 Woodruff Road		11.50	11.50	11.50		-		-			
2102	4.01	Borton, Brad & Corrine	178 Woodruff Road		10.00		-		-		-	Horses & Ponies - 8		
2102	4.02	Sheppard, Lenora	172 Woodruff Road		-		-		-		-	Horses & Ponies - 4		
2102	4.03	Chiarelli, John	166 Woodruff Road		-		-		11.31		-			
2201	1	Lupton, Ronald & Janice	Woodruff Road		34.00		-		-		10.00			
2201	2	Fox, Harold & Martha	120 Richards Road		6.50		-		-		-			
2201	3	Fox, Wilbert	130 Richards Road		16.48		-		-		-			
2201	4.02	Hobbs, Mary E.	142 Richards Road		-		-		-		-			
2201	6	Plummer, Barry & Carla	Richards Road		5.83		-		-		-			
2201	6.01	Klemick, John R. & Mary Lynn	Richards Road		5.00		-		-		-			
2201	8.02	Steever, Donald	127 Woodruff Road		8.00		-		-		-			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
					7.25		-		-		-			
2701	37	Romer, Robert & Pamela	9 Lebanon Road		-	-			-		8.00			
2701	38	Carr, John G. & Jennifer A. Allen	23 Lebanon Road		-	-			-		-	Horses & Ponies - 12 Chickens (layers) 6	6.00	2000.00
2701	43	Table, Edward Paul	591 Irving Avenue		-	-			-		-			
2701	47	Table, Edward Paul	Irving Avenue (Rear)		-	-			-		-			
2701	51	Bruck, William W. & Brenda P.	563 Irving Avenue		-	-	15.00	8.00			-			
2701	52	Horton, Olaf Howard	549 Irving Avenue		-	-			-		-			
2701	53	Pedrick, Leonard C. Jr. & Patricia	547 Irving Avenue		13.59	-			-		-			
2705	52	Bridgeton Farms Assoc G. Gramer Law	730 Irving Avenue		8.65	-			-		-	All Beef Cattle - 4 Goats - 10		
2706	13.01	Bacchini, Carlo & Mary C.	40 Lebanon Road		5.29	-			-		-			
2706	13.02	Shapiro, Gary & Lynn R.	48 Lebanon Road		6.28	-			-		-			
2706	13.05	Ryan, James & Delores	Irving Avenue		5.12	-			-		-			
2706	14	Howard, James & Patricia	84 Lebanon Road		15.00	-			-		-			
2801	1	Farm Service Agency USDA	790 Irving Avenue		-	-			63.00		-			
2801	3	Mitchell, Geneva Mason	766 Irving Avenue		5.50	-			-		-			
2801	5	Bridgeton Farms Assoc	740 Irving Avenue		53.95	-			-		-			
2802	1	Fisher, Edward W. & Toni M.	140 Lebanon Road		5.50	-			-		-			
2802	101	Lamanteer, Anthony Sr. ET. AL.	Lebanon Road	10.00	-	-			-		10.00			
2802	1.02	Riddle, Barry & Sherri	150 Lebanon Road		5.00	-			-		-			

Block	Lot	Owner	Land Location	Irrigated Acres	Field Crops Total	Irrigated Acres	Fruit Crop Total	Irrigated Acres	Vegetable Crops Total	Irrigated Acres	Ornamental Crops Total	Animals - No. and type	Fuelwood (Cords)	Timber (Bd. Ft.)
		T.	Road		9.00		-		-		-			
2803	10	Pipitone, Salvatore	135 Lebanon Road		30.00		-		-		-			
2803	11	Russo, James	193 S. Woodruff Road		3.00		-		-		-			
2804	1.02	Gianaris, George & Carol	Rosenhayn Avenue		3.08		-		-		12.00			
2804	2	Castellini, Rick	155 Carmel Road		20.00		-		-		10.00			
2804	3	Miller, Thomas B.	179 Carmel Road		-		-		-		-	Horses & Ponies - 3		
			2006 TOTALS	1139.2	5,595.21	20.5	255.76	323.7	708.67	1945	4,197.05		43	2000

Source: Wrrgt "F ggt hgrf "Vqy puj kr."4229

APPENDIX B: Agricultural Markets and Sales in the Upper Deerfield Region

Appendix B-1: Roadside Markets in Cumberland County, New Jersey				
Market	Address	Phone	Open	Products
A Taste of the Garden State	298 Columbia Hwy., Bridgeton	(856) 453-5749	Monday – Saturday, 8 AM – 5 PM	Nonperishable food items from NJ businesses
Adamucci Farms, Inc	152 Trench Rd., Bridgeton	(856) 451-4069	July 15 – Sept. 15, 8 AM – 6 PM P	eaches, nectarines
Badaracco Farms, Inc	954 Union Rd., Vineland	(856) 691-5531	July – Sept., 8 AM – 6 PM, Oct. – Dec., 8 AM – 5 PM	Peaches, pears, apples, pumpkins, sweet potatoes, vegetables, greens
Brassie’s Farm Market	1427 S Lincoln Ave., Vineland	(856) 692-8707	March – October 31, Monday – Saturday 10 AM – 6 PM. Sunday 10 AM – 3 PM	Dandelion, broccoli raab, sweet potatoes, tomatoes, sweet corn, peaches, strawberries, blueberries, apples, all types of lettuce, parsley, basil, summer squash, pickles, cucumbers, many other fruits & vegetables
Camps Big Oak Farm Market	Delsea Dr. (Rt 47), Port Elizabeth	(856) 825-7367	June – Oct., 9 AM – 6 PM	Fruits, vegetables, corn, sweet/white potato, melons, pumpkins
Cat-Tail Farm in the City	27 E. Commerce Street, Bridgeton		June – September, Saturdays, 8 AM – 4 PM	A wide selection of organically-grown vegetables, including green beans, beets, tomatoes, hot & sweet peppers, some herbs, hard-shell gourds, lavender, blackberries
Cruzandale Farms Harvest Quarters	434 Rt. 540, Bridgeton	(856) 455-8737	7 AM – dusk	Pumpkins, gourds, mums, corn stalks, straw
D’Ott’s Farm Market	3308 E. Landis Ave, Vineland	(856) 691-5565	May – Nov, Monday – Friday 9 AM – 6 PM, Saturday 9 AM – 5 PM, Sunday 9 AM – 3 PM	All fresh fruit & vegetables, fresh Jersey cantaloupes, greens, corn; melons & tomatoes are our specialty
Du Bose Farm	28 Ayars Lane, Bridgeton	(856) 455-5811	July – Dec., Monday – Saturday	Vegetables, herbs, fruits
Four Seasons Farm Market	601 Fordville Rd., Bridgeton	(856) 451-8341	June – January, Mon. – Fri. 10 AM – 7 PM; Sat. 10 AM – 6 PM; Sun. 10 AM – 5 PM	Vegetables; onions; tomatoes; peppers; collard greens; peas; beans
Half-Century Farms	709 Ye Greate St., Greenwich	(856) 455-5408	Daily, Sept. 15 – Oct. 31, 8 AM – 8 PM	Pumpkins, gourds, Indian corn
Horse Hay Acres	329 Old Mill Rd., Greenwich	(856) 455-3640	Daily	Timothy hay, orchard grass hay
Ingraldi Farms	Cedarville Rd. & Rieck Ave., Millville	(856) 451-1019	May – October 31, Daily, 10 AM – 6 PM	Corn, potatoes, strawberries, tomatoes, peas, beans, squash, apples, grapes, fruits, onions, peppers, asparagus
Jericho Gardens – MR Dickinson & Son	1256 Roadstown Rd., Bridgeton	(856) 451-3978	May – October, Mon. – Sun. 8:30 AM – 5 PM	Vegetables, herbs, tomatoes, peppers (hot & sweet), green beans, lima beans, pumpkins; lettuce
Joe’s Produce Market	481 East Elmer Rd., Vineland	(856) 794-8210	March – Oct. & Dec. 1 – Christmas, 9 AM – 6 PM	Spring: Easter crosses; summer: fresh Jersey produce; corn; tomatoes; peppers; melons; eggplants; zucchini; pickles; fall: pumpkins; gourds; cornstalks; mums; hay stacks
Lake View Farms – Nardelli Bros. Inc	54 N Main St., Cedarville	(856) 447-4020	April – November, Monday – Saturday 8 AM – 6 PM	All fruits & vegetables
Lillian’s Market	3834 Rt. 47, Port Elizabeth	(856) 293-0099	May – November (until Christmas with greens), Daily, 8 AM – dark	Asparagus thru zucchini, all home-grown fruits, vegetables

Appendix B-1: Roadside Markets in Cumberland County, New Jersey

Market	Address	Phone	Open	Products
Marlboro Farm Market & Garden Center	601 Route 49, Bridgeton	(856) 451-3138	Year round, 9 AM – 7 PM	Tree-ripened peaches; apples; pumpkins; sweet corn; strawberries; blueberries; full line of produce
Meadow View Farms Transport	92 Causeway Rd., Bridgeton	(856) 455-1882		
Muzzarelli's Farm Market	3460 Oak Road, Vineland	(609) 691-2497	Daily, 8 AM – 6 PM, Sunday 8 AM – 4 PM	Plum tomatoes; tomatoes; corn; all peppers; all eggplant; squash (acorn, butternut, spaghetti, green, yellow); okra; beets; basil; dill; parsley; garlic; beans (lima, string, flat); potatoes (white, red, sweet); pickles; cucumbers; peaches; plums; nectarines; pears; grapes; cabbage; lettuce; sugarbabies; seedless watermelon; yams; pumpkins
Nantuxent Farms	439 Baptist Rd., Newport	(856) 447-3917	June – Nov., 6/7 AM – Sunset	Sweet corn, vegetables, melons, okra, pumpkins, lima beans
Raehaven Farms	109 Bacon's Neck Rd. (Rt. 642), Greenwich		Daily, Memorial Day – Halloween, Sunrise – Sunset	Vegetables, small fruits, berries (strawberries, raspberries, blackberries, blueberries), melons, tomatoes, hot peppers (many varieties)
Rottkamp Farms Inc	780 Shiloh Pike, Bridgeton	(856) 451-2359		Fruits & vegetables
Sparacio's Produce Market	675 Parvins Mill Rd., Bridgeton	(856) 451-4859	3 Months, 8 AM – 7 PM	Corn; strawberries; tomatoes; lima beans; peppers
Sunny Slope Farms of NJ	400 Greenwich Rd., Bridgeton	(856) 451-0022	Mid-July – December, Daily, 8 AM – 6 PM	Apples, peaches (white, yellow), nectarines (white, yellow)
Willow Brook Farm	135 Seeley Rd, Bridgeton	(856) 451-7014	8 months	Pumpkins, nursery products
Woodbridge Farm	100 Back Rd., Newport	(856) 447-4724	May & June, Sunrise to Sunset	Strawberries

Source: NJ Dept. of Agriculture, 2007

Appendix B-2.: Produce Wholesalers and Distributors in Southern New Jersey

Name	Location	County	Phone
Amazon Produce Network	809 Kings Croft, Cherry Hill	Camden	(856) 321-3400
Atlantic County Provision Buena Vista	789 Harding Hwy, Newfield	Gloucester	(856) 697-1840
B & B Produce Inc	11 Seth Dr, Hammonton	Atlantic	(609) 561-8835
B & B Produce Inc	1008 N Main Rd, Vineland	Cumberland	(856) 691-0721
B & B Produce Inc	935 11th St, Hammonton	Atlantic	(609) 561-8835
B F Mazzeo	601 New Rd, Northfield	Atlantic	(609) 641-6608
Bacigalupo R Trucking	1850 E Oak Rd, Vineland	Cumberland	(856) 692-1440
Bassetti Joe	1088 N Main Rd, Vineland	Cumberland	(856) 691-7006
Bifulco Farms Inc	1145 N Main Rd, Vineland	Cumberland	(856) 696-9392
Bramante Farms	509 Sicklerville Rd, Sicklerville	Camden	(856) 629-7698
Buy It Fresh	105 W Broad St, Gibbstown	Gloucester	(856) 224-0005
Catalano Farms	11 Pointers Auburn Rd, Swedesboro	Gloucester	(856) 769-3249
Cherry Hot Shots Incorporated	215 N Mill Rd, Vineland	Cumberland	(856) 696-0940
Consalo Wm & Sons	1269 N Main Rd, Vineland	Cumberland	(856) 692-4414
D Spina & Sons	165 Haines Neck Rd, Salem	Salem	(856) 299-1940
Diamond Blueberry Inc	548 Pleasant Mills Rd, Hammonton	Atlantic	(609) 561-3661

Appendix B-2.: Produce Wholesalers and Distributors in Southern New Jersey			
Name	Location	County	Phone
Don A Lynn Prod Inc	114 S Main Rd, Vineland	Cumberland	(856) 691-3711
Donald Myers Produce Inc	1088 N Main Rd, Vineland	Cumberland	(856) 692-4084
Donio Trucking Company	692 N Egg Harbor Rd, Hammonton	Atlantic	(609) 561-2466
Formisano Farms Produce & Seeds	313 Plymouth St, Buena	Atlantic	(856) 697-0909
Fresh Ware LLC	1404 E Oak Rd, Vineland	Cumberland	(856) 794-1408
Fruitwood Orchards Honey	419 Elk Rd, Monroeville	Salem	(856) 881-7748
G A Restuccio Inc	392 S Egg Harbor Rd, Hammonton	Atlantic	(609) 561-5205
Garden State Produce Distribution	598 10th St, Hammonton	Atlantic	(856) 691-3711
Garrison C & D	981 Burlington Rd, Elmer	Salem	(856) 358-3889
Ginos Wholesale Fruit & Produce	373 S White Horse Pike, Hammonton	Atlantic	(609) 561-8199
Gloucester County Packing Company	535 Glassboro Rd, Woodbury Heights	Gloucester	(856) 845-0195
Heritage Treefruit LLC	124 Richwood Rd, Mullica Hill	Gloucester	(856) 589-6090
Kopke William H Jr. Inc	701 N Broadway, Gloucester City	Camden	(856) 456-2203
Krichmar Produce Co Inc	1850 E Oak Rd, Vineland	Cumberland	(856) 563-0040
Krichmar Produce Company Inc	1088 N Main Rd, Vineland	Cumberland	(856) 563-0059
Leone Alfred S Produce Inc	1145 N Main Rd, Vineland	Cumberland	(856) 794-2794
Maple Run Farms	55 Main St, Cedarville	Cumberland	(856) 447-5233
Metzler Systems Incorporated	535 Glassboro Rd, Woodbury Heights	Gloucester	(856) 845-8883
Midlantic Sweetener Co Inc	1249 Mays Landing Rd, Hammonton	Atlantic	(609) 704-7577
Millbridge Farms Incorporated	1831 Vine Rd, Vineland	Cumberland	(856) 794-3196
Missa Bay Citrus Company	3 Mallard Ct, Swedesboro	Gloucester	(856) 241-9161
Missa Bay Citrus Company	2333 Center Square Rd, Swedesboro	Gloucester	(856) 241-0900
Nardelli Bros	54 Main St, Cedarville	Cumberland	(856) 447-4621
Parzanese Salvatore	595 Spring Rd, Hammonton	Atlantic	(609) 561-5586
Produce Junction Inc	320 Beverly Rancocas Rd, Willingboro	Burlington	(609) 835-1911
Produce Services of America	2321 Industrial Way, Vineland	Cumberland	(856) 691-0935
Raio Produce Co Inc	557 Oak Rd, Hammonton	Atlantic	(609) 567-1070
Raio Produce Company Inc	181 Pine Rd, Hammonton	Atlantic	(609) 567-1070
Red Eagle Produce & Ice Cream	555 N Evergreen Ave, Woodbury	Gloucester	(856) 845-5885
Rigo Produce Inc	1088 N Main Rd, Vineland	Cumberland	(856) 696-5531
Russos Fruit & Vegetable Farm Inc	186 Carranza Rd, Tabernacle	Burlington	(609) 268-0239
Santelli Trucking Inc	1404 E Oak Rd, Vineland	Cumberland	(856) 692-1040
Seaburst Farms	109 N Broad St, Woodbury	Gloucester	(856) 853-1101
Seashore Fruit & Produce Company	800 N New York Ave, Atlantic City	Atlantic	(609) 345-3229
South Jersey Produce Cooperative Association Inc	4470 Italia Ave, Vineland	Cumberland	(856) 692-6600
Tilton Produce	2618 Tilton Rd, Egg Harbor Township	Atlantic	(609) 645-9599
Twin State Farms	310 N East Blvd, Landisville	Atlantic	(856) 697-2377
Vandenberg Jac Company	2321 Industrial Way, Vineland	Cumberland	(856) 691-0947
Vandenberg Jac Company	701 N Broadway, Gloucester City	Camden	(856) 456-8003
Variety Farms Inc	548 Pleasant Mills Rd, Hammonton	Atlantic	(609) 561-0612
Verchios Produce Outlet	272 Hurffville Cross Keys Rd, Sewell	Gloucester	(856) 262-0830
Zambito Produce Sales Inc	44 Cooper St, Woodbury	Gloucester	(856) 686-4810

Source: YellowPages.com, 2007

Table B-3: Vegetable Auctions in Southern New Jersey			
Auction	Location	Open	Phone
Vineland Produce Auction Association, Inc	1088 N. Main Rd, Vineland, NJ 08360	Sales daily 10:00 AM, except Sunday	(856) 691-0721
Swedesboro Vegetable Auction	Anderson Ave., Swedesboro, NJ 08085		(856) 476-0313
Tri-County Cooperative Auction Market Association, Inc	P.O. Box 269, Hightstown, NJ 08520	Sales Mon -- Wed-Fri 7:00 PM	(609) 448-0193
Landisville Produce Cooperative Association, Inc	Northwest Blvd., Landisville, NJ 08326	Direct sales daily	(609) 697-2271

Source: Rutgers Cooperative Extension, 2007

Table B-4: Produce Cooperatives in New Jersey		
Name	Location	Phone
Vineland Cooperative Produce Auction Association	1088 N. Main Road, Vineland, NJ 08360	(856) 691-0721
Trenton Market Growers Cooperative Association	960 Spruce Street, Trenton, NJ 08648	(609) 695-2998
Tri-County Cooperative Auction Market Association	P.O. Box 269, Hightstown, NJ 08520-0269	(609) 448-0193
Tru-Blu Cooperative Association	P.O. Box 5, New Lisbon, NJ 08064	(609) 894-8717
The Belle Mead Co-OP	100 Township Line Road, Hillsborough, NJ 08844	(908) 359-5173
Cedarville Cooperative Marketing Association, Inc	P.O. Box 245, Cedarville, NJ 08311	(856) 447-4585
Cooperative Growers Association, Inc	1360 Highway Rte. 206, Tabernacle, NJ 08088	(609) 268-1018
Jersey Fruit Cooperative Association, Inc	800 Ellis Street, Glassboro, NJ 08028	(856) 863-9100
Landisville Cooperative Association, Inc	P.O. Box 303, North Boulevard, Landisville, NJ 08326	(856) 697-2271
South Jersey Produce Cooperative, Inc	4470 Italia Avenue, Vineland, NJ 08360	(856) 692-6600

Source: Rutgers Cooperative Extension, 2007

APPENDIX C: Agricultural Support and Service Businesses in the Upper Deerfield Region

