

COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE



Gloucester County January 2025 GLOUCESTER COUNTY

January 14, 2025

COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

PREPARED BY



19 Boonton Avenue Boonton, NJ 07005 PH: (973) 541-1010 tlc-nj.org

The Land Conservancy of New Jersey David Epstein, President Barbara Heskins Davis, PP, AICP, Vice President, Programs Kenneth Fung, Senior GIS Manager Planning Team: Jake Gerardi and Heather Korzun, Planning Fellows

The original document was appropriately signed and sealed in accordance with Chapter 41, Title 13 of the State Board of Professional Planners upon adoption by the Planning Board on January 16, 2025.

Barbara Heskins Davis, PP, AICP - NJ Professional Planner (License No. 5926)

ACKNOWLEDGMENTS



Administration Building 2 South Broad Street Woodbury, NJ 08096 PH: (856) 853-3200 gloucestercountynj.gov



Land Preservation 254 County House Road Clarksboro, NJ 08020 PH: (856) 224-8045

The Land Conservancy of New Jersey acknowledges the following individuals and organizations for their help in providing information, guidance, and materials for the Gloucester County Comprehensive Farmland Preservation Plan Update. Their contributions have been instrumental in the creation of the Plan.

Gloucester County Agriculture Development Board (CADB)

West Jay Kandle III, Chairman Russell Marino, Vice-Chairman Robert Curtis Joel Viereck Wally Eachus Charles Romick Mike Visalli Eric M. Campo, Board Solictor/Secretary John Furfari, Soil Conservation District Michelle Infante-Casella, Rutgers Cooperative Extension Robert McErlane, Planning Board

Gloucester County Staff

Eric Agren, CADB Administrator Mary Cummings, Recording Secretary

State of New Jersey

State Agriculture Development Committee: Steven Bruder and Thomas Allen

The Gloucester County Comprehensive Farmland Preservation Plan Update was prepared with funding from the New Jersey State Agriculture Development Committee.

Table of Contents

	Maps
	Glossary
	Executive Summary
I-1	Chapter I. Agricultural Land Base
11-1	Chapter 2. Agricultural Industry
111-1	Chapter 3. Land Use Planning Context
IV-1	Chapter 4. Farmland Preservation Program
V-1	Chapter 5. Future Farmland Program
VI-1	Chapter 6. Economic Development
VII-1	Chapter 7. Natural Resource Conservation

VIII-1 Chapter 8. Agricultural Industry, Sustainability, Retention, & Promotion

A-1 Appendix

Cover Photo: Wellacrest Dairy East Greenwich Township Executive Summary: Duffields Farm Washington Township

Maps

1. Farmland

Referenced in Chapter I, Section A and Chapter IV, Section D

2. Land Use/Land Cover

Referenced in Chapter I, Section A

3. Agricultural Soils

Referenced in Chapter I, Section B

- 4. 2017 ADA Addition: Pinelands North Project Area
- 5. 2023 ADA Addition: Pinelands South Project Area
- 6. 2023 ADA Addition: Still Run Project Area
- 7. 2024 ADA Addition: Bethel Mill Project Area
- 8. 2024 ADA Addition: Pinelands South Project Area
- 9. 2024 ADA Addition: Mantua Creek Project Area
- 10A. and 10B. 2024 ADA Addition: Repaupo-Mantua Creek Project Area
- 11. 2024 ADA Reduction: Raccoon Creek Project Area
- 12. Agricultural Development Area
- **13. Project Areas**

Maps 4 -13 referenced in Chapter IV, Section A

Map 13 referenced in Chapter V, Section B

- 14. Farms Meeting the SADC Criteria for Tillable Land
- 15. Farms Meeting the SADC Criteria for Agricultural Soils
- 16. Farms Meeting the SADC Criteria for both Tillable Land and Agricultural Soils

17. Target Farms

Maps 14-17 referenced in Chapter V, Section C

All maps were developed using the NJDEP Geographic Information System (GIS) digital data, but this secondary product has not been verified by the NJDEP and is not state-authorized. These maps are to be used solely for planning purposes, and they do not take the place of a professional survey. Data sources include County of Gloucester, NJOGIS Open Data, NJGIN Road Centerline 2021, Civil Solution, NJDEP Land Use/Land Cover 2020, and NRCS Soil Survey 2023.

Glossary

CADB: County Agriculture Development Board

ADA: Agriculture Development Area

OLP: Office of Land Preservation

RTF: Right to Farm

NJDEP: NJ Department of Environmental Protection

LU/LC: NJDEP Land Use/Land Cover data

NJGS: NJ Geological Survey

NJDA: NJ Department of Agriculture

SADC: State Agriculture Development Committee

PIG: Planning Incentive Grant

SFV: Statewide Formula Value

SSCC: State Soil Conservation Committee

NJAES-RCE: NJ Agricultural Experiment Station-Rutgers Cooperative Extension

NJ SDRP: State Development and Redevelopment Plan

CMP: Pinelands Comprehensive Management Plan

PDC: Pinelands Development Credits

TDR: Transfer of Development Rights

USGS: US Geological Survey

USDA: US Department of Agriculture

USDA NRCS: Natural Resources Conservation Service

USDA NASS: National Agriculture Statistics Service

SCD: Soil Conservation District

USFS: US Forest Service

FSA: Farm Service Agency

Executive Summary

Gloucester County began its farmland preservation program in 1989 in Woolwich Township. The County preserved two farms using state and county funds, permanently protecting 335 acres. Since then, Gloucester County has **preserved 20,866 acres in 347 farms**. It has preserved farmland in 16 of the 24 municipalities, from Deptford Township (one farm) to Franklin Township (65 farms). The County has contributed 49% of the total purchase cost (\$88.8 million) with the State providing 48% of the funds needed to close on the farms.

In 2008, Gloucester County completed its first *Comprehensive Farmland Preservation Plan.* At that time, it had preserved 10,559 acres. The plan was updated in 2015 to ensure the County would remain eligible for matching state funds through their Planning Incentive Grant (PIG) program. Since the completion of the 2015 Farm Plan, Gloucester County has preserved an additional 96 farms, totaling 4,232 acres.

There are 57,968 acres of farm assessed land in Gloucester County. More than a third (36%) of this farmland is permanently protected. A parcel based analysis of the State's Minimum Eligibility Criteria for productive soils and tillable land reveals that 15,686 acres are potentially eligible for farmland preservation within Gloucester County's Agriculture Development Area (ADA). Gloucester County has identified the following goals for its farmland preservation program:

- One year target: 1,000 acres
- Five year target: 3,000 acres
- Ten year target: 5,000 acres.

This update to the County's 2015 Farmland Preservation Plan is required for continued participation in the state's PIG program, an important source of funding for the county. As part of this update, the County Agriculture Development Board undertook a detailed analysis of the ADA. Since the 2015 plan, the Board has added two new project areas (Bethel Mill and Mantua Creek) and revised its remaining project areas to include land which are part of a productive agricultural area in their municipality. The County's project areas are listed below:

- Bethel Mill (new project area, 2024);
- Chapel Heights;
- Delaware River;
- New Brooklyn;
- Mantua Creek (new project area, 2024);
- Oldmans Creek;
- Pinelands North (expanded in 2017);
- Pinelands South (expanded in 2023 and in 2024);
- Pitman Downer;
- Raccoon Creek (reduced in 2024);
- · Repaupo-Mantua Creek (expanded in 2024);
- Still Run (expanded in 2023); and
- Washington North.

The County's ADA does not exceed 90% of the agricultural land base. The ADA comprises 82% of the farm-assessed land in Gloucester County. All preserved farmland is now included within the County's ADA.

A series of public meetings were held on the update to the plan, and the meeting materials are included in **Appendix A** of this report.