C-1: Agricultural Support Businesses in Cumberland, Gloucester, and Salem Counties				
Supplier	Address	Town	County	Phone
Barbara's Fuel Supply	280 Alloway Aldine Road	Woodstown, NJ 08098-2048 Salem		(856) 769-1965
Bos Tack & Trailer Sales	331 Morton Ave	Millville, NJ 08332 Cumberland		(856) 451-2830
Carter Aviation & Aero Service LLC	Tuckahoe Road	Williamstown, NJ 08094	Gloucester (856)	629-6699
Catalano Equipment LLC	122 Marlton Rd	Woodstown, NJ 08098	Salem (856)	769-0787
Cedar Lane Feed	21 Cedar Lane	Elmer, NJ 08318- 2646 Salem		(856) 358-5400
Coleman Glendon Feeds & Limes	89 Aldine Shirley Road	Elmer, NJ 08318- 2824	Salem (856)	358-8386
Coleman Irrigation Sales & Service	129 Canhouse Road	Elmer, NJ 08318- 2806	Salem (856)	358-4740
Cresci Farm Supply	4703 E Landis Ave	Vineland, NJ 08361 Cumberland		(856) 691-3881
Crossroads Trailers Sales	1230 Harding Hwy	Newfield, NJ 08344	Gloucester (800)	545-4497
Daminger's Country Store	641 Main Street	Sewell, NJ 08080-4423	Gloucester (856)	468-0822
Dare's Feed & Pet Supply	591 Shiloh Pike	Bridgeton, NJ 08302 Cumberland		(856) 451-2114
Equine Essentials Incorporated	240 Franklinville Rd	Swedesboro, NJ 08085	Gloucester (856)	241-8088
Falciani Farmers Package Supply Incorporated	2676 Harding Hwy	Newfield, NJ 08344	Gloucester (856)	694-3579
Farm-Rite	122 Old Cohansey Road	Shiloh, NJ 08353	Cumberland	(856) 451-1368
Farm-Rite Inc	122 Old Cohansey Road	Bridgeton, NJ 08302-6761	Cumberland (856)	451-1368
Fiocchi D L	1142 Panther Rd	Vineland, NJ 08361	Cumberland (856)	691-7907
Fogg Leslie G Inc	563 Stow Creek Road	Bridgeton, NJ 08302-6561 Cumberland		(856) 935-5145
Foster Equipment Sales, Farm Implements	Pittsgrove Road	Elmer, NJ 08318	Salem	(856) 358-2880
Garoppo Stone & Garden Center LLC	40 State St	Elmer, NJ 08318	Salem	(856) 697-4444
Gideons International	US Highway 40 North	Elmer, NJ 08318	Salem	(856) 358-8128

C-1: Agricultural Support Businesses in Cumberland, Gloucester, and Salem Counties				
Supplier	Address	Town	County	Phone
Gloucester County Irrigation Supply	110 Bridgeton Pike	Mullica Hill, NJ 08062-2670 Gloucester		(856) 478-2604
Harz Fred & Son	US Highway 40 North	Elmer, NJ 08318	Salem	(856) 358-8128
J & S Agway	Shiloh Pike	Bridgeton, NJ 08302	Cumberland (856)	455-8010
Jesco Inc	1275 Bloomfield Avenue Suite 5	Fairfield, NJ 07004-2736 Cumberland		(973) 227-2221
John Deere Dealership	670 Route 40	Elmer, NJ 08318	Salem	(856) 358-2880
Lakeside Service & Supply LLC	325 South Main Street	Elmer, NJ 08318- 2251 Salem		(856) 358-2444
Lawns by Walt		Elmer, NJ 08318	Salem	(856) 358-6741
Lee Rain Inc	2079 East Wheat Road	Vineland, NJ 08361-2552	Cumberland (856)	691-4030
Lee Tractor Co	1 Old Deerfield Pike	Bridgeton, NJ 08302-3744	Cumberland (856)	451-8376
Leslie G Fogg Inc	563 Stow Creek Road	Bridgeton, NJ 08302-6561 Cumberland		(856) 451-2727
Nicholsons Farm Supplies Glassboro	Aura Rd	Monroeville, NJ 08343	Salem (856)	881-8719
Nu Rain Irrigation LLC	4251 Genoa Avenue	Vineland, NJ 08361-7918	Cumberland (856)	794-3054
Packaging Corps of America	217 West Peach Street	Vineland, NJ 08360-3650 Cumberland		(609) 561-2410
Pole Tavern Equipment Sales Corp	1880 North Delsea Drive	Vineland, NJ 08360-1980	Cumberland (856)	696-9398
Quartermill Farm & Supply	2325 W Main St	Millville, NJ 08332	Cumberland (856)	825-5244
Rainman	539 Watsons Mill Road	Elmer, NJ 08318- 2910 Salem		(856) 769-3989
Reuben JJ	Grant Avenue & Main	Vineland, NJ 08360	Cumberland (856)	692-4308
Roork's Farm Supply Inc	163 Route 77	Elmer, NJ 08318- 2662	Salem (856)	358-3100
Schalick Mills Inc	100 Front Street	Elmer, NJ 08318- 2139 Salem		(856) 358-2323
Schaper Bros and Farms Supplies	913 Landis Avenue	Elmer, NJ 08318- 4048	Salem (856)	455-1640
Select Sire Power		Elmer, NJ 08318	Salem	(856) 358-3933
South Jersey Farmers Exchange	101 East Avenue	Woodstown, NJ 08098-1318	Salem (856)	769-0062
South Jersey Sprinkler Irrigation		Glassboro, NJ 08028 Gloucester		(856) 863-0680
Tanger Chas W Feed	1577 Hurffville Rd	Sewell, NJ 08080	Gloucester	(856) 227-0436
Tractor Supply Company	3095 S Delsea Dr	Vineland, NJ 08360 Cumberland		(856) 691-3101

C-1: Agricultural Support Businesses in Cumberland, Gloucester, and Salem Counties				
Supplier	Address	Town	County	Phone
Tri County Equipment	US Highway 40 & Stat	Vineland, NJ 08360 Cumberland		(856) 697-1414
Turner Walt Farm	539 Watsons Mill Road	Elmer, NJ 08318-2910	Salem (856)	769-3989
V Puzio Dairy Inc	480 US Highway 46	Fairfield, NJ 07004-1906	Cumberland (973)	808-0400
W & W Farm Supply Inc	110 Bridgeton Pike	Mullica Hill, NJ 08062-2670 Gloucester		(856) 478-2604
Walt's Dixie Chopper	539 Watsons Mill Road	Woodstown, NJ 08098-2057	Salem (856)	358-6741
Ward Bishop Farms & Feeds	16 Pine Tavern Rd	Elmer, NJ 08318	Salem	(856) 358-3923
Warren's Hardware and Heating Service	110 Bridgeton Pike	Mullica Hill, NJ 08062-2670	Gloucester (856)	478-2604
Williamson J W Co	Aura-Hardingville Road	Monroeville, NJ 08343 Salem		(856) 881-3267
Woodstown Farm Supply	110 East Grant Street	Woodstown, NJ 08098 Salem		(856) 769-1800
Woodstown Ice & Coal Co	50 East Grant Street	Woodstown, NJ 08098-1416	Salem (856)	769-0069

Source: AllPages.com, YellowPages.com, 2007

C-2: Food Products Processors, Distributors, and Brokers in Southern New Jersey		
Name	Location	County
ABC Enterprises	66 Bells Lake Dr Turnersville, NJ 08012	Gloucester
Avalon Fine Food	617 Chapel Ave W Cherry Hill, NJ 08002	Camden
Ben Dor Sales	510 Liberty St, Camden, NJ 08104	Camden
Brandywine Brokerage Co	505 White Horse Pike, Haddon Heights, NJ 08035	Camden
Buona Vita Inc	1 Industrial Blvd S, Bridgeton, NJ 08302	Cumberland
Cappetta Associates Food Brkrs	8 Blossom Ct. Cherry Hill, NJ 08003	Camden
Chase Sales Co	320 Haddon Ave, Westmont, NJ 08108	Camden
Chelten House Products Inc	607 Heron Drive, Bridgeport, NJ 08014	Gloucester
Del Monte Corporation	Lock Avenue, Swedesboro, NJ 08085	Gloucester
Del-Val Foods	104 Maple Leaf Ct, Glassboro, NJ 08028	Gloucester

C-2: Food Products Processors, Distributors, and Brokers in Southern New Jersey		
Name	Location	County
Demitri M	199 Dundee Dr, Williamstown, NJ 08094	Gloucester
Dimar Foods Corp	144 Black Horse Pike, Mt Ephraim, NJ 08059	Camden
D L Matthews & Co	100 Dartmouth Drive, Swedesboro, NJ 08085 Gloucester	
D'Orazio Foods Inc	State Highway 47 North, Deptford, NJ 08096	Gloucester
Eagle Distribution Inc	103 Sewell Rd, Sewell, NJ 08080	Gloucester
Eatem Foods Inc	1829 Gallagher Dr, Vineland, NJ 08360	Cumberland
En Enterprises Inc	6728 Dewey Ave, Pennsauken, NJ 08110	Camden
F & S Produce	913 Bridgeton Ave, Rosenhayn, NJ 08352	Cumberland
Facts Enterprises	835 Canal St Blackwood, NJ 08012	Camden
Foods Etc	1001 Lower Landing Rd # 303, Blackwood, NJ 08012	Camden
Foods Galore Inc	9246 Commerce Hwy Pennsauken, NJ 08110	Camden
General Mills Food Service	1200 S Church St, Mt Laurel, NJ 08054	Burlington
Gino's Provision Incorporated	7 Hill Farm Way, Swedesboro, NJ 08085	Gloucester
Heims Pure Foods Inc	218 Powell St, Gloucester City, NJ 08030	Camden
H & S Provisions Inc	1478 S Broadway, Camden, NJ 08104	Camden
Intercity Foods	1600 Federal St, Camden, NJ 08105	Camden
J & J Snack Foods Corporation	361 Benigno Boulevard, Bellmawr, NJ 08031	Camden
J J Foods Inc	218 Salina Road, Sewell, NJ 08080	Gloucester
Katz's	410 Kaighns Ave, Camden, NJ 08103	Camden
M Zukerman & Co	270 N Delsea Dr, Vineland, NJ 08360	Cumberland
Mamacita Inc	2851 Industrial Way, Vineland, NJ 08360	Cumberland
Marketing Specialists Corp	5880 Magnolia Ave Merchantville, NJ 08109	Camden
Milano Foods Inc	824 E Gate Dr # D, Mt Laurel, NJ 08054	Burlington

C-2: Food Products Processors, Distributors, and Brokers in Southern New Jersey		
Name	Location	County
Mil-Ray Food Co	26 Cedar Hill Dr, Sicklerville, NJ 08081	Camden
MV Foods	300 Heron Dr, Logan Township, NJ 08085	Gloucester
Orrs Specialty Foods LLC	169 Wolfert Station Rd, Mullica Hill, NJ 08062	Gloucester
Pace Foods Inc	1 Campbell Pl, Camden, NJ 08103	Camden
Pace Target Brokerage	716 Clayton Rd, Williamstown, NJ 08094	Gloucester
Pennant Foods	280 Jessup Rd, Thorofare, NJ 08086	Gloucester
Philadelphia Brokerage Co	2201 Route 38 # 616, Cherry Hill, NJ 08002	Camden
Pride Marketing Assoc Inc	Franklinville, NJ 08322	Gloucester
Progresso Quality Foods	500 E Elmer Rd, Vineland, NJ 08360	Cumberland
Puratos Corp	8030 National Hwy, Pennsauken, NJ 08110	Camden
QSI Enterprises Inc	1001 Lower Landing Rd # 307, Blackwood, NJ 08012	Camden
Quality Brokerage	15 Willow St Blackwood, NJ 08012	Camden
Relative Foods	496 E Weymouth Rd, Vineland, NJ 08360	Cumberland
SK Wholesale Food Distributors	628 Whig Lane Road, Monroeville, NJ 08343	Salem
Southside Food Service	7300 S Crescent Blvd, Merchantville, NJ 08109	Camden
Stavola Foods	Frontage Rd & Route 47, Westville, NJ 08093	Gloucester
Tokyo House	7550 S Crescent Blvd, Merchantville, NJ 08109	Camden
Utz Quality Foods Inc	1570 Grandview Ave, Paulsboro, NJ 08066	Gloucester
Wagner Provisions Co	54 East Broad Street, Gibbstown, NJ 08027	Gloucester
WCLD	701 North Broadway, Gloucester City, NJ 08030	Camden

Source: *YellowPages.com, 2007*

C-3: Cold Storage Warehouses in Southern New Jersey			
Name	Location	County	Phone
Bifulco Four Seasons Cold Storage Inc	590 Almond Rd, Elmer	Salem	(856) 696-2288
C R England & Sons	403 Dultys Ln, Burlington	Burlington	(609) 386-8034
Cumberland Cold Storage Compressor Room	85 Finley Rd, Bridgeton	Cumberland	(856) 455-1499
Cumberland Freezers	6 N Industrial Blvd, Bridgeton	Cumberland	(856) 451-8300
Davy Cold Storage LLC	2055 Demarco Dr, Vineland	Cumberland	(856) 205-9490
Dockside Refrigerated Warehouse of Philadelphia	8 Oregon Ave, Cherry Hill	Camden	(215) 271-3021
Doughty S Furniture Distribution Center	3665 N Mill Rd, Vineland	Cumberland	(856) 692-9550
Eastern Pro Pak	800 Ellis Mill Rd, Glassboro	Gloucester	(856) 881-3553
First Choice Freezer & Cold Storage	396 N Mill Rd, Vineland	Cumberland	(856) 696-8878
Garden State Freezer & Cold Storage Inc	554 Franklinville Rd, Mullica Hill	Gloucester	(856) 478-4224
Garden State Freezers Inc	540 Franklinville Rd, Mullica Hill	Gloucester	(856) 478-4250
Garden State Freezers Inc	554 Franklinville Rd, Mullica Hill	Gloucester	(856) 478-4666
Garden State Freezers Inc	217 Harrisonville Way, Mullica Hill	Gloucester	(856) 223-8689
Jackly Holding LLC	300 Atlantic Ave, Camden	Camden	(856) 614-1001
Kmt Brrr Inc	1042 W Parsonage Rd, Bridgeton	Cumberland	(856) 455-0031
Land Olakes Inc	2041 Us Highway 130, Roebling	Burlington	(609) 499-3810
Light Impact US	600 Columbia Ave Ste A, Millville	Cumberland	(856) 327-2555
Lucca Cold Freezer	2321 Industrial Way, Vineland	Cumberland	(856) 563-1246
Luccas Freezer & Cold Storage	181 Pine Rd, Hammonton	Atlantic	(609) 561-3100
Lucca's Freezer & Cold Storage	2321 Industrial Way, Vineland	Cumberland	(856) 692-3202
Mid Eastern Cold Storage Inc	97 N Mill Rd, Vineland	Cumberland	(856) 691-3700
Mullica Hill Cold Storage Inc	554 Franklinville Rd, Mullica Hill	Gloucester	(856) 478-4200
Rls Cold Storage LLC	1250 Dutch Mill Rd, Newfield	Gloucester	(856) 694-3216
Safeway Freezer Storage Inc	97 N Mill Rd, Vineland	Cumberland	(856) 691-9696
South Jersey Cold Storage	546 Franklinville Rd, Mullica Hill,	Gloucester	(856) 223-1883
South Jersey Cold Storage	554 Franklinville Rd, Mullica Hill	Gloucester	(856) 223-1882
South Jersey Cold Storage	100 Dartmouth Dr, Swedesboro	Gloucester	(856) 241-2004
Store Rite Freezer Storage	215 N Mill Rd, Vineland	Cumberland	(856) 696-0055
Timberline Cold Storage Inc	55 Commerce Ave, Pitman	Gloucester	(856) 589-3130
United States Cold Storage Inc	100 Dobbs Ln, Cherry Hill	Camden	(856) 354-8181
Vineland Ice & Storage	544 E Pear St, Vineland	Cumberland	(856) 692-3990

Source: YellowPages.com, 2007

APPENDIX D: UPPER DEERFIELD TOWNSHIP FARMLAND PRESERVATION PROGRAM

RANKING CRITERIA/SCORING WORKSHEET

Application Number _____
 Block(s)/Lot(s) _____
 Application Name _____
 Completed By _____ Date _____

SUMMARY OF SCORES

1.	Soil Quality Score	<input style="width: 100%; height: 20px;" type="text"/>
2.	Size and Density Score	<input style="width: 100%; height: 20px;" type="text"/>
3.	Boundaries and Buffers Score	<input style="width: 100%; height: 20px;" type="text"/>
4.	Degree of Imminence of Change Score	<input style="width: 100%; height: 20px;" type="text"/>
5.	Special Considerations Score	<input style="width: 100%; height: 20px;" type="text"/>
TOTAL SCORE		<input style="width: 100%; height: 20px;" type="text"/>

1. SOIL QUALITY	(Weight 25)	Points
a. _____	% Prime Soils x 0.25	_____
b. _____	% Statewide Soils x 0.20	_____
c. _____	% Local Soils x 0.10	_____
d. _____	% Unique Soils x (0 or 0.20)	_____
TOTAL SOILS SCORE		<input style="width: 100%; height: 20px;" type="text"/>

2. SIZE AND DENSITY	(Weight 9)	Points
a. Farmland Acreage	> 100 ac. 3 points	
50-10	0 ac. 2 points	
	<u>20-49 ac. 1 point</u> _____	_____
b. Percentage Tillable	80-100% 3 points	
50-79%	2 points	
25-49%	1 point	
	<u>< 25% 0 points</u> _____	_____
c. Percentage of area within 1 mile	80-100% 3 points	
in agricultural use	50-79% 2 points	
25-49%	1 point	
	<u>< 25% 0 points</u> _____	_____
TOTAL SIZE AND DENSITY SCORE		<input style="width: 100%; height: 20px;" type="text"/>

3. BOUNDARIES AND BUFFERS

(Weight 30)

Points

a. Percentage of farm perimeter adjacent to deed-restricted farmland, deed-restricted open space, or Wildlife Areas
80-100% 10 points
60-79% 8 points
40-59% 6 points
20-39% 4 points
0-19% 0 points

b. Percentage of farm perimeter adjacent to compatible natural or man-made buffers. (unrestricted farmland, parks, public golf courses, streams and wetlands)
80-100% 10 points
60-79% 8 points
40-59% 6 points
20-39% 4 points
 0-19% 0 points

c. Ratio of road frontage to total acreage of applicant's property. 20.1-4
> 40.1 ft./ac. 10 points
10.1-2 0 ft./ac. 8 points
0.1-10 0 ft./ac. 6 points
ft./ac. 4 points
0 ft./ac. 0 points

TOTAL BOUNDARIES AND BUFFERS SCORE

4. DEGREE OF IMMINENCE OF CHANGE

(Weight 5)

a. High percentage of land developable 2 points
b. High threat of development within 5 years 3 points

TOTAL DEGREE OF IMMINENCE OF CHANGE SCORE

5. SPECIAL CONSIDERATIONS

(Weight 21)

a. Full-time farmer 3 points
b. Primary earned income source 3 points
c. Soil and water conservation practices in place 3 points
d. Historic considerations 2 points
e. Unique agricultural operation 1 point
f. Environmentally sensitive features 2 points
g. Other considerations 1 point

TOTAL SPECIAL CONSIDERATIONS SCORE

APPENDIX E.: CONSERVATION PROGRAMS FOR FARMERS

FEDERAL PROGRAMS

The **Conservation Reserve Program (CRP)** is offered by NRCS and administered by the Farm Service Agency. It provides technical and financial aid and gives farmers assistance in complying with federal, state, and tribal environmental laws. The program encourages farmers to convert highly erodible or environmentally sensitive cropland to vegetative cover, such as native grasses, filter strips or riparian buffers. In exchange, farmers receive rental payments for enrolled land as well as financial assistance for implementing and maintaining conservation practices. Website: www.nrcs.usda.gov/programs/crp/.

The State of New Jersey partnered with the USDA to help farmers protect water quality by establishing a \$100 million **Conservation Reserve Enhancement Program (CREP)**, which is the New Jersey version of the federal program. Under a joint agreement between the USDA and State of New Jersey, \$100 million in funding has been provided for New Jersey farmers to install stream buffers in order to reduce the flow of nonpoint source pollution into the state's waterways. Types of buffers to be installed include trees, shrubs, vegetative filter strips, contour grass strips, and grass waterways. Under the program, a landowner installs and maintains approved practices through a 10- or 15-year rental contract agreement. A landowner entering the state Farmland Preservation Program or Green Acres Program also may opt for a permanent easement under the Conservation Reserve Enhancement Program. This would provide additional payment for permanent maintenance of approved conservation practices. The program will pay landowners annual rental and incentive payments for participating in the program, as well as 100 percent of the cost to establish approved practices. Additional information can be found at www.fsa.usda.gov or contact the local Farm Services Agency (FSA) Office or Soil and Water Conservation District Office.