Gloucester County's Board of Commissioners remain committed to preserving the agricultural economy and legacy of the County and support the efforts of the County Agriculture Development Board to preserve farmland in Gloucester County.



Holly Acres, Elk Township

Chapter I.

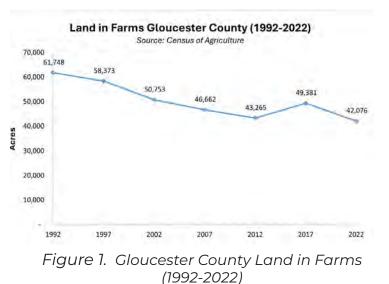
Agricultural Land Base

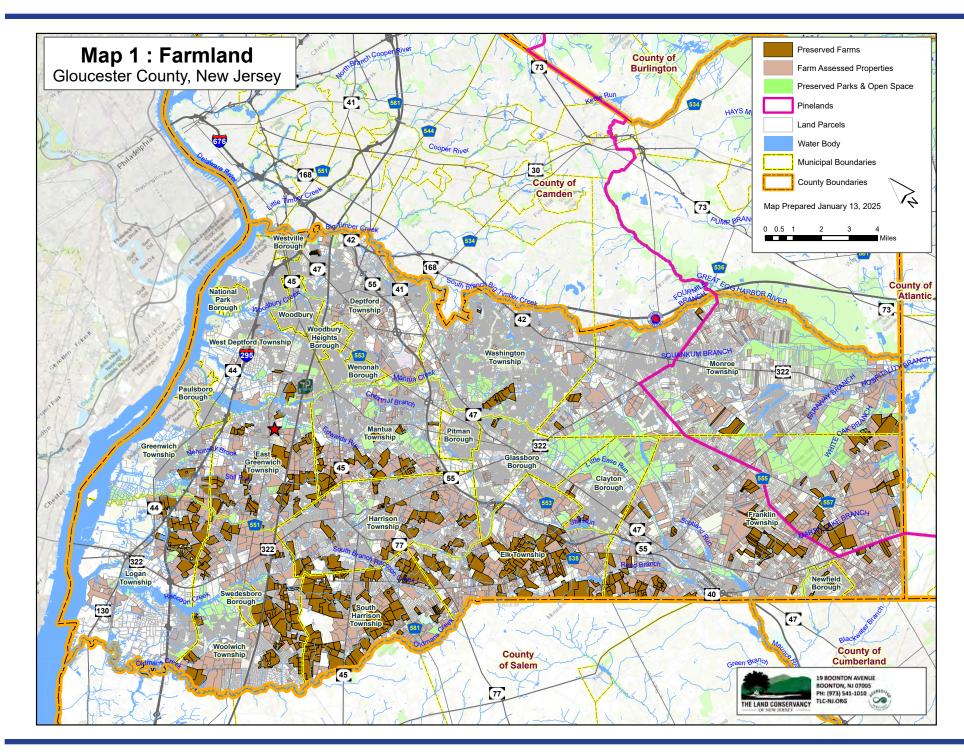
A. Agricultural Landscape

The landscape of Gloucester County supports a rich and productive agricultural industry. Its flat, sandy terrain, soils, and high-yielding groundwater aquifers create excellent conditions for agricultural production. The County's temperate climate and generally mild weather patterns make it suitable for a wide range of agricultural products.

In 1925, agricultural use represented 57.5% of land use in the County.¹ Over the past 100 years, residential and commercial construction has consumed agricultural lands within an expanding periphery around the traditional development centers located in the northern and eastern portions of the County (**Map 1**).

Between 1992 and 2022, land in farms declined from 61,748 acres to 42,076 acres (**Figure I-1**). In 2022, agricultural lands constituted 18% of Gloucester County's 215,072 acres (**Figure I-2**). The County ranked eighth in the state for land in farms behind Monmouth County.