Another program targeted for wetlands preservation is called the **Wetlands Reserve Program (WRP)**. WRP is a voluntary resource conservation program that provides landowners with the opportunity to receive financial incentive to restore, protect, and enhance wetlands in exchange for returning marginal land from agriculture. WRP is made possible by a reauthorization in the Food, Conservation and Energy Act of 2008, known as the Farm Bill. The program has three enrollment options: permanent easement, 30-year easement, or restoration cost-share agreement, which has a minimum 10-year commitment. Applications are accepted on a continuous basis and may be obtained and filed at any time. Please see the website for more details: www.nrcs.usda.gov/programs/wrp/.

The **Grassland Reserve Program (GRP)** is another conservation program authorized by the 2008 Farm Bill. GRP is a voluntary program that protects grasslands, pasturelands, and rangelands without prohibiting grazing. Participants voluntarily put limitations on the future use of their land while retaining the ability and right to conduct grazing practices, produce hay, mow or harvest for seed production, conduct fire rehabilitation, and construct

Appendix E: Conservation Programs for Farmers (cont'd.)

firebreaks and fences. There are four enrollment options: permanent easement; 30-year easement; rental agreement, which is available in 10-, 15-, 20-, or 30-year contracts; and restoration agreement. Participants are compensated in different ways according to the enrollment option. For more information and application procedures, visit the GRP website: www.nrcs.usda.gov/programs/grp/.

The **Wildlife Habitat Incentives Program (WHIP)** is another USDA voluntary program, that targets landowners who want to preserve and protect fish and wildlife habitat on nonfederal lands. WHIP applicants develop a plan of operations outline conservation practices and implementation schedules. The NJ State Conservationist, in conjunction with the State Technical Committee, identifies and prioritizes plans that complement the goals and objectives of relevant fish and wildlife conservation initiative at the state, regional and national levels. If selected, a plan forms the basis of a cost-share agreement, lasting between 1 to 10 years. NRCS will pay for up to 75 percent of costs of implementing conservation practices that protect fish and wildlife habitat. For beginning farmers, socially disadvantaged or limited resource producers, NRCS will pay for up to 90 percent of costs. In New Jersey, a state plan has been developed that targets a number of priority habitat areas: pollinator habitat, grasslands habitat, disturbance-dependent habitat, bog turtle priority species habitat, wetland habitat and Delaware Bay priority habitat. For more information and application procedures, visit the NJ WHIP website: www.nj.nrcs.usda.gov/programs/whip/.

The **Environmental Quality Incentives Program (EQIP)** is also a part of the reauthorized Farm Bill of 2008. EQIP is a voluntary program that focuses on conservation that promotes both agricultural production and environmental quality. The program itself offers technical and financial assistance with installation and implementation of structural and management practices on agricultural land. EQIP features a minimum contract term compared to other programs, lasting a maximum of 10 years. Landowners are eligible for incentive and cost-share payments of up to 75 percent and sometimes up to 90 percent, while still engaging in livestock or agricultural production activities. For more information please visit the website: www.nrcs.usda.gov/programs/eqip.

The **Conservation Stewardship Program (CSP)** is a voluntary program administered by the NRCS that replaces the Conservation Security Program. This program is intended to promote conservation and improvement of soil, water, air, energy, plant and animal life, etc. on tribal and private working lands. Working lands refer to a variety of land types, including cropland, grassland, prairie land, improved pasture, and range land. In some cases, forested lands would also be included in this category. CSP is available in 50 states, as well as the Caribbean and Pacific Basin areas, and provides equal access to funding. For more information please visit the website: www.nrcs.usda.gov/programs/new_csp/csp.html.

Appendix E: Conservation Programs for Farmers (cont'd.)

The **Farm and Ranch Lands Protection Program (FRPP)** is a voluntary land conservation program that assists farmers in keeping their lands for agricultural purposes. FRPP provides matching funds to those provided by state, tribal, local government, or nongovernment organizations, offering farm and ranch protection programs designed to purchase conservation easements. The FRPP is managed by the NRCS. Conservation easements are purchased by the state, tribal, or local entity. A participating landowner agrees not to convert their land to nonagricultural uses, and to develop a conservation plan for any highly erodible lands. Landowners do, however, maintain all of their rights to utilize their land for agricultural purposes. For more information about FRPP, please visit the website: www.nrcs.usda.gov/programs/frpp/.

The federal Environmental Protection Agency (EPA) offers the **Strategic Agricultural Initiative**, an outreach program designed to demonstrate and facilitate the adoption of agricultural management practices that will enable growers to transition away from the use of high-risk pesticides. Funds are provided to projects that develop agricultural management practices that offer risk reductions to human health and the environment. For additional information visit www.epa.gov/region02.

The EPA also offers the **Source Reduction Assistance Program**, which prioritizes water conservation and the minimization of chemicals of concern, such as pesticides, endocrine disruptors, and fertilizers. For additional information visit www.epa.gov/region02.

The U.S. Fish and Wildlife offers technical and financial assistance to private landowners through the **Partners for Fish and Wildlife** Program. The owners restore wetlands, streams and river conditions, as well as other important fish and wildlife habitat, for federal trust species. More information is available at: <http://njfieldoffice.fws.gov/partners>.

STATE PROGRAMS

The **Landowner Incentive Program (LIP)** is a preservation program for private landowners who wish to protect and conserve rare wildlife habitat and species. LIP is funded by the U.S. Fish and Wildlife Service and is administered by NJDEP's Division of Fish and Wildlife Endangered Nongame Species Program. Participating landowners receive both technical and financial assistance through this competitive grant program. Generally, a five-year minimum commitment is required and longer terms are preferred. A 25 percent cost-share is required of the landowner. While the LIP is seeking funding for additional habitat protection projects, it may be another year before grants are available. To learn more about the program in general visit the website: www.state.nj.us/dep/fgw/ensp/lip_prog.htm.

Appendix E: Conservation Programs for Farmers (cont'd.)

The **State Agricultural Development Committee (SADC) in New Jersey** has made soil and water conservation grants available as part of the Farmland Preservation Program. The grants gives landowners up to 50 percent of the funds required for approved soil and water conservation projects. Farms are only eligible if they are already enrolled in a permanent or eight-year easement program. Soil projects can include measures to prevent or control erosion, control pollution on agricultural land, and improve water management for agricultural purposes. Projects must be completed within three years of SADC funding approval. However, under special circumstances, the grant may be renewed for an additional year. For more information, contact the local Soil Conservation District or the State Agricultural Development Committee at (609) 984-2504 or visit the website: www.state.nj.us/agriculture/sadc/sadc.htm for additional details.

NJDEP's 319(h) Non-point Source Pollution Control Pass-through Grant Program provides financial assistance to reduce non-point source pollution through riparian buffers, manufactured treatment devices, and other methods. (Applicant must be a government entity or a non-profit organization, but can partner with farmers.)

APPENDIX F: UPPER DEERFIELD RIGHT-TO-FARM ORDINANCES

TOWNSHIP OF UPPER DEERFIELD

ORDINANCE NO. 360

AN ORDINANCE TO AMEND CHAPTER 98 OF THE CODE OF THE TOWNSHIP OF UPPER DEERFIELD TO SUPPLEMENT THE ZONING MAP, ADOPT NEW REGULATIONS RELATED TO AIRPORT HAZARD AREAS, ADOPT A RIGHT TO FARM PROVISION PROVIDE REGULATIONS GOVERNING DEVELOPMENTS WHICH STRADDLE MUNICIPAL BOUNDARIES, ELIMINATE PROVISIONS FOR FLEA MARKETS, AUCTIONS AND OUTDOOR SALES, AMEND PROVISIONS FOR OFF-SITE AND OFF-TRACT IMPROVEMENT REQUIREMENTS, PROVISION OF SANITARY SEWERS AND WATER SUPPLY, PROVISIONS FOR SUBMISSION OF APPLICATIONS FOR DEVELOPMENT, REGULATIONS GOVERNING THE FURNISHING OF LISTS OF PROPERTY OWNERS, AND PROVISION OF NEW FEE SCHEDULES.

BE IT ORDAINED BY THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF UPPER DEERFIELD IN THE COUNTY OF CUMBERLAND, STATE OF NEW JERSEY THAT:

Section 1. Section 98-3, "Terms defined." is hereby amended by the deletion thereof the definition for the term: "Garden Apartment."

Section 2. Section 98-3, "Terms defined." is further hereby amended by the addition thereto of the following definition:

"Airpark. Any area of land, adjacent to a public use airport, to be utilized as a combined single family residence and aircraft storage facility."

Section 3. Section 98-5, "Zoning map." is hereby amended so that Subsection A thereof shall cease to read as heretofore and shall hereafter read as follows:

"A. Establishment. The boundaries of all zone districts shall be shown on the Zoning Map of the Township of Upper Deerfield, dated December 1990, Revised to May 1990, which, together with all explanatory matters shown thereon, is hereby adopted by reference and declared to be a part of this Chapter. The original of said map shall be maintained by the Township Planning Board and all changes in said zones shall be entered upon such map upon enactment, after which it shall not be necessary to refer to such changes by metes and bounds."

Section 4. The following sections of Chapter 98 are by deleted in their entirety as all zone boundaries are shown on the Zoning Map of the Township of Upper Deerfield Township, dated December 1990, Revised to May 1990, and as adopted by Section 98-5 herein this Ordinance:

- Section 98-5.1, entitled: "Territory near Centeron Road rezoned from B-1 Business Zone to R-2 Residential Zone;"
- Section 98-5.2, entitled: "Territory near Centeron Road rezoned from B-1 Business Zone to B-2 Business Zone;"
- Section 98-5.3, entitled: "Territory near Landis Avenue rezoned from B-1 Business Zone to R-2 Residential Zone;"
- Section 98-5.4, entitled: "Territory near Landis Avenue rezoned from B-2 Business Zone to R-2 Residential Zone;"
- Section 98-5.5, entitled: "Territory near Old Deerfield Pike rezoned from R-2 Residential Zone to A Agricultural Zone."
- Section 98-5.6, entitled: "Territory near DuBois Road rezoned from R-2 Residential Zone to R-1 Residential Zone;" and
- Section 98-5.7, entitled: "Territory near Seeley-Finley Road rezoned from R-2 Residential Zone to A Agricultural Zone."

Section 5. A new section, Section 98-22.1, entitled: "Right To Farm," is hereby added to this Chapter and shall read as follows:

"Section 98-22.1 Right To Farm. The right to farm all land is ordained to be a permitted use which can be pursued on any of the land in the Township of Upper Deerfield which land is considered a "farm" as defined in this Chapter, subject only to the restrictions and regulations for intensive fowl and swine farms and the keeping of animals and subject to local health laws and regulations. The "Right to Farm" as applied in this section includes the following:

- A. Use of irrigation pumps.
- B. Aerial and ground seeding and spraying of land and crops.
- C. Application of fertilizers, pesticides and herbicides.
- D. Use of tractors and other power-driven, wheeled and tracked vehicles.
- E. Use of farm laborers (local and transient).
- F. The grazing of livestock.

All the foregoing activities are permitted for the purpose of producing from the land, agriculture products such as vegetables, grains, hay, fruit, fibers, wood, shrubs, flowers, seeds and for raising livestock. Farming activities shall be conducted in accordance with generally accepted agricultural practices and may occur at any time including Sundays and holidays. These activities also may occur at any hour of the day or night. The noises, odors, and fumes which are reasonable and necessary to farming are included as inherent parts of the "Right to Farm."

It is expressly found that whatever nuisance may be caused to others by such uses and activities so conducted, is more than offset by the benefits from farming to the neighborhood and community and to society in general, by the preservation of open space, the beauty of the countryside and clean air and by the preservation and continuance of farming operations in Upper Deerfield Township and in New Jersey as a source of agricultural products for this and future generations.

The approving authority shall require developers of major subdivisions to provide perspective purchasers of lots within the subdivision with written notice that Upper Deerfield Township has a right to farm ordinance which notice shall include a copy of this Section 98-22.1. The developer shall provide the Zoning Officer with proof that said notice was provided as a condition to the issuance of an initial (new construction) certificate of occupancy."

Section 6. Section 98-6.1, "Airport hazard area delineation.", shall cease to read as heretofore and shall hereafter read as follows:

"Airport hazard area delineation.

The areas of airport hazard identified on the map prepared by Robert A. DuBois, P.E. of DuBois and Martin Associates, Inc., entitled "Buck's Airfield Hazard Areas, dated December 15, 1989, are hereby adopted by reference and declared to be a part of this Chapter. The Buck's Airfield Hazard Areas Map herein referenced is on file in the office of the Township Clerk, Municipal Building, Highway 77, Seabrook, New Jersey 08302."

Section 7. Section 98-12, "Lot requirements." is hereby amended by the addition thereto of a new subsection E which shall read as follows:

"E. Where a lot straddles a municipal boundary line all minimum lot size and minimum lot yard dimension requirements shall be met by that by that portion of the lot within the Township of Upper Deerfield."

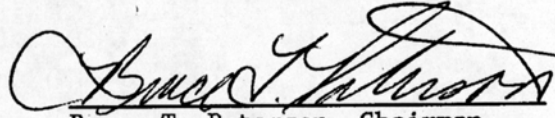
Section 8. Section 98-14.3C(1)(b) shall cease to read as heretofore and shall hereafter read as follows:

"(b) Each Airport Hazard Area shall consist of a RUNWAY SUBZONE, two RUNWAY

buffering, sidewalks, curbs, drainage facilities, street lighting, trees; open spaces and recreational areas or facilities; schools, utilities such as sanitary sewers, water supply facilities, solid waste and recycling collection, disposition and removal facilities; and any other improvements set forth in this Chapter or as a condition of the tentative approval.

Any excess of funds in escrow at the time of final acceptance of the said improvements shall be returned to the applicant. If at any time it becomes evident that the escrow fund is or will be insufficient to cover the fees, the applicant shall increase the fund as required by the municipal authority, upon receipt of written, itemized substantiation of each additional need."

Section 24. This Ordinance shall take effect immediately upon passage.

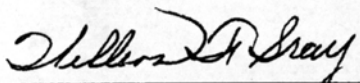


Bruce T. Peterson, Chairman

Finally adopted:

August 2, 1990

Attest:



William F. Sray, Township Clerk

TOWNSHIP OF UPPER

DEERFIELD ORDINANCE #564

**ORDINANCE ESTABLISHING A POLICY WITH RESPECT
TO THE RIGHT TO FARM WITHIN THE
TOWNSHIP OF UPPER DEERFIELD**

WHEREAS, the Township of Upper Deerfield has historically been a community primarily engaged in farming and farming related operations; and

WHEREAS, the Township Committee of the Township of Upper Deerfield believes that farming constitutes an integral part of the fabric of the life and community of the Township of Upper Deerfield and that farming has been and continues to be a significant part of the community and its economic base; and

WHEREAS, the Township Committee of the Township of Upper Deerfield desires to establish and to reinforce that farming is and should be in the future considered as an appropriate and desirable economic and land use activity within the Township of Upper Deerfield and to establish a policy to promote, protect, and preserve farming now and into the future; and

WHEREAS, the Township Committee of the Township of Upper Deerfield believes that it is in the interests of the residents of the Township of Upper Deerfield to enact an ordinance to further and promote the foregoing policy;

NOW THEREFORE BE IT ORDAINED by the Township Committee of the Township of Upper Deerfield that Chapter 97 of the Township Code of the Township of Upper Deerfield shall hereafter read as follows:

Chapter 97. Right to Farm

A. Recognition of Right to Farm. The Township of Upper Deerfield hereby recognizes that the industry of farming is a natural right and that this industry and economic activity has been a primary source of income and economic activity within the Township of Upper Deerfield since preceding the founding of the Township and since the inception of New Jersey as a State and the United States as a union.

B. The Right to Farm exists and should be considered in the future as existing throughout the Township of Upper Deerfield except where specifically prohibited by the zoning ordinances stating otherwise.

C. Scope of Farming. The right to farm includes all manner and means of physical labor and mechanical equipment now available to engage in agriculture and farming including but not limited to irrigation pumps, equipment, aerial and ground seeding, spraying, equipment including tractors and aviation equipment together with their attachments and the use and application of recognized fertilizers, pesticides, insecticides, and herbicides.

D. Farming Methods. Farming methods shall include all recognized methods and types of farming as pertain to the growing of food **and nonfood** crops and the raising of animal or fowl within the Township of Upper Deerfield.

E. Acceptable Practices. The right to farm shall include the uses, methods, and activities that have been proven effective in the past or which are generally accepted within the farming community and the farming industry and which are considered reasonable and necessary in the farming and agricultural industry throughout New Jersey and the country as a whole and which are conducted in accordance with generally accepted agricultural practices.

F. The right to farm and acceptable practices herein above described may occur on holidays, weekdays, and Sundays as well as at night and during normal working hours. Accordingly, the hours during which farming is reasonably expected to take place shall be considered as a right incident to farming.

G. Noise, Odors, Dust and Fumes. It is also recognized by the Township of Upper Deerfield that certain odors, dust, and fumes are incident to farming activities and that the creation of noise, odors, dust, fumes, is considered to be incidental to and related to farming activities and shall be specifically permitted as a legitimate part of the right to farm.

I. Inconvenience to Public. The Township of Upper Deerfield recognized that inconveniences to the public have been alleged and have been on occasion caused by certain nuisances with respect to noise and smells related to and incident to farming and agricultural activities. However, the Township of Upper Deerfield further recognizes that the right to farm and the benefits derived therefrom more than offset the benefits derived from preventing and restricting such activities and it is, therefore, recognized that inconvenience to the public or to nearby property owners who locate close to a farming area should not, in and of themselves, constitute a reason to undermine or to prevent or restrict farming activities which are recognized as a right and a desirable goal within the Township of Upper Deerfield.

J. Statement of Policy. The Township of Upper Deerfield recognizes the agricultural and rural nature of Upper Deerfield and, among other things, the Township has attempted to preserve farmland and preserve the rural and agricultural character of the Township and its lands. The Township believes that this is a desirable goal to further and to protect within the Township of Upper Deerfield and that it is in the interests of the residents of the Township of Upper

Deerfield now and into the future to have this right recognized, preserved, and protected. It is further the policy of Upper Deerfield to demonstrate a strong commitment to the Township remaining as a rural agriculturally related community by committing future efforts of the Township to protect and preserve farmland and to protect and preserve the agricultural and rural way of life incidental to and a part of farming. The Township further recognizes that as the population of the Township may increase, that individuals who move to the Township should be informed of Township policies with respect to farming and that in order to protect the heritage of farming within the Township that certain noises, smells, or inconveniences may from time to time be caused. However, these inconveniences are deemed minor and insufficient to discontinue the objective of farming or to restrict farming activities and that it would be deleterious to the interests of the Township and its residents to implement measures to erode and undermine farming and farming-related activities as part of the policy of the Township of Upper Deerfield. Accordingly, the Township desires to make the provisions of this ordinance available to any new residents who seek to build within the Township of Upper Deerfield and requests and directs that a copy of this ordinance be provided **by the Upper Deerfield Township Tax Assessor** to all persons **or entities upon the filing of a deed of transfer of property** (who obtain building permits and requests and directs that builders, real estate agents, and others to make this policy known and to disseminate it to their clients, customers, and prospective residents of the Township of Upper Deerfield) in order that they may be informed of the Township policy with respect to the right to farm and the right to engage in activities related to farming throughout the Township.

Finally adopted. C. Kenneth Hill. Chairman
November D. 2005
Attested: Roy J. Spoltore. Township Clerk

APPENDIX G: FUTURE OF UPPER DEERFIELD TOWNSHIP'S AGRICULTURE PROGRAM [FARMER SURVEY] AND SUMMARY OF RESPONSES

Survey on the Future of Agriculture in Upper Deerfield Township

The Upper Deerfield Township Agricultural Farmland Preservation Committee would like to ask you some basic questions about the organization and management of your entire farm and farming operation(s):

1. What is your role on the farm? (Please circle one)
 - a. Owner Operator
 - b. Child/relative of owner operator
 - c. Nonowner manager
 - d. Other
2. How many years has the farm(s) been in your family? _____
3. What commodity generates most of your gross farm receipts? (*dairy, grain, vegetable, fruit, nursery, etc.*)

4. Consider the present and the future: How much Upper Deerfield land is included in your operation this year? How much acreage do you expect to be in your operation in five years?

(Please list the acreage)

	<u>Current Year</u>	<u>In 5 Years</u>
a. Total UD Acres Owned	_____	_____
b. Number of tillable acres owned	_____	_____
c. Number of UD tillable Acres rented from others	_____	_____
e. Number of UD Tillable Acres Rented to others	_____	_____

5. If you rent from others—number of landlords? _____
6. Are you having problems finding land to rent? (*Please circle one.*)
 - a. Yes
 - b. No
 - c. No – Don't need to rent land
7. If you had the opportunity to purchase more farmland, would you like to do so? (*Please circle one.*)
 - a. Yes
 - b. No
 - c. Not certain
8. Do neighbor concerns present any conflicts with your ability to farm? (*Please circle one*)
 - a. Yes
 - b. No
9. How many more years do you plan to continue farming? (*Please circle one best answer*)
 - a. Plan to stop farming within a year
 - b. 1-5 more years
 - c. 6-10 more years
 - d. 11-20 more years
 - e. More than 20 years
 - f. Don't know
10. If you-plan to stop farming within the next ten years, why do you plan to stop?

11. When the time comes for you stop farming, what do you plan to do with your farm? (*Please circle all that apply*)
 1. Transfer farm to a relative
 2. Sell farm to a non-family member who wants to farm
 3. Rent out some or all of the land
 4. Sell some or all of the land for non-agricultural purposes
 5. Sell Developmental Rights or Preserve land
 6. Don't know
12. How optimistic are you about the economic outlook for agriculture in the township? (*Please circle.*)

Very pessimistic

1

2

3

4

Very optimistic

5

13. Please rate each of the following “business” factors. (Circle one for each).

	<u>Poor</u>	<u>Fair</u>	<u>Good</u>	<u>Excellent</u>	<u>Don't Know</u>	
a. Availability of financing	1	2	3	4	5	
b. Availability of labor	1	2	3	4	5	9
c. Availability of housing	1	2	3	4	5	9
d. Availability of farm land	1	2	3	4	5	9
e. Availability of markets	1	2	3	4	5	9
f. Property taxes	1	2	3	4	5	9
h. Wage rates (paid)	1	2	3	4	5	9
g. Zoning	1	2	3	4	5	9
i. Other local regulations	1	2	3	4	5	9
j. How neighbors view agriculture	1	2	3	4	5	9
k. How officials view and support ag.	1	2	3	4	5	9
l. Other _____	1	2	3	4	5	9

14. Overall, what would you say is the main advantage and disadvantage to farming in UD Township?

Advantage _____
 Disadvantage _____

15. Please rate how you think the following groups, in general, feel about the survival of agriculture in Upper Deerfield Township and Cumberland County. Please read the name of a group and circle the number beneath one of the following: “don’t care at all,” “indifferent or unaware,” “somewhat concerned,” or “very concerned.”

	<u>Don't care at all</u>	<u>Indifferent or unaware</u>	<u>Somewhat concerned</u>	<u>Very concerned</u>
a. UD Township officials	1	2	3	4
b. County officials	1	2	3	4
c. Local Chamber of Commerce	1	2	3	4
d. Local Planning Board	1	2	3	4
d. Local Economic Development Committee	1	2	3	4

16. What is your opinion of the Current Agricultural Land Preservation Program?

17. What do you think should be done to improve the current Farmland Preservation Program?

18. Would you like to see more farmland preserved in the township? (Please circle one) a. Yes b. No c. Don't care

19. Should additional local zoning strategies be used to preserve farmland? A. Yes b. No

20. Would you consider selling the development rights to your farmland? a. Yes b. No

If yes, and keeping in mind that each tract of farmland is unique, at what realistic figure (per tillable acre) would you consider selling your development rights? \$ _____

21. Would you support new restrictions that could help prevent developments from being built on farmland in Upper Deerfield, but might have a negative impact on farmland value? (Please circle one) a. Yes b. No c. Depends on circumstances

22. What else do you believe can be done to maintain or enhance agriculture's viability in Upper Deerfield Township?

**Thank you for your cooperation and the prompt return of your completed survey to:
 Upper Deerfield Township, PO Box 5098, Seabrook NJ 08302.**

Results of the Future of Agriculture in Upper Deerfield Township Survey

A total of 90 surveys were returned to Upper Deerfield Township.

Question 1. What is your role on the farm?

Role	Number of Responses
<i>a. Owner Operator</i>	71
<i>b. Child/relative of owner operator</i>	2
<i>C Nonowner manager</i>	3
<i>d. Other</i>	10
No response	7

Question 2. How many years has the farm(s) been in your family?

Year(s)	Number of Responses
<i>< 5 years</i>	7
<i>5-9 years</i>	16
<i>10-19 years</i>	20
<i>20-49 years</i>	22
<i>50-99 years</i>	9
<i>≥100 years</i>	3
No response	13

Question 3. What commodity generates most of your gross farm receipts? (*dairy, grain, vegetable, fruit, nursery, etc.*)

Commodity	Number of Responses
<i>Nursery</i>	27
<i>Grain</i>	16
<i>Hay</i>	18
<i>Vegetable</i>	9
<i>Timber</i>	5
<i>Horse Boarding</i>	6
<i>Horse Breeding</i>	3
<i>Sod</i>	1
<i>Fruit</i>	1
<i>Dairy</i>	0
No Response	8

Some responses were multiple

Question 4. Consider the present and the future: How much Upper Deerfield land is included in your operation this year? How much acreage do you expect to be in your operation in five years?

	Number of Responses
<i>Expect Fewer Acres in 5 Years</i>	3
<i>Expect Same Number of Acres in 5 Years</i>	52
<i>Expect More Acres in 5 Years</i>	4
<i>No Estimate of Acres in 5 Years Provided</i>	31

Question 5. If you rent from others—how many landlords? How many of the landlords live in Upper Deerfield Township?

Number of Responses: 8

# of Landlords from which you rent	Number of Responses	Landlords Live in Upper Deerfield	Landlords Live Outside Township
1	4 (= 4 landlords)	2	2
2	2 (= 4 landlords)	2	2
3	1 (= 3 landlords)	2	1
4	1 (= 4 landlords)	3	1

Question 6. Are you having problems finding land to rent? *(Please circle one)*

	Number of Responses
a. Yes	8
b. No	9
c. No – Don’t need to rent land	61
No Response	12

Question 7. If you had the opportunity to purchase more farmland, would you like to do so? *(Please circle one.)*

	Number of Responses
a. Yes	26
b. No	34
c. Not certain	29
No Response	1

Question 8. Do neighbor concerns present any conflicts with your ability to farm? *(Please circle one)*

	Number of Responses
a. Yes	11
b. No	72
No Response	2

Question 9. How many more years do you plan to continue farming? *(Please circle one best answer)*

	Number of Responses
a. Plan to stop farming within a year	1
b. 1-5 more years	7
c. 6-10 more years	9
d. 11-20 more years	15
e. More than 20 years	21
f. Don’t know	33
No Response	4

Question 10. If you-plan to stop farming prior to retirement, why do you plan to stop?

Reasons included:

“Financial or health reasons,” “regulations are the only hindering factor,” “development,” and “If I move, I would sell the land and stop farming.”

Question 11. When the time comes for you stop farming, what do you plan to do with your farm? *(Please circle all that apply)*

	Number of Responses
a. Transfer farm to a relative	32
b. Sell farm to a non-family member who wants to farm	9
c. Rent out some or all of the land	3
d. Sell some or all of the land for non-agricultural purposes	10
e. Sell Developmental Rights or Preserve land	8
f. Don't know	35
No Response	1

Question 12. How optimistic are you about the economic outlook for agriculture in the township? *(Please circle.)*

	Number of Responses
(Very Optimistic) 5	5
4	12
3	33
2	13
(Very Pessimistic) 1	23
No Response	3

Question 13. Please rate each of the following “business” factors. *(Circle one for each).*

	Poor (1)	Fair (2)	Good (3)	Excellent (4)	Don't Know	No Response
<i>Availability of financing</i>	3 5		17	21	16	28
<i>Availability of labor</i>	7 16		20	5	15	27
<i>Availability of housing</i>	2 10		19	3	23	33
<i>Availability of farm land</i>	9 13		15	7	19	27
<i>Availability of markets</i>	6 8		27	10	12	27
<i>Property taxes</i>	22 24		12	4	6	22
<i>Wage rates (paid)</i>	7 17		25	0	15	26
<i>Zoning</i>	9 9		27	4	15	26
<i>Other local regulations</i>	2 16		22	1	24	25
<i>How neighbors view agriculture</i>	8 12		24	12	9	25
<i>How officials view and support ag.</i>	5 10		27	10	13	25

Question 14. Overall, what would you say is the main advantage and disadvantage to farming in UD Township?

Advantage Responses Included: “Farming in what I consider a beautiful farming community,” “Good highway access,” “Availability of underground water,” “Neighbor complaints are few,” “Product availability,” “Keeping up the agricultural traditions,” “Soil is conducive to growing nursery products,” “Taxes,” “Close to Markets,” “good soil quality, water supply, equipment suppliers for repair.”

Disadvantage Responses Included: “Concerns about problems with Bridgeton City spilling out to the UD area,” “Rapid housing development,” “Lack of markets,” “No market for produce,” “Costs to farm,” “Land Availability,” “taxes,” “lack of markets,” “cost of farming,” “cost of land,” “farm buffers,” “too many houses.”

Question 15. Please rate how you think the following groups, in general, feel about the survival of agriculture in Upper Deerfield Township and Cumberland County.

	Don't Care At All	Indifferent or Unaware	Somewhat Concerned	Very Concerned	Don't Know/No Response
<i>UD Township Officials</i>	3	9	30	20	28
<i>County Officials</i>	3	14	30	16	26
<i>Local Chamber of Commerce</i>	7	14	26	11	32
<i>UD Planning Board</i>	3	16	22	21	28
<i>UD Economic Development Comm.</i>	4	17	22	19	28

Question 16. What is your opinion of the Current Agricultural Land Preservation Program?

Number of Responses: 47 of which 23 were positive comments and 20 were negative; 4 were unsure

Sample Positive Responses: “It helps keep open spaces, ” “Help s keep agriculture active and viable in Upper Deerfield Township,” “Excellent,” “Very Good,” “Without it there would be more housing developments”

Sample Negative Responses: “Could be more effective,” “It devalues farmland that is zoned for 6 acre lots,” “Poorly administered; keyed unconditionally on "by right" ability to develop,” “Is not equitable or fair to small farms,” “Needs more funding,” “Need to pay more to land owner.”

Question 17. What do you think should be done to improve the current Farmland Preservation Program?

Number of Responses: 46

Responses included: There was a general consensus that Upper Deerfield Township should “protect more land” and “have less housing development.” The general suggestions for achieving this goal were to provide more incentives and increase the program’s funding. More specific suggestions included: “Build in room to preserve non-conforming lands and adjust for non-conformity with dollars,” “Appraise a farm for current owners and guarantee that price so the buyer would know the real selling price and then pay out at the same time as purchase is signed,” “the zoning (for the purpose of determining a fair amount per acre), should revert to how it was zoned when the farm was originally purchased,” and “Anyone--regardless of acreage--should be eligible.”

Question 18. Would you like to see more farmland preserved in the township? (Please circle one)

	Number of Responses
a. Yes	51
b. No	0
c. Don't care	5
No response	17

Question 19. Should additional local zoning strategies be used to preserve farmland?

	Number of Responses
a. Yes	48
b. No	13
No response	18

Question 20. Would you consider selling the development rights to your farmland?

	Number of Responses
a. Yes	30
b. No	35
Write-In Comment	9
No response	18

If yes, and keeping in mind that each tract of farmland is unique, at what realistic figure (per tillable acre) would you consider selling your development rights?

Number of Responses: 24 (and 2 people who wrote “Depends on the market/price” and one who wrote “Done”). Four responses gave values over \$20,000. These are not included in the statistical calculations.

	\$ per tillable acre
Minimum	6,000
Maximum	17,500
Average	9,583
Median	8,500
Mode	10,000

Question 21. Would you support new restrictions that could help prevent developments from being built on farmland in Upper Deerfield, but might have a negative impact on farmland value? (Please circle one)

	Number of Responses
a. Yes	31
b. No	16
c. Depends on the circumstance	24
No response	19

Question 22. What else do you believe can be done to maintain or enhance agriculture's viability in Upper Deerfield Township?

Number of Responses: 28

Sample Responses: “Limit the total amount of houses to be built in Upper Deerfield Township. Do not cut down any more woodlands in UD Township. Local businesses should use local produce and get a tax break if they join a local program year to year,” “Please stop garbage dumping when no other farming takes place on property,” “Avoid fallacy of large lot zoning that eats up farmland; keep taxes under control,” “Reduce regulation,” “Back us up with real political clout to pressure State Agencies off our backs. Hold taxes down or give out tax incentives.”

APPENDIX H: IS YOUR TOWN FARM FRIENDLY?

Practical Land Use Ordinances and Regulations

Does your town...

<p>...have a detailed section on agriculture in the Town Master Plan? The Master Plan is the big picture view of what land uses are encouraged, protected, or excluded within a town. Does your town's Master Plan refer to "maintaining rural character", but overlook agriculture as the primary component? Agriculture shouldn't be an afterthought!</p>
<p>...allow agricultural uses in more than one zoning district? Agricultural businesses are not the same as other commercial development. Some towns confine agricultural businesses to the commercial zone only, while other towns prohibit such uses in the commercial zone! Farm enterprises are often hybrids of several different uses; ordinances and regulations should allow farm businesses flexibility.</p>
<p>...allow simpler design standards for Site Plan Review regulations on agricultural businesses limited to seasonal use? Simpler standards for certain aspects of Site Plan Review regulations make sense for agricultural uses, such as parking requirements for seasonal retailing or events. When agricultural uses are limited in scope and impact, they need not be treated as if they were year-round permanent businesses. Does your town apply the same site design requirements to a seasonal farm stand as to a grocery store?</p>
<p>...allow flexibility in regulations to accommodate the unusual needs of agricultural businesses? Both the land use impact and the off-site impact of a seasonal farm business are much less than that of a full-time business. Pick-your-own strawberries or Christmas tree farm businesses can't be viable in a town that treats farms like all other retailers. Do your town's regulations provide for reduced restrictions such as expanded hours of business operation, temporary signs, parking near pick-your-own fields, or on street parking?</p>
<p>...require buffer zones between farmland and residential uses? The old saying "good fences make good neighbors" has a modern corollary that says "good buffer zones make new neighbors good neighbors." New development should not place the burden on existing farms to give up boundary land as a buffer zone between agricultural and residential uses. New residential development should provide for its own buffer zone and/or landscape plantings for screening when necessary.</p>
<p>...provide for the agricultural use of open space land created by innovative residential subdivisions? Many towns have adopted innovative subdivision regulations like cluster housing, which provide for setting aside open space land within the subdivision. Ideally, such land should be the most valuable agricultural land, be big enough for commercial agricultural purposes, and specifically allow long term agricultural use to provide consistent resource management. Smaller plots of set aside land could accommodate community gardens. Land set aside for open space can stay productive agricultural land and at the same time contribute to the ecological health and scenic quality of the area -- instead of becoming grown over with brush.</p>
<p>...allow off-site signs to attract and direct farm stand customers? Farm stands are often seasonal businesses that need to capture potential sales at harvest time. Signs that give directions to the farm stand and let customers know what's available (such as strawberries, corn, apples) are vitally important.</p>
<p>...allow accessory uses to agriculture? Remember, it's not just the farmland that makes farming possible: businesses related to agriculture (veterinarians, equipment and supply dealers, custom farm providers, feed milling and delivery, etc.) have to be close enough to serve farmers' needs.</p>

Fair Enforcement of Local Regulations

Does your town...

...have a consistent policy approach for local land use procedures that deal with agriculture? Planning Boards, Zoning Boards, and Conservation Commissions have different responsibilities, but a common regulatory outlook is possible. Update your Master Plan to express the value agriculture contributes to your town's quality of life through open space, wildlife habitation, watershed purification, and natural resource preservation. Establish a policy presumption that agriculture is of beneficial use in your town, and fairness will follow.

...have a good idea of how much agriculture there is in town? Consider having a Town appointed committee formulate an Agricultural Profile to demonstrate the economic, cultural, and resource stewardship value of agriculture in your Town. People often carry the misconception that "there's no agriculture in our town" if they don't see cows and red barns. Agriculture in New Hampshire stretches from apples and bees to yaks and zinnias!

...allow roadside stands or pick-your-own operations by right? Consider amending your Town's zoning ordinance so that certain agricultural operations don't need a Special Exception or Variance. Write flexibility into ordinances or regulations that may apply to agricultural land uses so the intent is clearly to promote such use, not to deny because the rules don't fit the unique situations that frequently arise with agricultural businesses.

...use zoning definitions such as "agricultural accessory uses;" in a broad and inclusive manner? "Agricultural accessory uses" refers to everything from machinery sheds to housing for seasonal workers. Various agricultural businesses have very different needs that can test the balance of rule and exceptions. Flexibility written into the ordinances and regulations can prevent many denials of the sort where "the rules don't fit."

...allow farm stands to sell produce purchased elsewhere? Many towns have rules that a certain percentage of farm stand produce be grown on the farm. The unintended consequence of such regulation is to penalize farm operators who have a crop failure! The rational basis for allowing a farm stand shouldn't only be how much is grown on the farm, but what benefit the farm provides to the town from the open space, wildlife habitation, watershed purification and natural resource preservation it accomplishes.

...properly assess specialized agricultural structures? Specialized structures such as silos, milking parlors, and permanent greenhouses depreciate in value over time. Providing assessors with depreciation schedules may enable more accurate valuations, which can lead to lower assessments. If your town frequently overvalues agricultural structures, this can have a chilling effect on all types of farm investment.

...allow non-traditional or retail-based farm businesses in an agricultural zoning district? Agricultural businesses don't all look alike. Trying to decide what constitutes an agricultural business can involve splitting hairs to make unfamiliar distinctions between what is "commercial" and what is "agricultural." Ordinances defining agriculture based on state law may be accurate, yet need local interpretation. Your town should recognize that newer types of farm businesses such as horse arenas, landscape nurseries, or greenhouses are more intensive in land use, but still carry valuable elements of rural character that benefit the town.

...address agricultural structures in building and safety codes? Building practices that are state of the art for a specialized use in agriculture may not fit the specifics of codes meant for housing or commercial structures. Bringing up to code agricultural buildings that are historic structures may destroy the very qualities that make them special.

Understanding and Encouraging Farming

Does your town....

<p>...consider farmland a natural resource and encourage conservation easements, discretionary easements, and purchase of farmland? Easements and outright purchases of farmland ensure preservation of the natural resource base for agriculture. Once a town has applied these techniques, the benefits of keeping farmland in private ownership can be more clearly appreciated. By understanding and allowing for the peculiarities of agricultural land use, towns can encourage working farms that contribute to the town's well-being at no cost to the taxpayers.</p>
<p>...have any visible demonstration of the value of agriculture? Does your town have a county fair, an apple festival, or an Old Home Day parade? Making agriculture visible to the general public helps establish the economic, cultural, and resource stewardship value of having active farms in a town.</p>
<p>...respect the state Right to Farm law, which has specific exemptions for odor and noise? Local control is an important tradition for New Hampshire towns. The state Right to Farm law provides a backstop to farmers if local officials overreach their regulatory authority. Conflicts between agriculture and other land uses can be reduced when town officials are informed about Best Management Practices (BMP's) that may alleviate nuisance complaints. University of New Hampshire's Cooperative Extension Service writes BMP's about various agricultural practices based on sound scientific research.</p>
<p>...encourage farmers to use the Soil Productivity Index (SPI) calculations to reduce Current Use tax burdens? Using Soil Productivity Index (SPI) information may reduce the Current Use assessment on less productive agricultural land. By reducing the tax burden on agricultural land, towns can encourage the maintenance of open space at a relatively low cost.</p>
<p>...have farmers serving on local land use Planning and Zoning Boards, Conservation and Heritage Commissions? There are few better ways to incorporate agricultural concerns into local land use ordinances and regulations than having farmers serve. Help your town's land use boards keep a broad perspective by asking "Have you thought of the consequences...?"</p>
<p>...have farmers serving on the local Economic Development Committee? Agricultural businesses are frequently undervalued in terms of their effect on the community. Most of the economic activity generated by farms stays within the community. Negative impressions about the strength of New Hampshire agriculture may have a similar impact on the availability of credit to viable farm operations. Having successful farmers on Economic Development Committees can change these misperceptions.</p>
<p>...know where to go to get advice and assistance on farm questions? Make the connection to resources such as the Department of Agriculture, Markets and Food (industry regulator, statewide perspective); UNH Cooperative Extension (technical questions, BMP's); New Hampshire Farm Bureau (non-governmental farm lobby, broad experience); Natural Resource Conservation Service (land and water resource management).</p>

Presented by The New Hampshire Coalition for Sustaining Agriculture and UNH Cooperative Extension. For more information, please contact Nada Haddad, 603-679-5616 or nada.haddad@unh.edu.