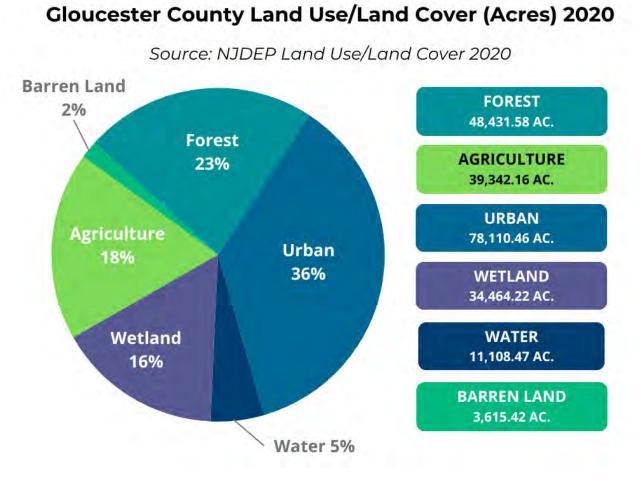
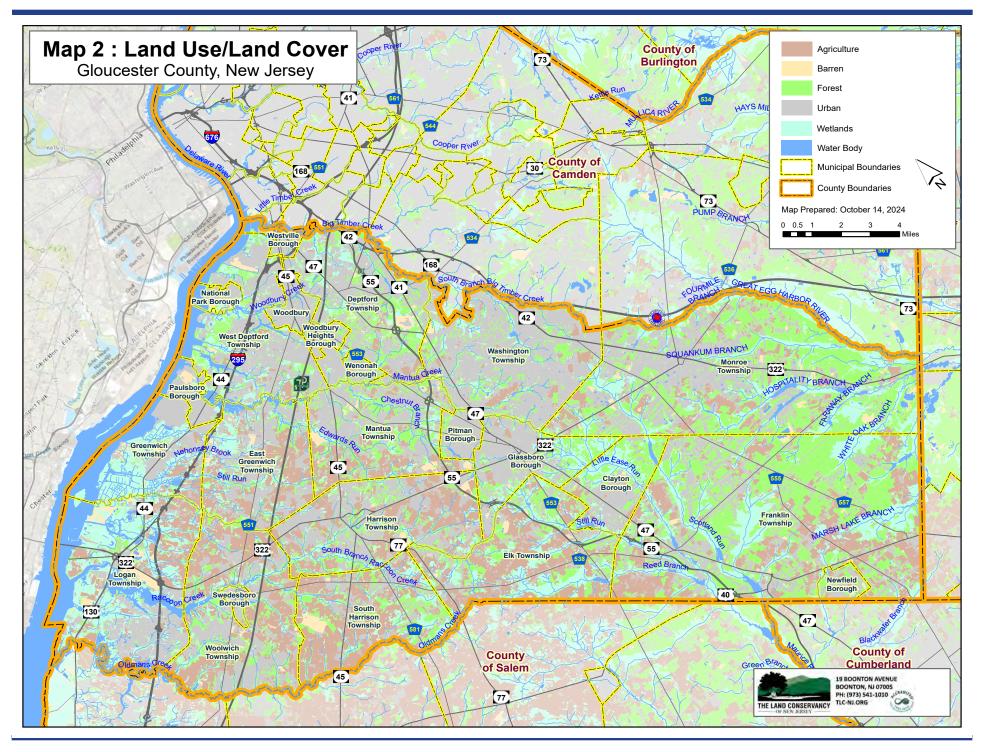


Figure 2. Gloucester County Land Use/Land Cover

Table 1. NJDEP Land Use/Land Cover										
Category	1986	1995	2002	2007	2012	2015	2020			
Forest	23%	24%	23.5%	23%	23%	22%	23%			
Agriculture	30%	25%	23%	20 %	19 %	19 %	18%			
Urban	25%	27%	30.5%	34%	35%	36%	36%			
Wetland	15%	17%	17%	16%	16%	16%	16%			
Water	4.5%	5%	5%	5%	5%	5%	5%			
Barren Land	2%	2%	1.5%	2%	1%	1.5%	2%			
Source: NJDEP L	and Use	/Land Co	over data	ב						