Survey created by Gary Matteson, Web Site developed by the CIT Department UNH Cooperative Extension.

Survey located at: <http://cecf1.unh.edu/sustainable/farmfrnd.cfm>

APPENDIX I: OPEN SPACE, RECREATION, AND FARMLAND PRESERVATION QUESTIONNAIRE AND SUMMARY OF RESPONSES

The Township of Upper Deerfield is preparing an Open Space and Recreation Plan and a Farmland Preservation Plan. This survey is to ask your opinions about protecting natural resources, preserving open space and farmland, and providing recreational opportunities in Upper Deerfield. To help shape the community's future, **PLEASE COMPLETE AND RETURN THIS SURVEY BY SEPT. 10, 2006.**

You are also welcome to attend meetings of the Open Space and Agricultural Advisory Committees. **ALL MEETINGS ARE OPEN TO THE PUBLIC.** Times are posted at the Municipal Building and published in the newspaper and on the township website.

1) How many years have you lived in Upper Deerfield?

- Less than 5 years 5 – 10 10 – 20 20 – 40 more than 40 years

2) What is your vision of Upper Deerfield Township for the future? Specifically, what do you want Upper Deerfield to look like in

5 Years:

10 Years:

20 Years:

3) As Upper Deerfield works to achieve the following goals, how would you rank them in order of importance (1 being the most important and 3, or 4, the least important)?

- ___ protecting the environment (lakes, rivers, streams, water sources, habitat)
___ economic growth
___ preservation of town history, character
___ _____ (fill in another goal)

4a) What do you see as Upper Deerfield's strengths (advantages or assets), in regard to open space, recreation, and farmland preservation?

4b) What do you view as Upper Deerfield's weaknesses (shortcomings or limitations), in regard to open space, recreation, and farmland preservation?

5a) Would you support a dedicated tax as a means of funding the acquisition of land for open space and recreation or for preservation of farmland in Upper Deerfield?

- YES NO Undecided

5b) If yes, what amount would you support as the most effective and appropriate amount per \$100 of assessed property value?

- ___ 1 cent ___ 2 cents ___ 3 cents ___ 5 cents ___ 7 cents other: ___ cents (please specify amount)

DRAFT

6) What outdoor recreational activities are you or a household member currently involved in?

- | | | | |
|----------------------------------------------|--------------------------------------|-----------------------------------------|----------------------------------------------------|
| <input type="checkbox"/> Baseball / Softball | <input type="checkbox"/> Golf | <input type="checkbox"/> Walking | <input type="checkbox"/> Bird Watching |
| <input type="checkbox"/> Basketball | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Jogging | <input type="checkbox"/> Nature Pathways |
| <input type="checkbox"/> Soccer | <input type="checkbox"/> Picnics | <input type="checkbox"/> Bicycling | <input type="checkbox"/> Gardening (vegetables) |
| <input type="checkbox"/> Football | <input type="checkbox"/> Hunting | <input type="checkbox"/> Roller Blading | <input type="checkbox"/> Gardening (ornamentals) |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Fishing | <input type="checkbox"/> Skateboarding | <input type="checkbox"/> Boating/Canoeing/Kayaking |
| <input type="checkbox"/> Tennis | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

7) Are there any recreation or leisure activities that you DO NOT take part in now, but WOULD LIKE to start doing regularly within Upper Deerfield Township?

8) Using each number only once, please rank the following initiatives from 1 to 10, with 10 being the highest priority and 1 being the lowest:

- _____ Preservation of land for active recreation areas (such as playing fields and playgrounds)
- _____ Preservation of land for passive recreation (walking, running, hiking, and fishing)
- _____ Preservation of scenic vistas (overlooks, scenic byways)
- _____ Preservation of land to create greenways to link recreation areas, natural areas, and local neighborhoods, and to provide possible trail corridors
- _____ Preservation of forested lands
- _____ Preservation of farmland to protect agriculture, preserve prime agricultural soils, and retain the rural quality of life in Upper Deerfield
- _____ Preservation of land with historical value
- _____ Preservation of land for protection of, or access to, surface water (streams, lakes, wetlands)
- _____ Preservation of land for the protection of groundwater, including drinking water resources
- _____ Preservation of land for wildlife and plant habitats

9) Are there any specific areas within the Township that you think are critically important to preserve? Please describe:

10) Do you have any additional opinions or comments on open space, recreation, and farmland preservation in Upper Deerfield Township?

If you have additional comments and need more space, just attach another sheet of paper at the back.

UPPER DEERFIELD OPEN SPACE, RECREATION, & FARMLAND PRESERVATION PLANNING SURVEY

SUMMARY OF RESULTS

12/12/06

The survey was distributed to Upper Deerfield residents with their tax bills in August 2006. Residents were asked to return the completed survey with their tax payment or drop off the survey at the municipal building. Surveys were also distributed at public meetings held during July and in early September 2006. A total of 236 surveys were completed by residents.

Question 1: How many years have you lived in Upper Deerfield?

5yrs = 24

5-10 yrs = 17

10-20 yrs = 37

20-40 yrs = 74

>50 yrs = 76

Total = 228 respondents answered this question.

Question 2: What is your vision of Upper Deerfield Township for the future? Specifically, what do you want Upper Deerfield to look like in:

5 Years:

Responses repeatedly stressed “less development;” “no more housing unless for seniors;” “preserve farmland, open space, woodlots;” “no more loss of woods or farmland;” “stay as is;” “keep rural.” A smaller number of repeated responses were more specific: “mixture of commerce and recreation;” “more recreation for adults and seniors;” “more business growth;” “stay as is with some expansion of retail;” “more affordable housing for seniors;” “fill empty stores at Carll’s corner.”

10 Years:

The majority of responses said “same as” 5 Years answer. The second most numerous response was “limit growth,” followed by “keep agricultural/rural character.” A few responses mentioned a need for more restaurants, for parks and walking paths, and for modest business growth.

20 Years:

The majority of responses said “same as” previous (5 Years and 10 years). Many others said “keep as is;” keep farmland, country living;” “maintain open space but some additional stores;” “keep balance between open areas and commercial growth.” A few responses mentioned keeping/expanding business along route 77 but qualified that by saying to keep open areas everywhere else.

Question 3: As Upper Deerfield works to achieve the following goals, how would you rank them in order of importance (1 being the most important and 3, or 4, the least important)?

	Ranked #1	#2	#3	#4
a) Protecting the environment (lakes, rivers, streams, water sources, habitat)	171	29	8	2
b) Economic growth	13	55	105	24
c) Preservation of town history, character	24	104	85	14
d) Other (fill in another goal): Control sprawl; Stop development; Preserve farmland; Invest in schools; Need library/indoor facility for kids; Protect trees; Reduce taxes.				

Clearly protecting the environment ranked highest of the three choices. Economic growth and preservation of town history and character were evenly split as ranking second. Write in goals were reflective of many comments made elsewhere in the survey.

Question 4a): What do you see as Upper Deerfield’s strengths (advantages or assets), in regard to open space, recreation, and farmland preservation?

A large number of respondents listed “a great place to live.” Other repeated answers were “the farmland” or “the amount of preserved farmland,” or “rural character.” A number of respondents listed “lots of active recreation” and “ample open space.” Some specific answers (given by at least three respondents) were “lakes;” “wildlife;” and “township government.”

Question 4b): What do you view as Upper Deerfield’s weaknesses (shortcomings or limitations), in regard to open space, recreation, and farmland preservation?

Over and over, respondents listed “too many houses being built” and “to much development.” Other frequent responses were “not enough open space [vs. recreation and farmland];” “loss of open space;” “vulnerability to development pressure.” A repeated response was some variation on the idea that Upper Deerfield lacks the laws or regulations, the Master Plan statements, or the leadership strength to limit development and to protect forests, waterways, open space, farmland. It was also mentioned several times that developers have too much power or are running the show. A specific response, by more than two respondents, was “lack of an [indoor] recreation building.”

Question 5a): Would you support a dedicated tax as a means of funding the acquisition of land for open space and recreation for preservation of farmland in upper Deerfield?

Results:

Yes = 117

No = 43

Undecided = 71

No response = 5

Total # of answers to this question = 230

Question 5b): If yes, what amount would you support as the most effective and appropriate amount per \$100 of assessed property value?

Results:

36 – checked off 1 cent

30 - checked off 2 cents

11 - checked off 3 cents

25 - checked off 5 cents

8 - checked off 7 cents

1 – wrote in 10 cents for “other”

1 – wrote in 4 cents for “other”

Total # of answers given: 112

Comments written in next to “other” or if “undecided” or “no” was checked:
“whatever it takes;” “1 cent to start;” “would need more info;” “don’t really know;” “only for agriculture;” “no more taxes;” “take from existing funds.”

Question 6): What outdoor recreational activities are you or a household member currently involved in?

Results:

Activity	# of Checks	% of Total Checks
1 Baseball/Softball	36	3.07
2 Basketball	18	1.54
3 Soccer	20	1.71
4 Football	12	1.02
5 Swimming	68	5.81
6 Tennis	20	1.71
7 Golf	35	2.99
8 Playgrounds	30	2.56
9 Picnics	48	4.10
10 Hunting	34	2.90
11 Fishing	73	6.23
12 Walking	160	13.66
13 Jogging	39	3.33
14 Bicycling	82	7.00
15 Roller Blading	12	1.02
16 Skateboarding	7	0.60
17 Bird Watching	96	8.20
18 Nature Pathways	86	7.34
19 Gardening (vegetables)	107	9.14
20 Gardening (ornamentals)	110	9.39
21 Boating/Canoeing/Kayaking	71	6.06
22 Write-in (value)	7	0.60
Totals	1171	100.00

Question 7): Are there any recreation or leisure activities that you DO NOT take part in now, but WOULD LIKE to start doing regularly within Upper Deerfield Township?

Results and (# who listed specifically):

NO (32)

- Walking (10) - “safe walking; “on trails” and “on a track” were some qualifying words
- Nature walks (8) – “in woods,” also
- Bicycling (8)
- Swimming (7)
- Playground (3)
- Tennis (3)
- Movies (3) – “need movie theater”
- Horseback riding (1) – “need horse trails”
- Golf (2)
- Skateboarding (2)
- Hunting (2)

Question 8): Using each number only once, please rank the following initiatives from 1 to 10, with 10 being the highest priority and 1 being the lowest:

Total Rank
Value

- 8a)** 1,088 Preservation of land for active recreation areas (such as playing fields and playgrounds)
- 8b)** 1,167 Preservation of land for passive recreation (walking, running, hiking, and fishing)
- 8c)** 983 Preservation of scenic vistas (overlooks, scenic byways)

Total Rank Value	
8d) _1,039__	Preservation of land to create greenways to link recreation areas, natural areas, and local neighborhoods, and to provide possible trail corridors
8e) _1,337__	Preservation of forested lands
8f) _1,406__	Preservation of farmland to protect agriculture, preserve prime agricultural soils, and retain the rural quality of life in Upper Deerfield
8g) _1,130__	Preservation of land with historical value
8h) _1,253__	Preservation of land for protection of, or access to, surface water (streams, lakes, wetlands)
8i) _1,376__	Preservation of land for the protection of groundwater, including drinking water resources
8j) _1,277__	Preservation of land for wildlife and plant habitats

Summary: Preservation of farmland ranked highest (1,406). Preservation of land for protection of groundwater (1,376) was a close second and preservation of forested lands (1,337) followed as third. Preservation of land for wildlife and habitats (1,277) and for protection of or access to surface water (1,253) ranked fourth and fifth.

Question 9): Are there any specific areas within the Township that you think are critically important to preserve? Please describe.

Areas/categories specifically mentioned and (# of specific mentions)

Wetlands (9)	Indian Run area mentioned specifically (1)
Land along/around Streams/lakes generally (16)	Powell property at Cornwell & Old Deerfield Pike (5)
Woodlands/forests (31) - Buttermilk Area woods mentioned specifically	Land between Sunset Lake & Old Deerfield Pike (6)
Areas along Cohansey River (5)	Land along Old Deerfield Pike (3)
Farmland (21)	Recreation parks & fields (5)
Area around Sunset Lake (25)	Ballfields (3)
Area around Silver Lake (11)	Deerfield Street historical homes (2)
Area around Bostwick Lake (7)	Deerfield Presbyterian Church land (1)
Area around Seely Pond/Lake (6)	Southern area of township (10)
Area along tributaries to lakes (3)	

Question 10): Do you have any additional opinions or comments on open space, recreation, and farmland preservation in Upper Deerfield Township?

Many respondents left this question unanswered. The comments given were dominated, again, by statements such as “stop development,” “stop the building,” “preserve as fast as can,” “get busy on open space,” “keep farmland,” “stand up to developers,” and the like. Saving/protecting trees was mentioned here directly by 6 respondents who had not entered that answer in question 9.

There were 5 comments that were essentially negative about farmland preservation – “stop giving farmers free money;” “we should not waste money on farmland preservation;” and two comments that were in favor of more food production and fewer nurseries. The other comment that was made by 12 respondents pertained to controlling taxes – “no more taxes;” “Thank you for the 0 tax rate;” “I’m a senior...in need of tax relief;” and “do whatever it takes to lower taxes” are examples.

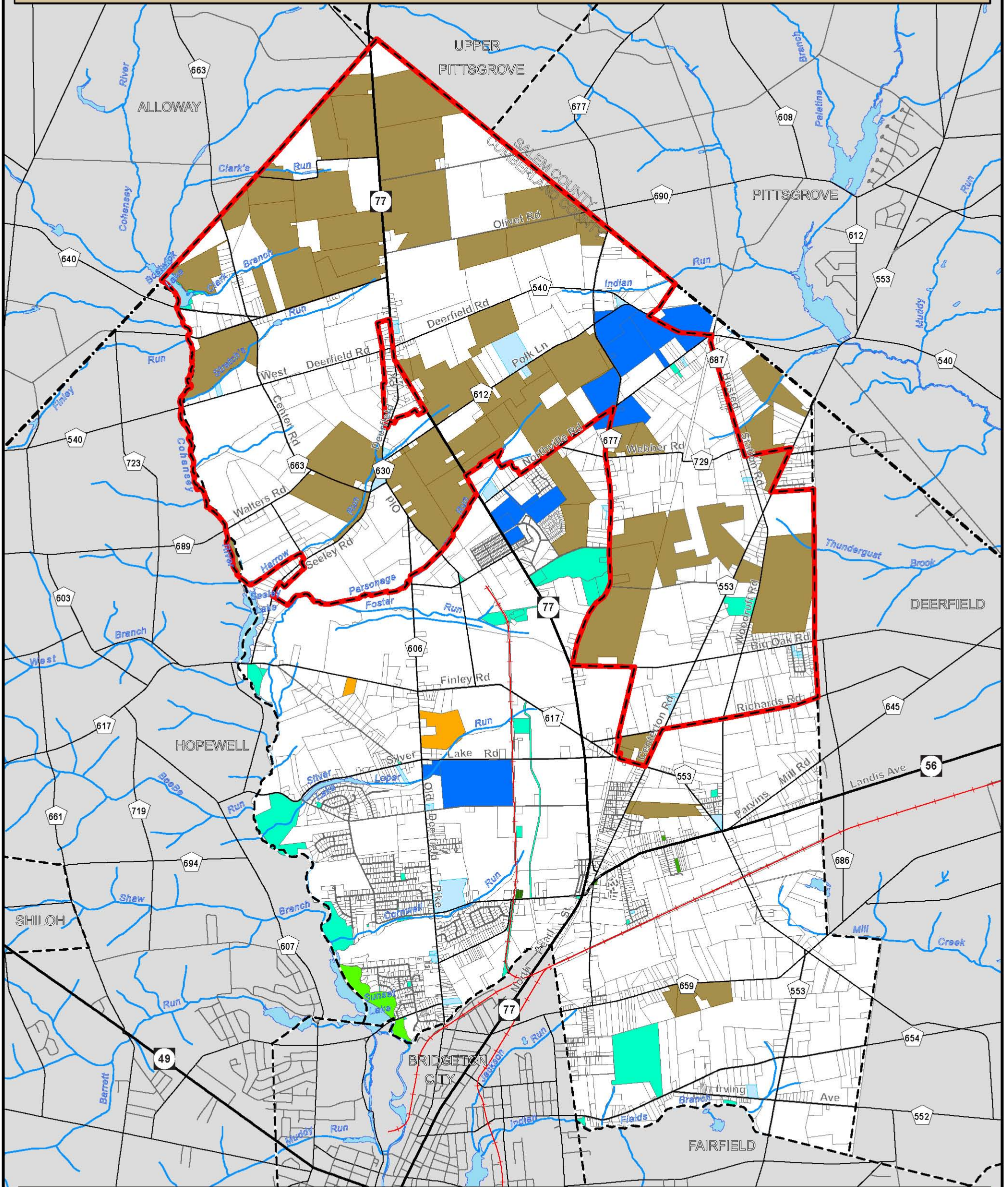
Other specific comments made here had also been listed at least once in answer to a previous question (by a different respondent). These included “need for senior housing;” “more senior activities;” “control runoff pollution to waterways” and “control farm runoff;” “use abandoned railroads for trails;” “need a good playground;” and “increase landscaping and the appearance of the entrance to the township. Specific suggestions made here that did not appear in any other surveys or in answers to other questions included “[prohibit] seizing citizens property,” “TDR program needed” (by 2 respondents), “cluster ordinance needed” (by one respondent), and “recycling center [needed]” (by two).