The majority of Gloucester County's agricultural lands are clustered along its border with Salem County. Municipalities in this area tend to have the highest concentration of farmland within the County. According to the **New Jersey Department of Environmental Protection** (NJDEP) Land Use/Land Cover (LU/LC) data, agriculture accounted for 18% of its land use, or 39,342 acres (**Table I-1** and **Map 2**).² The most recent data (2020) shows that Gloucester County is experiencing a gradual increase in urban land cover and a decline in forest cover, agricultural land, and wetlands.



B. Soils

Gloucester's soils form the foundation of the farmland industry. The erodibility, water capacity, nutrient retention, and other physical features of the region's soils influence the productivity and viability of Gloucester County's farms. They also determine what agricultural goods are appropriate to produce locally. Preserving the productive and locally unique soils of Gloucester County as farmland remains critical for maintaining its agricultural industry and rural landscapes.

Gloucester County's soils were formed through a series of geological events. They originated as sediments that accumulated on top of bedrock at the bottom of an ancient ocean that covered what is now Gloucester County. These fine and sandy marine sediments were later covered by gravelly guartzite material that was deposited by glacial melt waters following the last Ice Age. The characteristics of the individual soil types in Gloucester County are defined largely by the ratio of marine to glacial sediments they contain and the parent materials from which they were derived. The sandy and gravelly soils of Gloucester County are good for field crop agriculture because they are generally free of rocks and are relatively easy to till.

Local topography also plays a role in determining soil characteristics. Low-lying areas were submerged by glacial melt waters for an extended time after the last Ice Age. The remains of plants and microorganisms that lived in these shallow waters formed thick layers of organic material on top of low-lying soils. Conversely, dry upland soils were subjected to strong weathering forces, such as wind and precipitation, which eroded them and reduced their depth to bedrock in these areas. Low-lying soils are generally deeper and have more organic matter than upland soils, making them more productive for some crops. However, they also tend to be poorly drained and are more likely to incur flood-related losses.³

The climate and local environment of Gloucester County also exert a significant influence on its soils. The County's wet and humid climate causes a large amount of organic nutrients and basic compounds to leach out of its soils, leaving them relatively nutrient-poor and acidic. The plants and animals that colonize these soils deposit some organic material, but not enough to entirely counteract the extensive leaching that occurs. Consequently, many farmers in Gloucester County must use fertilizer on their fields for certain crops and regularly apply lime to raise the soil pH.

The combination of all these characteristics including chemical composition, texture, depth to bedrock, organic material, drainage, and pH of the County's soils determines their suitability for agricultural production. Based on these features, the Natural Resources Conservation Service (NRCS) classifies soils as **prime**, of **statewide importance**, **unique**, and of **local importance** because they exhibit exceptional capacity for supporting agricultural production:

• Prime farmland soils rest on land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. They have the quality, growing season, and moisture supply to sustain high yields when managed according to acceptable farming methods. Prime soils are not heavily eroded or saturated for a long period of time, and they either do not flood frequently or are protected from flooding. In Gloucester County, 78,154 acres (36% of the County) are classified as prime farmland soils (Table I-2).