APPENDIX J: MAPS

1. Agricultural Project Area
2. Agricultural Project Area – Detail
3. Soil Classification of Agricultural Project Area
4. 2002 Aerial Photo & 2005 Parcel Data
5. Land Use/Land Cover (2007)
6. Soils
7. Soil Classifications
8. State Planning Areas
9. Zoning
10. Sewer Service Area
11. County Agricultural Development Areas
12. Landscape Project Habitat Priorities
13. Groundwater Recharge
14. Existing Open Space



Upper Deerfield Township



- Agricultural Project Area
- New Jersey State Owned
- Cumberland County Owned
- Upper Deerfield Township Owned
- Bridgeton City Owned
- Farmland Preservation (Permanent)
- Farmland Preservation (8-Year)
- Church & Non Profit Property
- School Property

Map 1

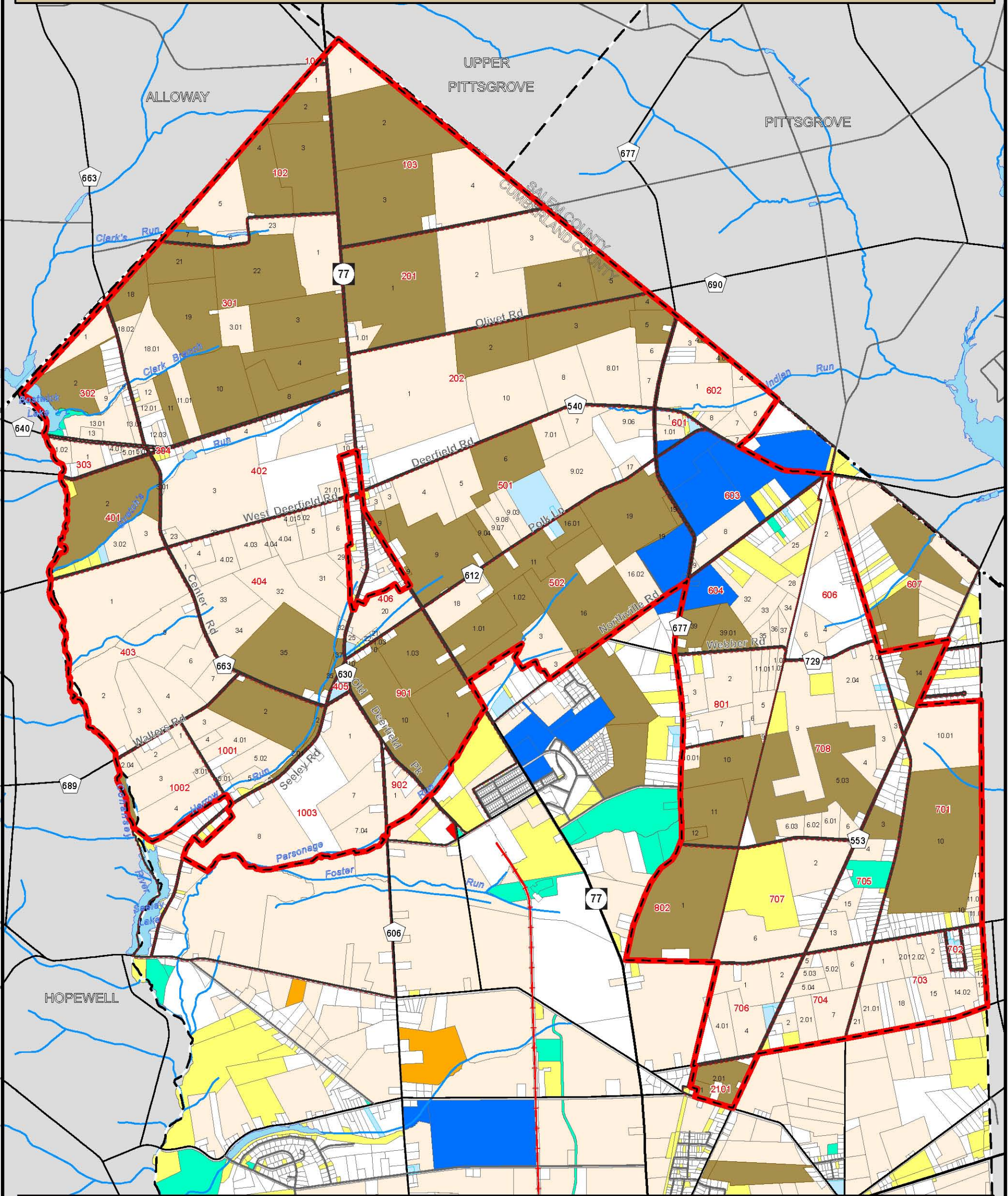
Source : Upper Deerfield Township, Cumberland Cnty., NJDEP, NJDOT, DVRPC.
 This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Miles



Agricultural Project Area

Upper Deerfield Township

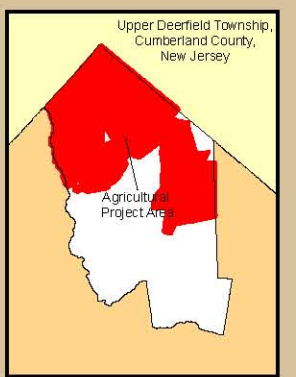


Map 2

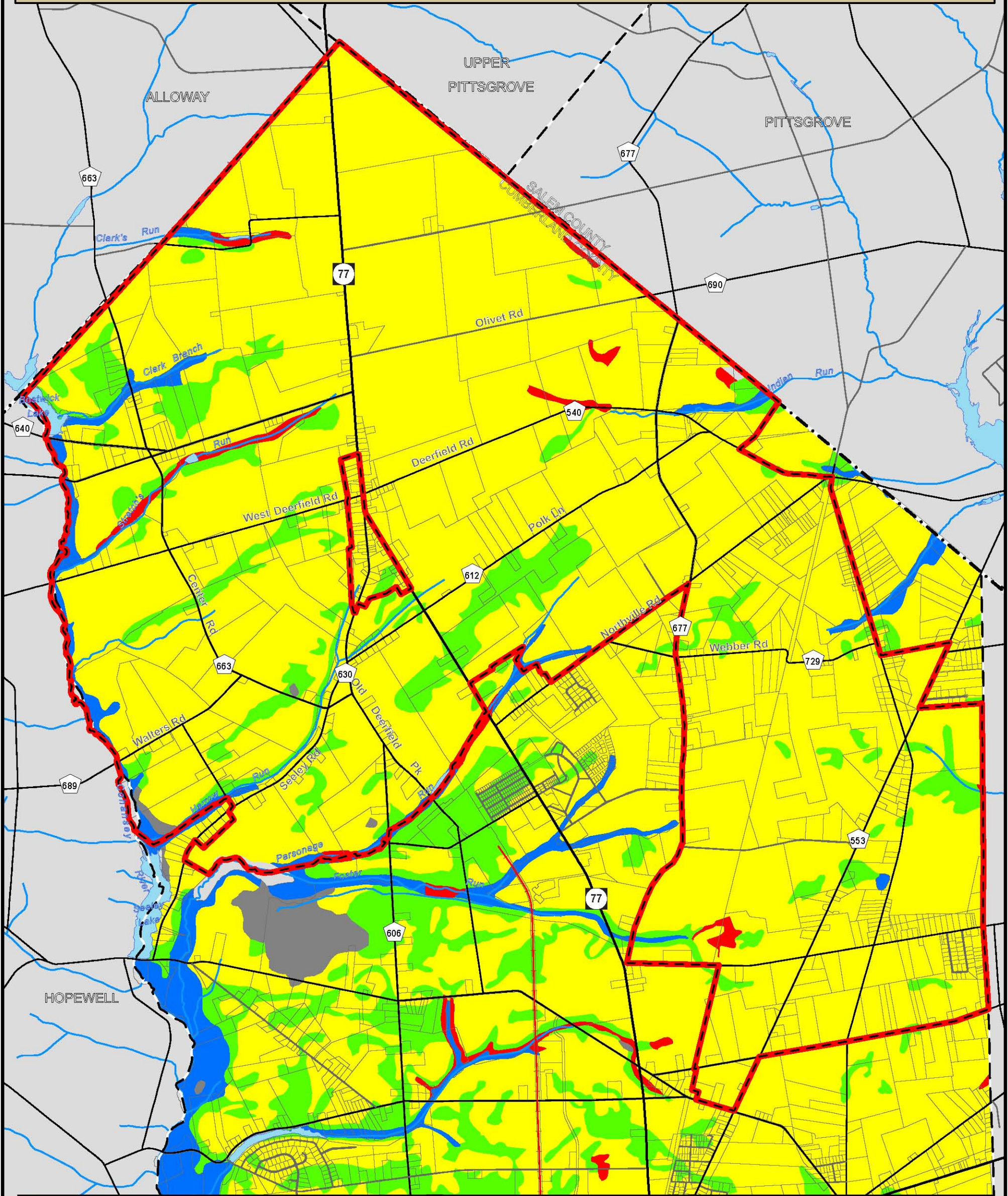
- Agricultural Project Area
- New Jersey State Owned
- Cumberland County Owned
- Upper Deerfield Township Owned
- Bridgeton City Owned
- Fire Company Owned
- Farmland Preservation (Permanent)
- Farmland Preservation (8-Year)
- Farm Assessed
- Vacant Property
- Church & Non Profit Property
- School Property
- Developed Parcel

Source : Upper Deerfield Twp, Cumberland Cnty, NJDEP, NJDOT, DVRPC.
 This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Agricultural Project Area - Detail



Upper Deerfield Township

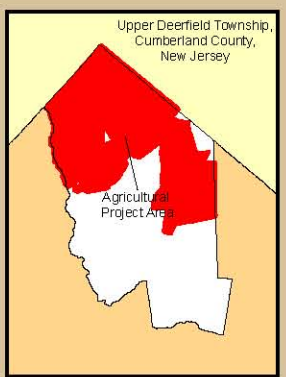


- County Boundary
- Municipal Boundary
- River or Stream
- Lake
- Agricultural Project Area
- Developed Parcel
- Soil Classifications**
- Prime Farmland
- Statewide Importance
- Hydric Soil
- Statewide Importance & Hydric Soil Drained
- Not Classed

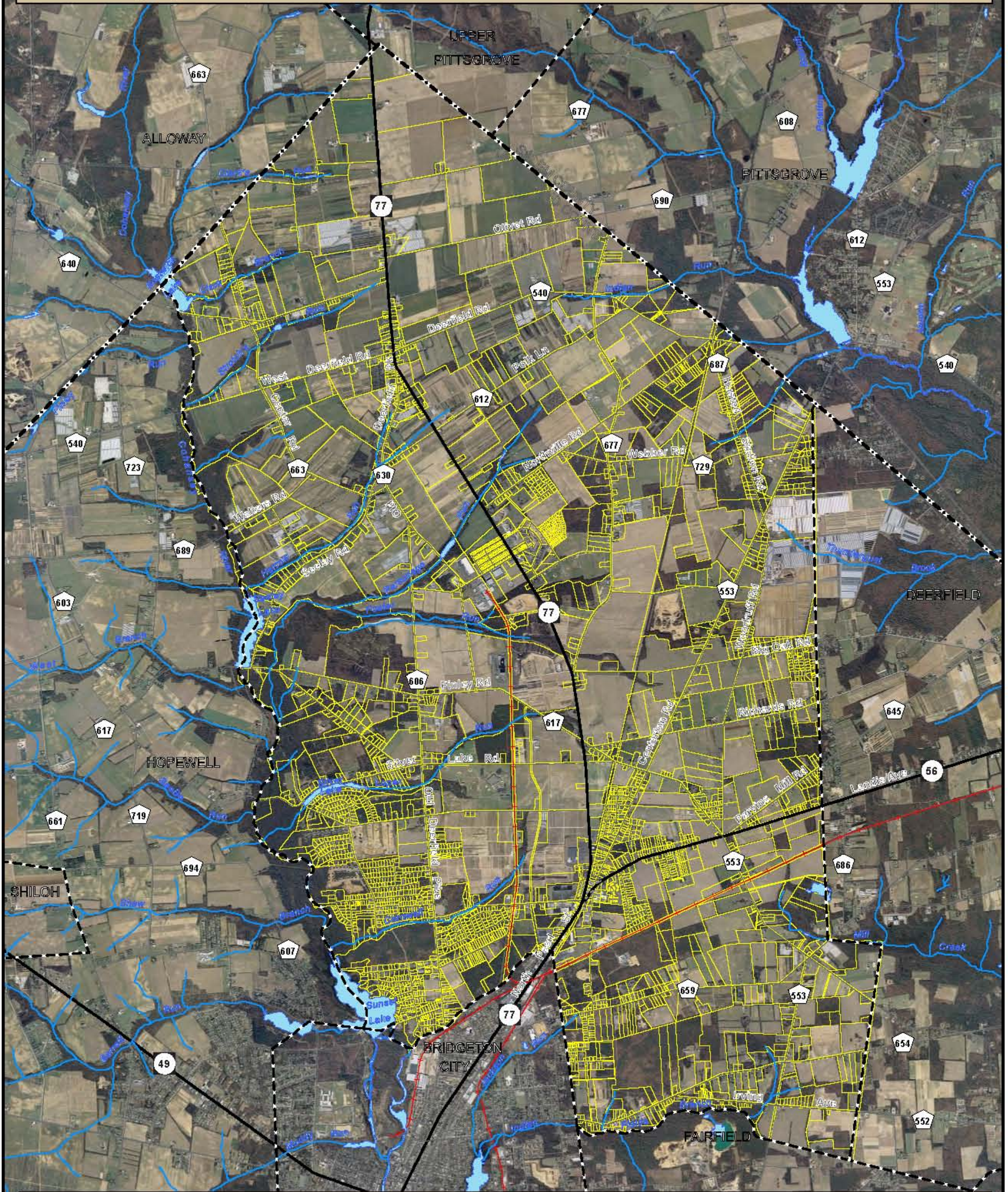
Map 3

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





Soil Classification of Agricultural Project Area



Upper Deerfield Township



Map 4

-  Tax Parcel Boundary
-  River or Stream
-  County Boundary
-  Municipal Boundary

Source : Cumberland Cnty, NJDEP, NJDOT, DVRPC, Grant F. Walton CRSSA, NJDEP - Historic Preservation Office. This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



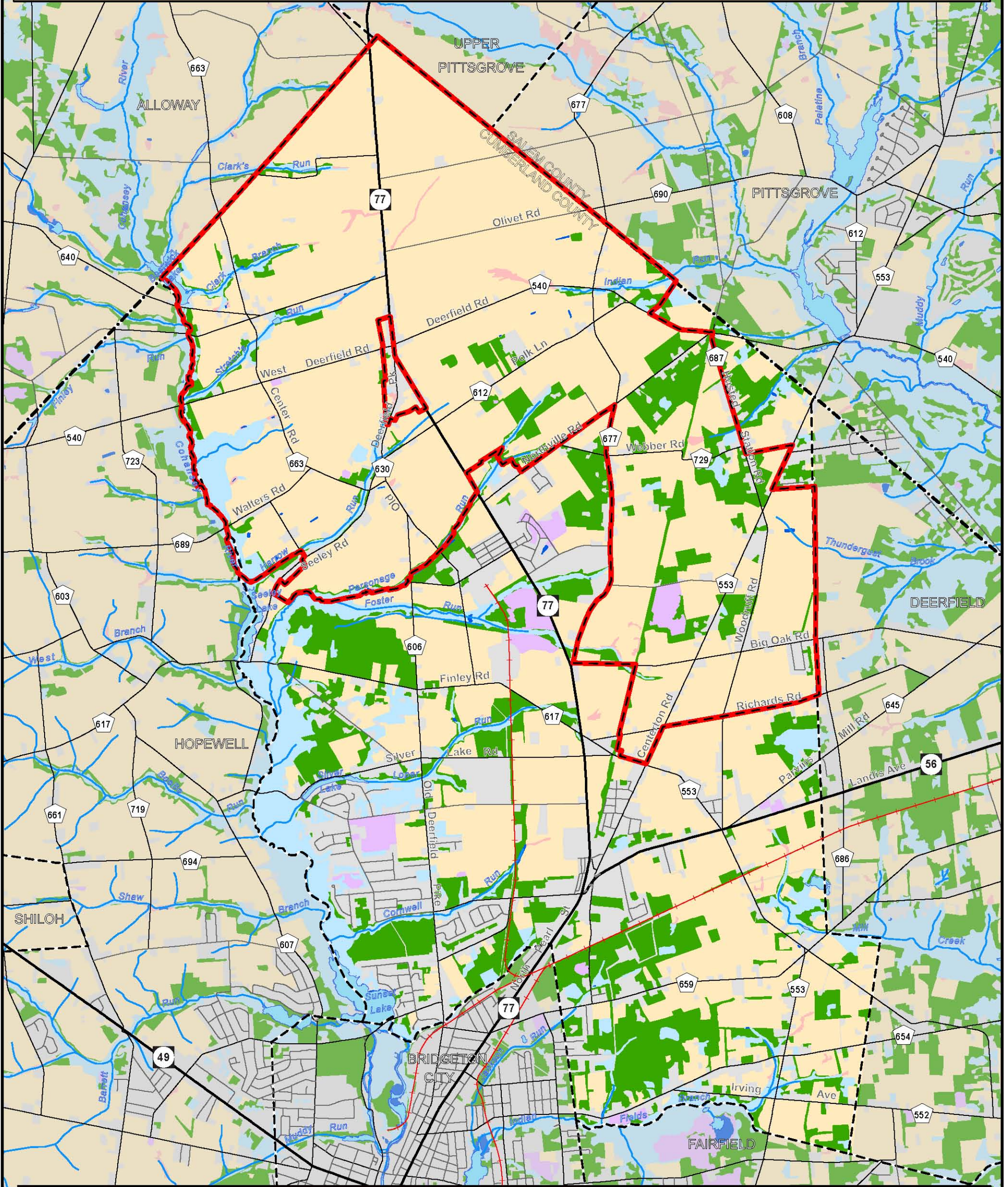
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DELAWARE VALLEY
REGIONAL
PLANNING COMMISSION



Parcels with 2007 Aerial Photo

Upper Deerfield Township



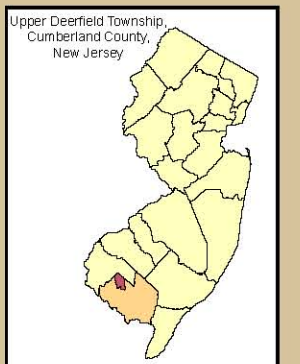
-  Agricultural Project Area
-  River or Stream
-  Agriculture
-  Agricultural Wetlands
-  Barren Land
-  Forest
-  Urban
-  Water
-  Wetlands

Map 5

Source : Upper Deerfield Township, Cumberland Cnty., NJDEP, NJDOT, DVRPC.
 This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

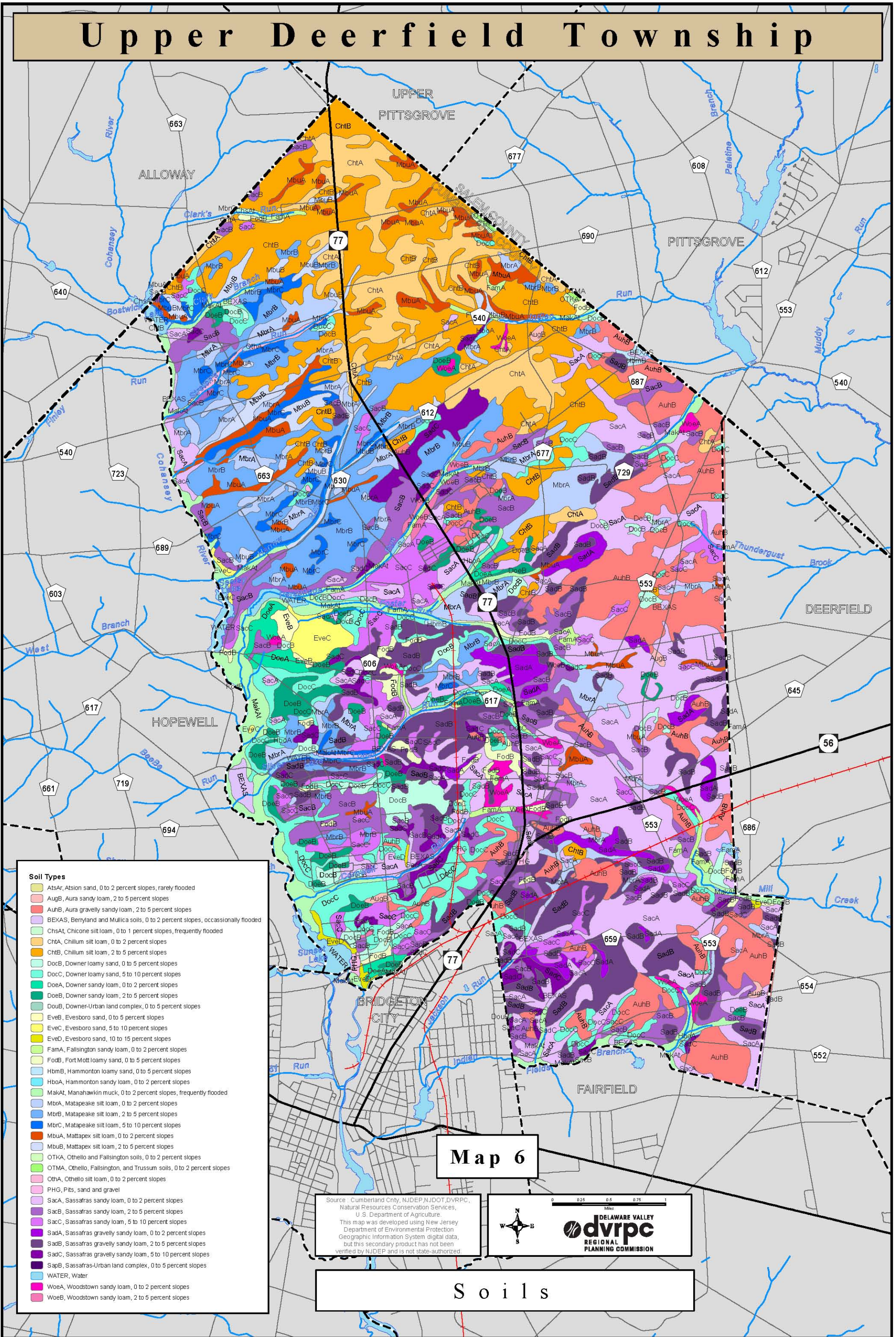






Land Use / Land Cover (2007)