Table 2. Agricultural Soils and Land in Active Agriculture, Gloucester County									
Soil Classification	Acres	% of County	Acres in Active Agriculture	% of Soil Type in Active Agriculture	% of Acres in Active Agriculture				
Prime Farmland Soil	78,154	36%	26,042	33%	64%				
Soils with Statewide Importance	34,030	16%	10,450	31%	26%				
Soils of Statewide Importance, if drained	8,671	4%	1,245	14%	3%				
Soils with Unique Importance	23,763	11%	411	2%	1%				
Farmland of Local Importance	7,056	3%	888	13%	2%				
Other Soils	63,242	29%	1,710	3%	4%				
Total	214,917	100%	40,747*	19%	100%				
Source: NRCS Soil Data Access 2023; 2020 NJDEP Land Use/Land Cover data									

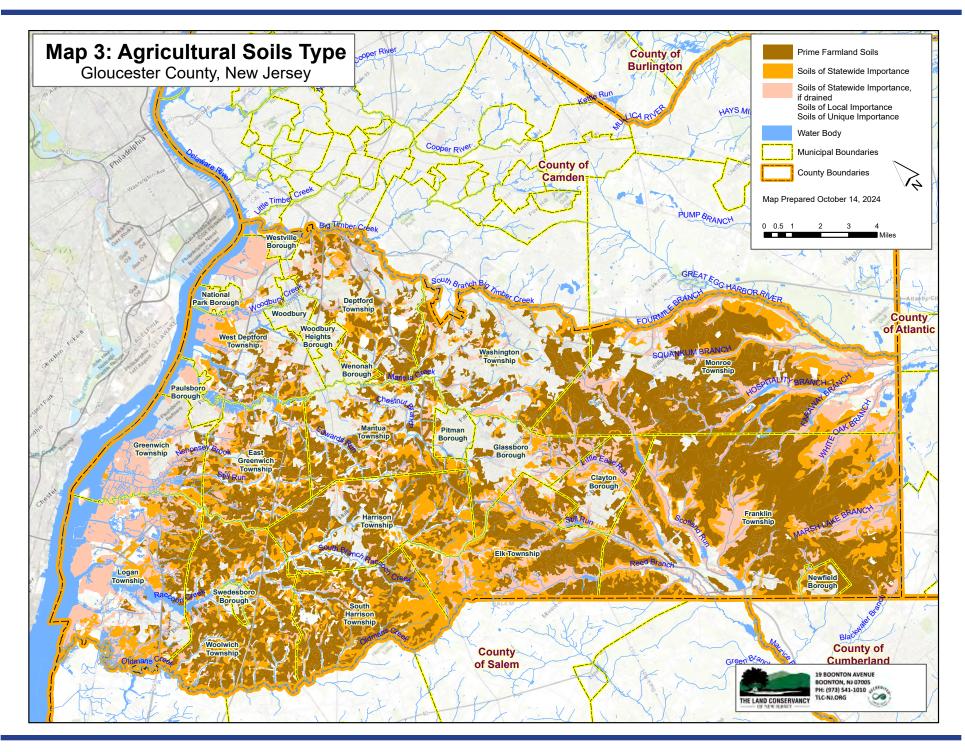
*Statistics may differ within this report due to the inclusion of agricultural wetlands as active agriculture in this chart.

- Farmland soils of statewide importance are nearly prime, producing high yields of crops when treated and managed according to acceptable farming methods, and some may produce yields that are as high as prime soils if conditions are favorable. 34,030 acres of soils of statewide importance are located in Gloucester County (16%).
- Soils of statewide importance, if drained: In Gloucester County 8,671 acres fall under this classification.
- Unique soils exhibit specific qualities that may be favorable to the production of specialized crops, such as blueberries or cranberries. In Gloucester, 23,763 acres are classified as unique soils.
- Farmland soils of local importance include those soils that are not prime or statewide importance and are used for the production of high value food, fiber or horticultural crops. Gloucester County has the most soils in this category in the state: 7,056 acres.⁴

Other soils encompass all soil types that are not classified as prime, statewide important, unique, or locally important. The capacity of these soils for supporting agriculture should be assessed on a sitespecific basis. This category also includes areas of water.

Farmland soils cover 151,675 acres (71%) of Gloucester County (**Table I-2, Figure I-3**, and **Map 3**).⁵ The largest expanses of prime farmland soils are found in Monroe, Franklin, and Elk Townships. High concentrations of prime farmland soils are also found in Woolwich, South Harrison, and East Greenwich Townships. Soils of statewide importance (if drained), locally important, and unique soils tend to be located along the streams and rivers within the County, including the Delaware River.