Upper Deerfield Township



Map 6

Source: Cumberland Cnty, NJDEP, NJDOT, DVRPC, Natural Resources Conservation Services, U.S. Department of Agriculture.
 This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

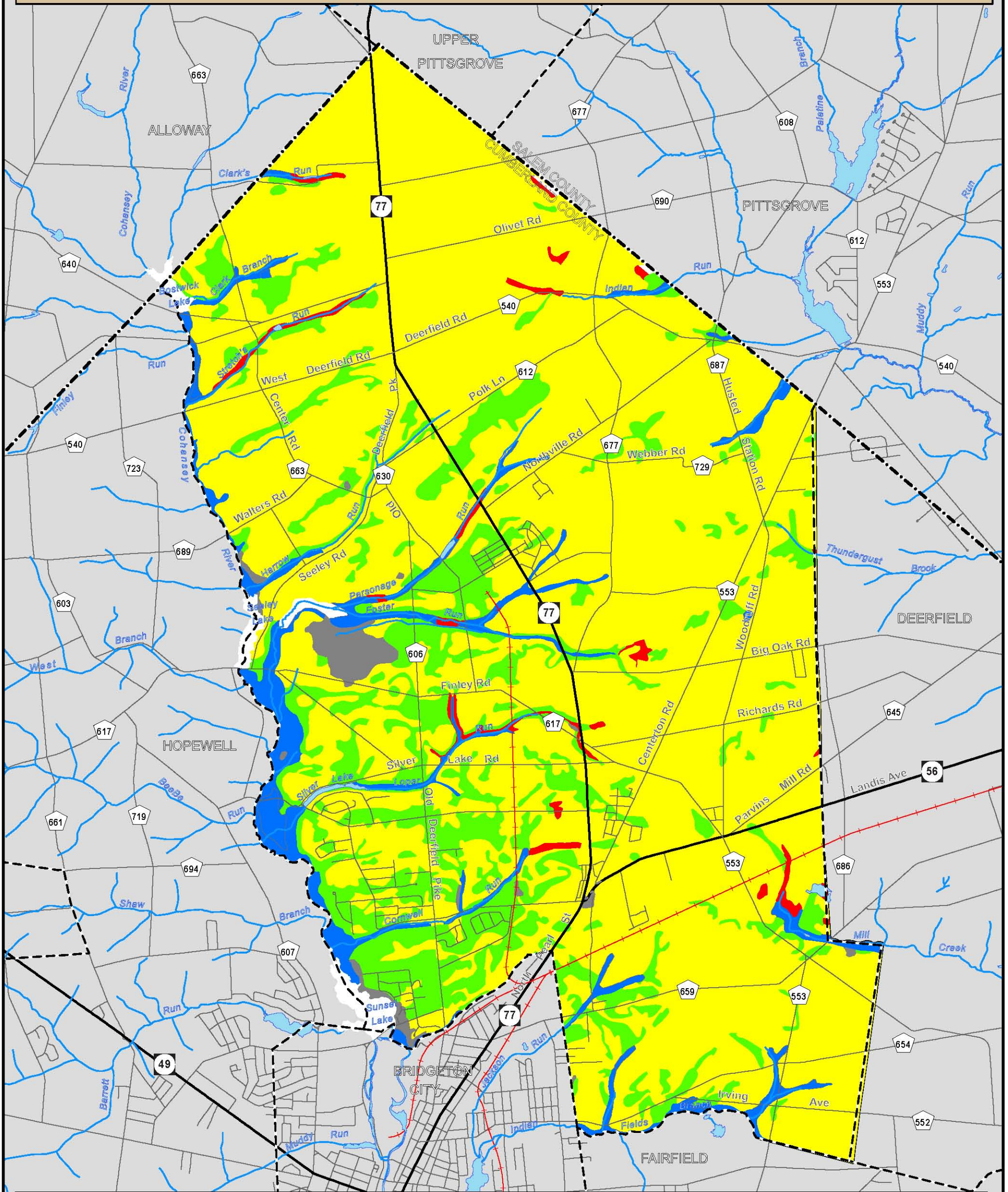
0 0.25 0.5 0.75 1
Miles

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 DELAWARE VALLEY
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- Soil Types**
- AtsAr, Atsion sand, 0 to 2 percent slopes, rarely flooded
 - AugB, Aura sandy loam, 2 to 5 percent slopes
 - AuhB, Aura gravelly sandy loam, 2 to 5 percent slopes
 - BEXAS, Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded
 - ChsAt, Chicone silt loam, 0 to 1 percent slopes, frequently flooded
 - ChtA, Chillum silt loam, 0 to 2 percent slopes
 - ChtB, Chillum silt loam, 2 to 5 percent slopes
 - DocB, Downer loamy sand, 0 to 5 percent slopes
 - DocC, Downer loamy sand, 5 to 10 percent slopes
 - DoeA, Downer sandy loam, 0 to 2 percent slopes
 - DoeB, Downer sandy loam, 2 to 5 percent slopes
 - DouB, Downer-Urban land complex, 0 to 5 percent slopes
 - EveB, Evesboro sand, 0 to 5 percent slopes
 - EveC, Evesboro sand, 5 to 10 percent slopes
 - EveD, Evesboro sand, 10 to 15 percent slopes
 - FamA, Fallsington sandy loam, 0 to 2 percent slopes
 - FodB, Fort Mott loamy sand, 0 to 5 percent slopes
 - HbmB, Hammonon loamy sand, 0 to 5 percent slopes
 - HboA, Hammonon sandy loam, 0 to 2 percent slopes
 - MakAt, Manahawkin muck, 0 to 2 percent slopes, frequently flooded
 - MbrA, Matapeake silt loam, 0 to 2 percent slopes
 - MbrB, Matapeake silt loam, 2 to 5 percent slopes
 - MbrC, Matapeake silt loam, 5 to 10 percent slopes
 - MbuA, Mattapex silt loam, 0 to 2 percent slopes
 - MbuB, Mattapex silt loam, 2 to 5 percent slopes
 - OTKA, Othello and Fallsington soils, 0 to 2 percent slopes
 - OTMA, Othello, Fallsington, and Trussum soils, 0 to 2 percent slopes
 - OthA, Othello silt loam, 0 to 2 percent slopes
 - PHG, Pits, sand and gravel
 - SacA, Sassafras sandy loam, 0 to 2 percent slopes
 - SacB, Sassafras sandy loam, 2 to 5 percent slopes
 - SacC, Sassafras sandy loam, 5 to 10 percent slopes
 - SadA, Sassafras gravelly sandy loam, 0 to 2 percent slopes
 - SadB, Sassafras gravelly sandy loam, 2 to 5 percent slopes
 - SadC, Sassafras gravelly sandy loam, 5 to 10 percent slopes
 - SapB, Sassafras-Urban land complex, 0 to 5 percent slopes
 - WATER, Water
 - WoeA, Woodstown sandy loam, 0 to 2 percent slopes
 - WoeB, Woodstown sandy loam, 2 to 5 percent slopes

Soils

Upper Deerfield Township



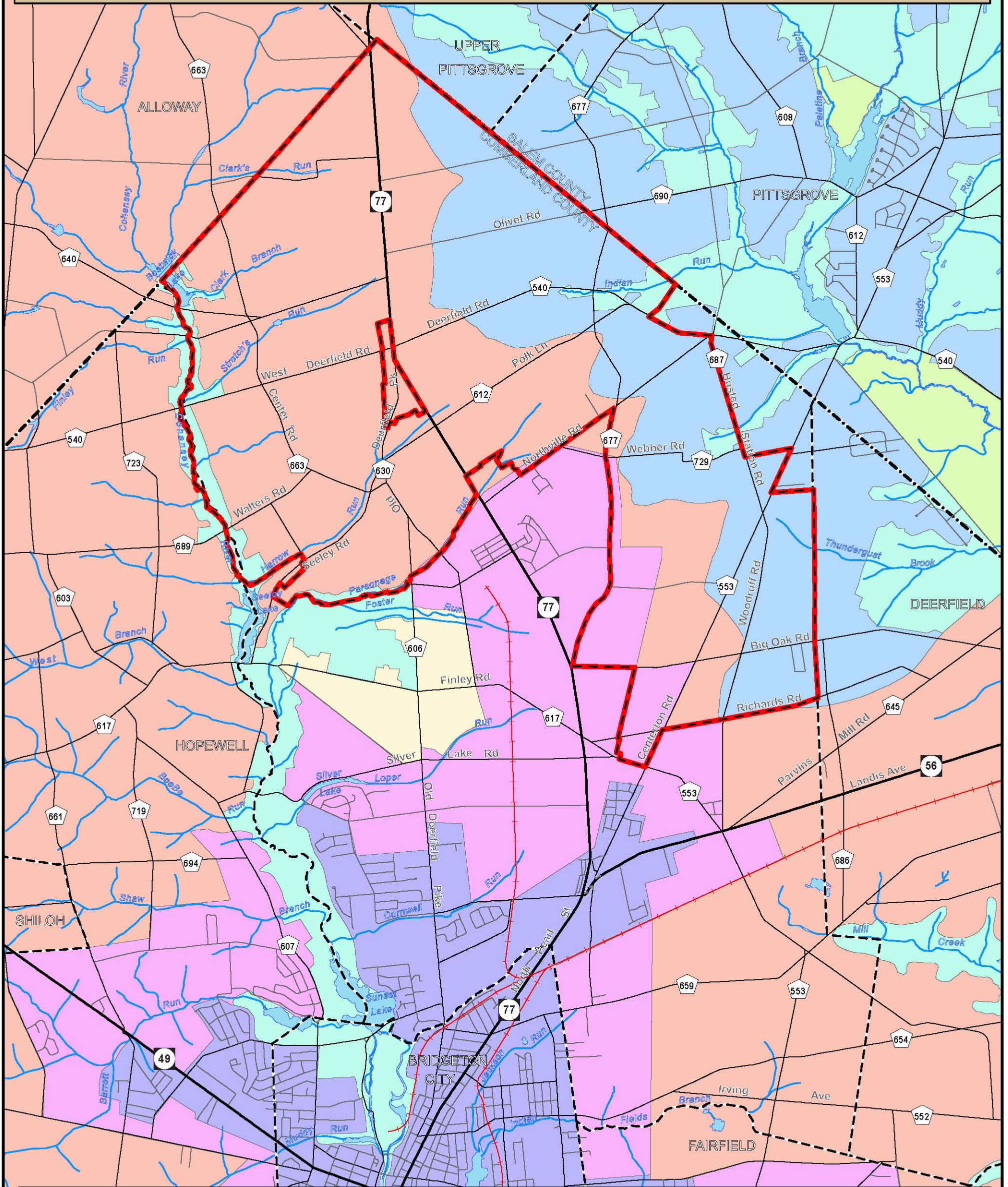
Map 7

- County Boundary
- Municipal Boundary
- ~ River or Stream
- ~ Lake
- Soil Classifications**
- Prime Farmland
- Statewide Importance
- Hydric Soil
- Statewide Importance & Hydric Soil Drained
- Not Classed
- No Data

Source: Cumberland Cnty, NJDEP, NJDOT, DVRPC, Natural Resources Conservation Services, U.S. Department of Agriculture. This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Soil Classifications

Upper Deerfield Township



- Agricultural Project Area
- PA-1 Metropolitan
- PA-2 Suburban
- PA-3 Fringe
- PA-4 Rural
- PA-4B Rural Environmentally Sensitive
- PA-5 Environmentally Sensitive
- PA-8 State Park

Map 8

Source: Upper Deerfield Township, Cumberland Cnty., NJDEP, NJDOT, DVRPC.
 This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



State Planning Areas

**karabashian
eddington planning group**

1425 cantillon boulevard
mays landing, nj 08330

phone 609.347.0311 • fax 609.347.1819 • keplanninggroup.com

a limited liability company



Cumberland County
Alloway Twp.

Salem County
Upper Pittsgrove Twp.

Map 9: Zoning Upper Deerfield Township

Zone Districts	
	Agriculture - A
	Business - B1
	Business - B2
	General Industry - GI
	Public - P
	Residential - R1
	Residential - R2
	Residential - R3
	Residential - R4
	Redevelopment Area
	Entertainment Overlay District
	Neighborhood Commercial - NC
	Eco Industrial
	Eco/Agricultural Zone
	Agricultural Business - AB
	Business Park - BP
	Town Center - TC

Cumberland County
Hopewell Twp.

Adopted by the governing body of the
Township of Upper Deerfield

Pursuant to Ordinances:

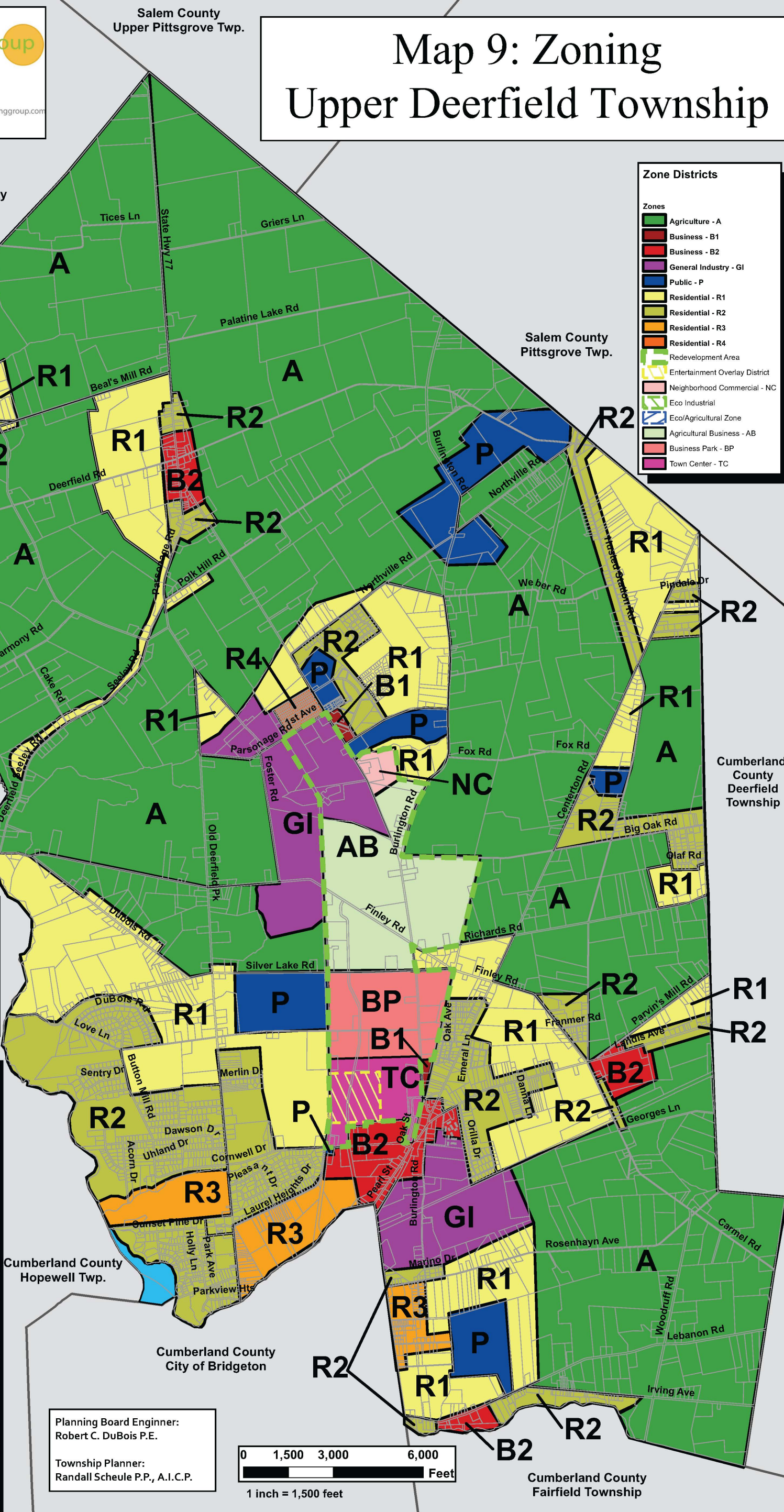
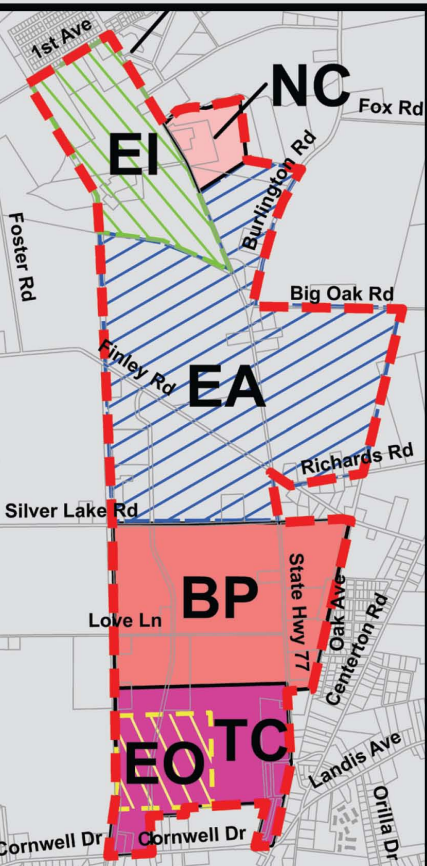
Mayor: _____

Township Clerk: _____

Date: _____

Redevelopment Overlay Zones	
	Business Park - BP
	Eco Industrial
	Eco/Agricultural Zone
	Entertainment Overlay District
	Neighborhood Commercial - NC
	Town Center - TC

Redevelopment Area



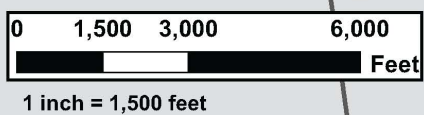
Cumberland County
Deerfield Township

Cumberland County
Hopewell Twp.

Cumberland County
City of Bridgeton

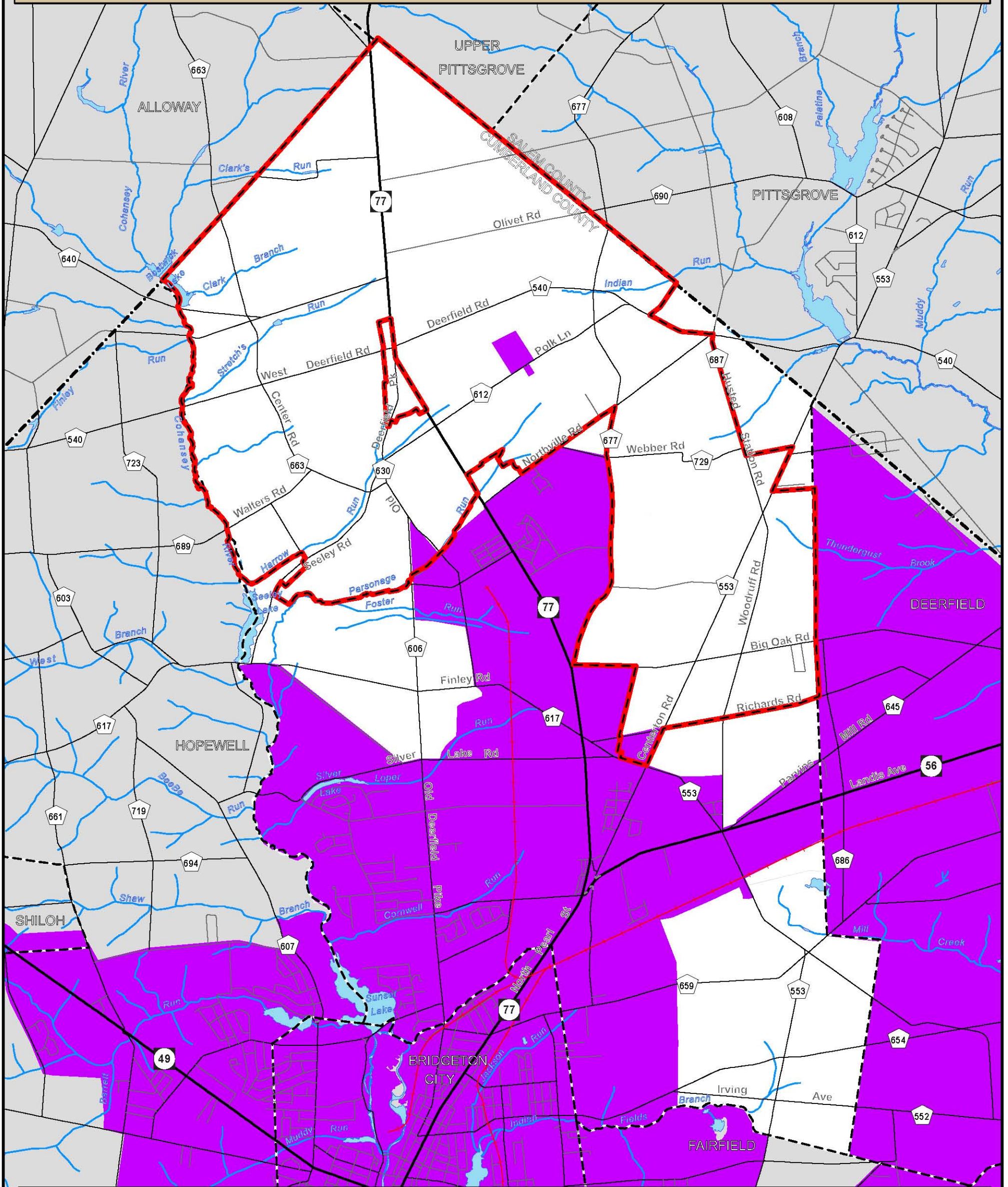
Planning Board Engineer:
Robert C. DuBois P.E.

Township Planner:
Randall Scheule P.P., A.I.C.P.



Cumberland County
Fairfield Township

Upper Deerfield Township



Map 10

- County Boundary
- - - Municipal Boundary
- River or Stream
- ▭ Agricultural Project Area
- ▭ Lake
- ▭ Sewer Service Area

Source : Upper Deerfield Township, Cumberland Cnty., NJDEP, NJDOT, DVRPC.
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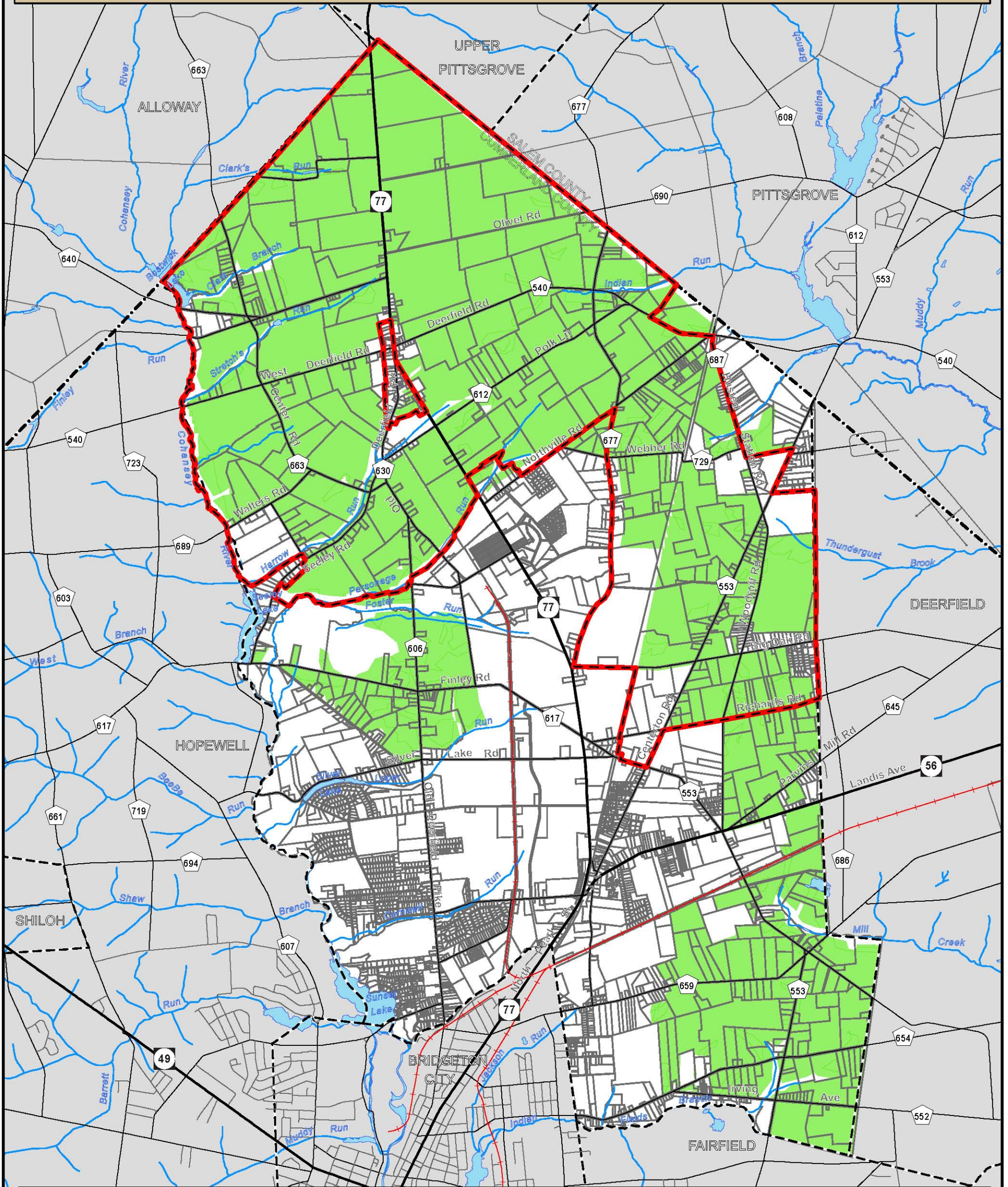
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 Miles

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Sewer Service Area

Upper Deerfield Township



Map 11

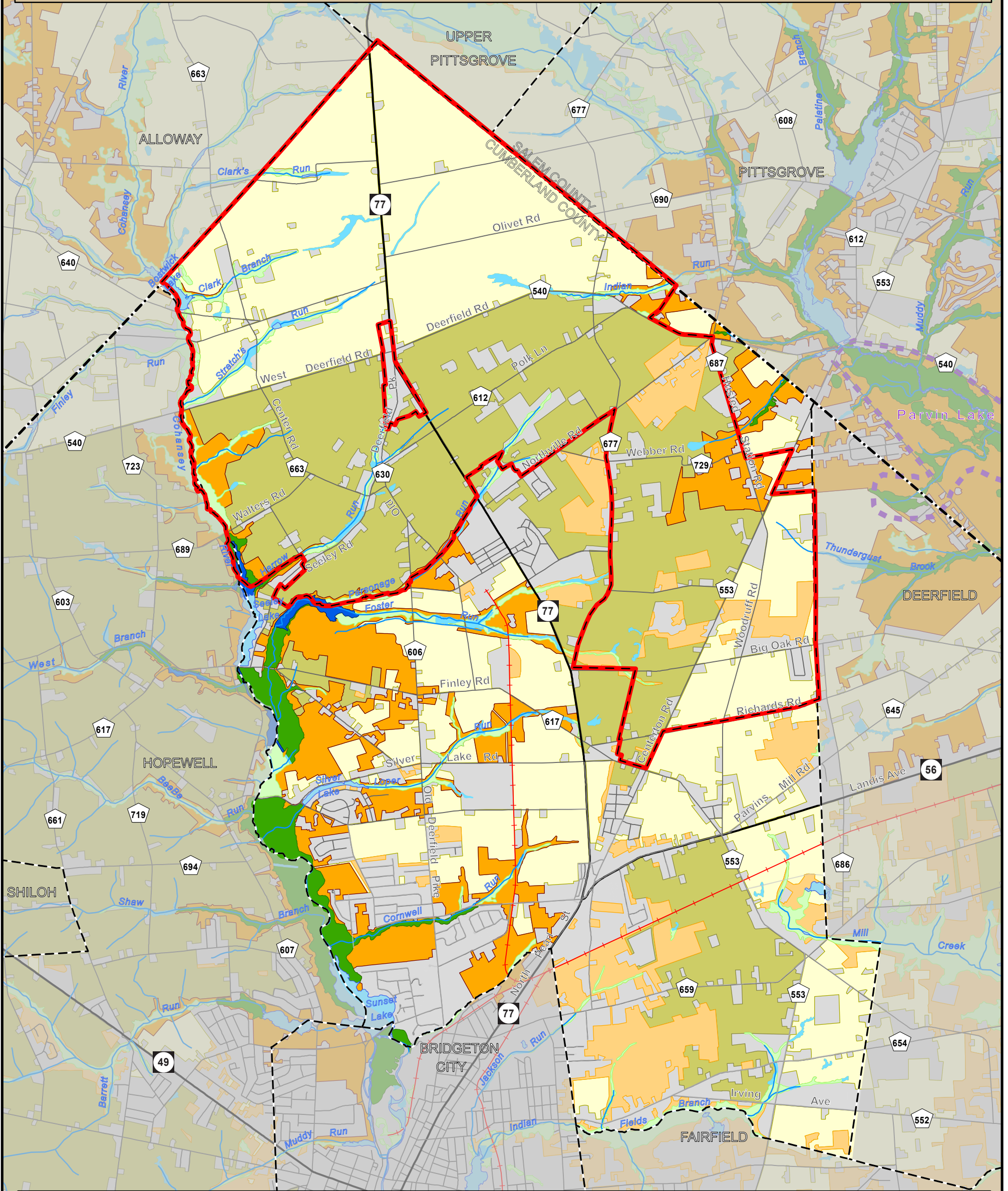
- Cumberland County Agricultural Development Area
- Upper Deerfield Agricultural Project Area
- Tax Parcel Boundary

Source: Upper Deerfield Township, Cumberland Cnty., NJDEP, NJDOT, DVRPC.
 This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.



County Agricultural Development Area

Upper Deerfield Township



- Emergent Wetlands Conservation Priority**
- Suitable Habitat
 - Critical Habitat
- Forested Wetlands Conservation Priority**
- Suitable Habitat
 - Critical Habitat
- Upland Forest Conservation Priority**
- Suitable Habitat
 - Critical Habitat
- Grassland-Dependant Species Conservation Priority**
- Suitable Habitat
 - Critical Habitat

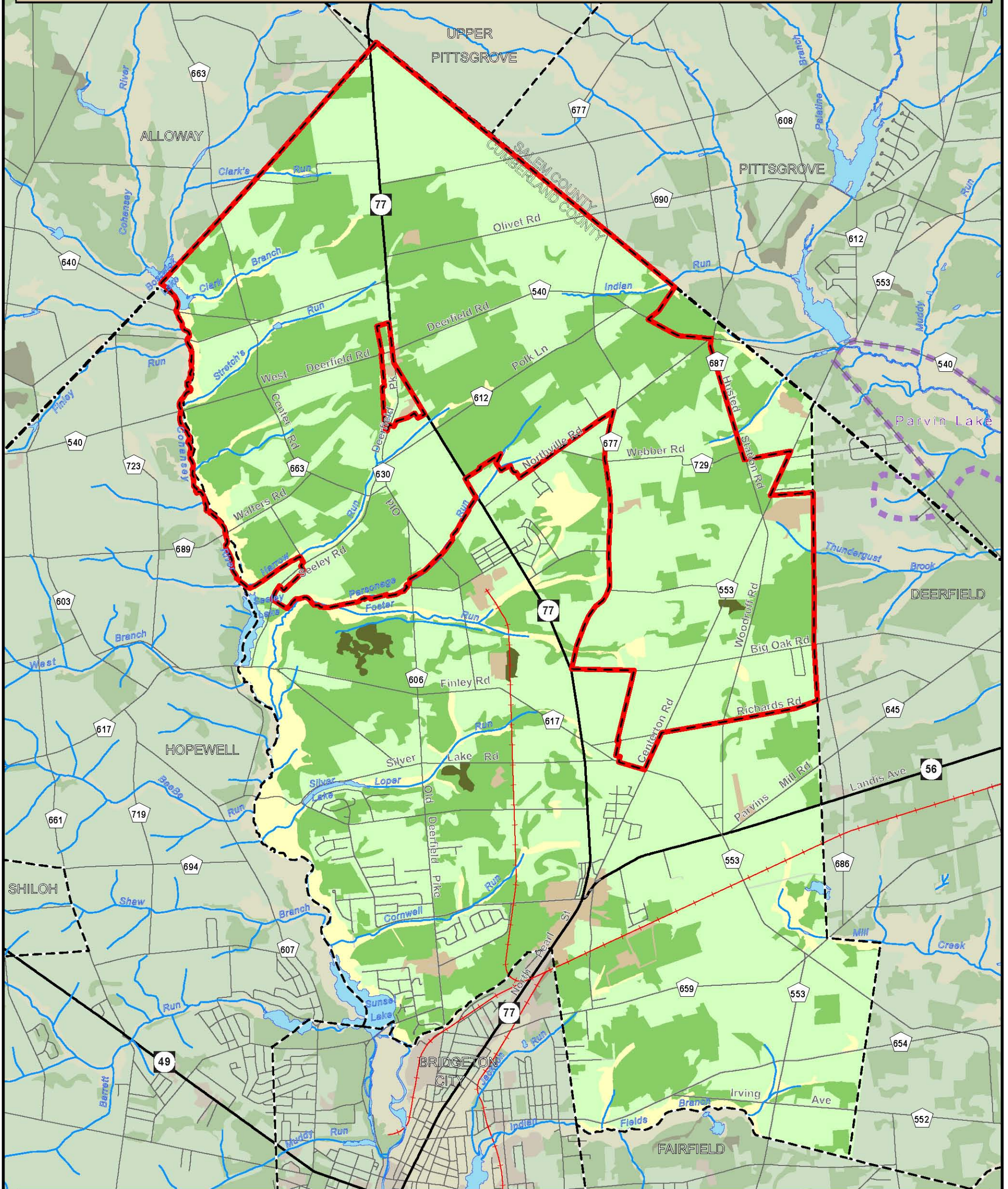
Map 12

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

- County Boundary
- Municipal Boundary
- River or Stream
- Natural Heritage Priority Site
- Agricultural Project Area
- Lake
- Developed Land

Landscape Project Habitat Priorities (2007)

Upper Deerfield Township



Inches per Year

- 0
- 1 - 5
- 6 - 10
- 11 - 12
- 13 - 14

Map 13

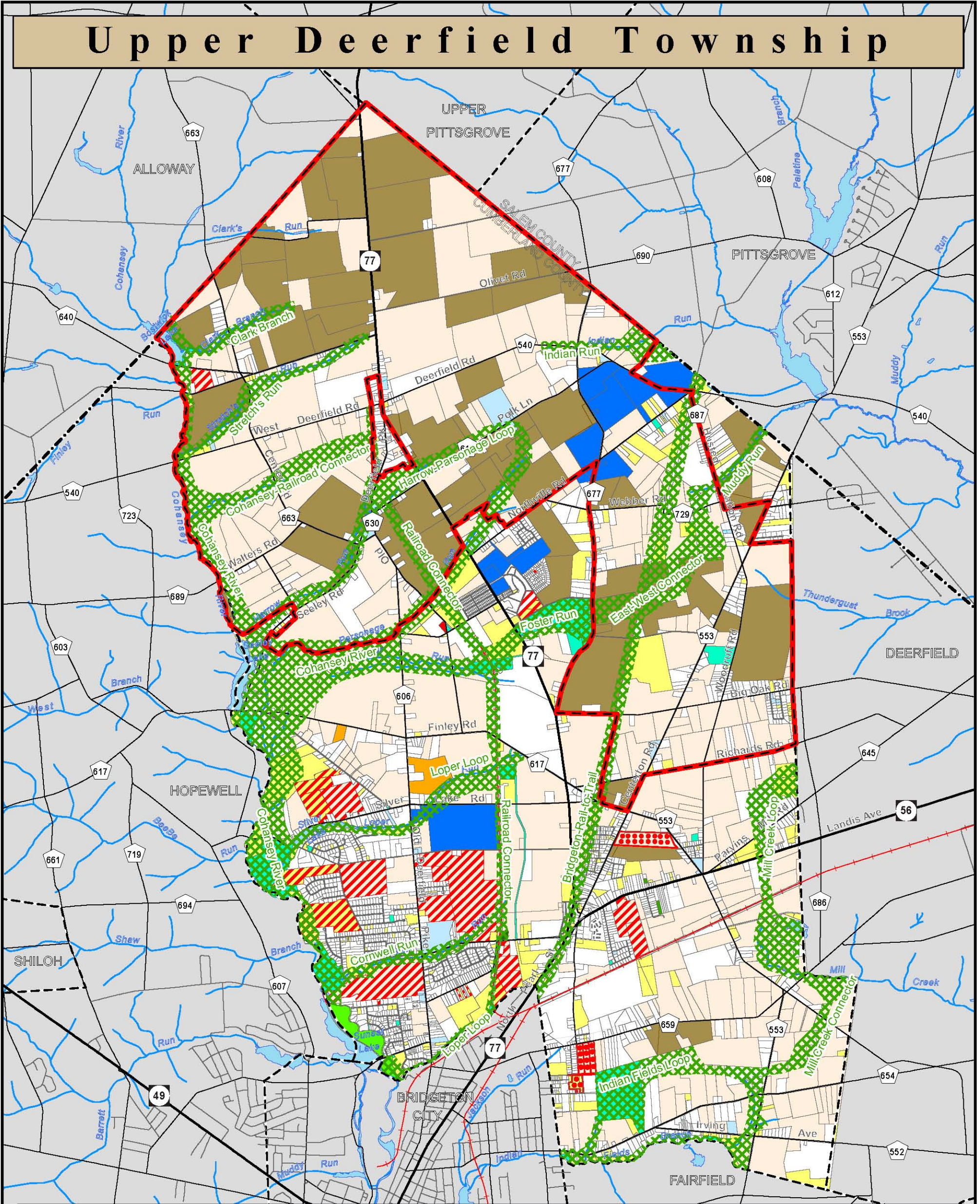
Source : Cumberland Cnty, NJDEP, NJDOT, DVRPC.
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 Department of Environmental Protection
 Geographic Information System digital data,
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- County Boundary
- - - Municipal Boundary
- Natural Heritage Priority Site
- River or Stream
- Agricultural Project Area
- Lake

Groundwater Recharge

Upper Deerfield Township



- Agricultural Project Area
- Greenway
- Conceptual Developments - September 2006
- Approved Developments (some constructed) - September 2006
- New Jersey State Owned
- Cumberland County Owned
- Upper Deerfield Township Owned
- Bridgeton City Owned
- Fire Company Owned
- Farmland Preservation (Permanent)
- Farmland Preservation (8-Year)
- Farm Assessed
- Vacant Property
- Church & Non Profit Property
- School Property
- Developed Parcel

Map 14

Source: Upper Deerfield Township, Cumberland Cnty, NJDEP, NJDOT, DVRPC.
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Greenways System

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

Title: Township of Upper Deerfield,
Cumberland County,
Farmland Preservation Plan

Date Published: January 2011
Publication No. 08011

Geographic Area Covered: Upper Deerfield Township, Cumberland County, New Jersey

Key Words: Agriculture, Agricultural Project Areas, conservation, environment, farming, farming industry, farmland, farmland plan, farmland preservation, Cumberland County, land preservation, master planning, municipal planning, natural resources, Planning Incentive Grant, Upper Deerfield Township.

ABSTRACT

This publication outlines a plan for municipal action to preserve farmland and the agricultural industry in Upper Deerfield Township, Cumberland County, New Jersey. It delineates Agricultural Project Areas within the township and lists individual farm properties for priority preservation. It meets the requirements for such plans of the NJ State Agricultural Development Committee and supports application to the state for a Farmland Planning Incentive Grant for Upper Deerfield.

Information on Upper Deerfield Township's agricultural land base, its soils, the region's agricultural status, township planning, farmland preservation options, delineation of natural resource conservation programs for farmers, and ideas to support local farmers and strengthen the local agricultural industry are provided through text, tables, and maps. Farmland already preserved in Upper Deerfield is documented, and future plans to protect farmland are outlined, including a multi-year funding plan for future farmland preservation through purchase of development easements. An inventory of all farmland-assessed parcels and some specific tools for ranking farmland and for evaluating township support of agriculture are incorporated, along with tables of farming-related businesses in Southern New Jersey,

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