Also included in **Table I-2** is the acres of land in active agriculture. 64% of land in active agriculture has prime farmland soils (26,042 acres). **Appendix B** includes a detailed listing of all soils in the County.



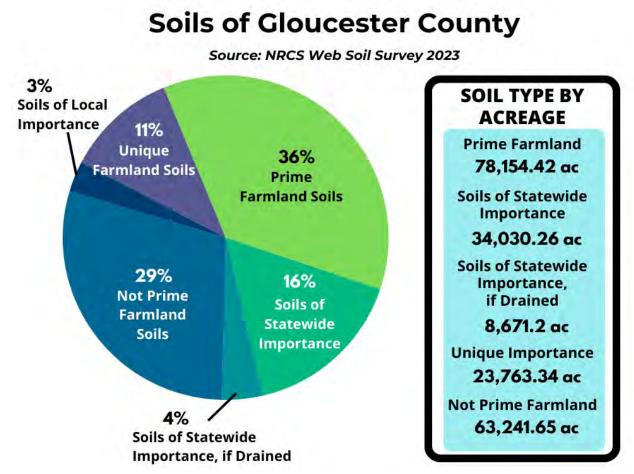


Figure 3. Soils of Gloucester County (2023)

C. Irrigated Land & Water Sources

Irrigated land is defined by the Census of Agriculture as all land watered by any artificial or controlled means. Included are supplemental, partial, and pre-plant irrigation, as well as livestock lagoon waste water distributed by sprinkler or flood systems.⁶

Irrigation plays an important role in the agricultural industry of Gloucester County. Some of the County's sandier soils are easily over-dried, and require irrigation to maintain adequate growing conditions. Many of the County's staple crops, including vegetables, ornamentals, and fruit, need well-irrigated soils in order to develop. According to the New Jersey farmland assessment for 2019, the majority of irrigated acres were planted with vegetable, ornamental, field and/or fruit crops in towns along the Salem County border, including Elk, Franklin, South Harrison, and Woolwich Townships. Field crops in irrigation have almost doubled since 2000, while fruit has decreased by over 50%. The need for irrigation for field crops has increased since 2000 (**Table I-3**).⁷

Overall, since 1997, there is a downward trend in the use of irrigation in Gloucester County. The number of farms with lands in irrigation has decreased by 25%. Total acreage on farms with irrigation (including portions not irrigated) has decreased by 8%, and the number of acres in irrigation has decreased by 32%. Irrigated farmland as a percentage of all Gloucester County farmland and total acres irrigated were highest in 2007, at 28%, while the number of farms with irrigation continued to decline. In 2022, 162 farms irrigated 8,615 acres, representing 20% of all farmland (**Table I-4**).

Groundwater is the main source of water for irrigation in the County. Most farmers use on-site wells that are dug into underlying bedrock aquifers to access groundwater. The productivity of those wells is determined by the capacity of the aquifers below them and the demand from other water uses. Capacity is greatest if the aquifer is made up of sandy, porous substrate and bordered by confining layers of non-porous clay or rock material that trap water between them.

Gloucester County rests upon a number of highly productive aquifers. Unfortunately, many of these aquifers are experiencing increased development within their recharge areas. These are zones where surface waters filter into the aquifers, and there is risk of contamination. The aquifers are especially important during dry season and overdevelopment puts these aquifers at risk.

Table 3. Irrigated Land (acres), Crop Type, Gloucester County										
2000 2005 2010 2015 2019										
Field Crops	578	571	630	1,315	1,193					
Fruit	873	564	481	431	405					
Ornamental	939	810	1,069	806	1,093					
Vegetables	962	1,539	1,181	1,572	1,429					
Total	3,352	3,484	3,361	4,124	4,120					
Source: Farmland Assessments										

Source: Farmland Assessments

According to the **United States Geological Survey** (USGS), there are two principal aquifers within New Jersey, Coastal Plain aquifers and Non-Coastal Plain aquifers.⁸ Gloucester County falls into the Coastal Plain zone. Within this zone there are several smaller aquifers. There are four primary aquifers in Gloucester County. **Figure I-4** shows the aquifers across the state.

The Potomac-Raritan-Magothy (PRM) Aquifer serves areas in Gloucester County from the Delaware River to Mt. Laurel-Wenonah outcrop. This aquifer is generally used by industrial operations and commercial water companies that service residents near the Delaware River. However, this aquifer is easily

Table 4. Gloucester County Farms with Land in Irrigation										
	1997	2002	2007	2012	2017	2022	% Change 1997-2022			
# of Farms	217	176	191	137	158	162	-25%			
Land in Irrigated Farms	29,585	24,683	26,958	24,717	30,942	27,091	-8%			
Harvested	12,450	11,349	12,751	8,969	(D)	8,548	-31%			
Pasture/Other	176	173	140	40	(D)	67	-62%			
Total Acres Irrigated	12,626	11,522	12,891	9,009	8,732	8,615	-32%			
Percent of Total Farmland	22%	23%	28%	21%	18%	20%				
Source: Census of Agriculture										

contaminated from saltwater intrusion and waste disposal. To help sustain the aquifer, the NJDEP established Water Supply Critical Area #2 in 1993 which reduced aquifer use by 22%.

The Mount Laurel-Wenonah (MLW) Aquifer is found in central Gloucester County between its outcrop area and the Kirkwood-Cohansey Aquifer to the southeast. It has become increasingly popular since the establishment of the Water Supply Critical Area #2. Developing areas of the County have relied more on this aquifer. Farmers in Woolwich, East Greenwich, and Harrison Townships rely upon the MLW Aquifer for irrigation water.

Northwest of the Mount Laurel-Wenonah Aquifer is the Englishtown Aquifer System. It is predominantly used in the northern counties, such as Ocean and Monmouth Counties. However, it does stretch down into Gloucester and Salem Counties. In the aquifer, a single well has an average yield of 369 gallons per minute (gpm).⁹

The Kirkwood-Cohansey Aquifer underlies the portion of Gloucester County south of the outcrop area which runs through South Harrison Township and north of Pitman into Washington Township. Its loamy substrate supports wells that can yield up to 800 gpm to residential and agricultural land uses above it.

The Kirkwood-Cohansey Aquifer is recharged directly by surface precipitation. This leaves it vulnerable to surface contamination from any liquids that penetrate its surface soils. The Kirkwood-Cohansey also provides the base flow for the region's water bodies. Excessive extractions from the aquifer would negatively affect the rivers and streams of southern Gloucester County.

D. Farmland Trends and Statistics

According to the 2022 Census of Agriculture, in Gloucester County:

- 546 farms average 77 acres in size, which is above the overall New Jersey average of 71 acres.
- The median farm in Gloucester County is 16 acres, indicating that most of the County's farm units are much smaller than the average 77 acres.
- Furthermore, the majority of farms are between 1-50 acres, which has been a trend in the County since before 2002. In 2022, the same distribution of farm sizes is seen but the total number of farms continue to drop (Figure 1-5).

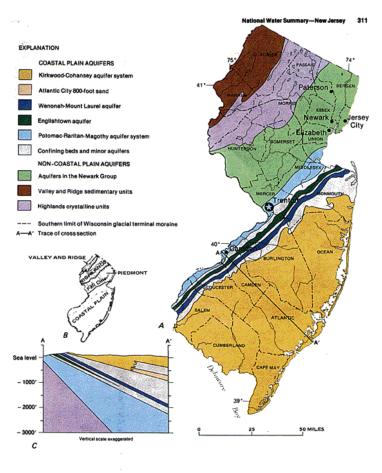
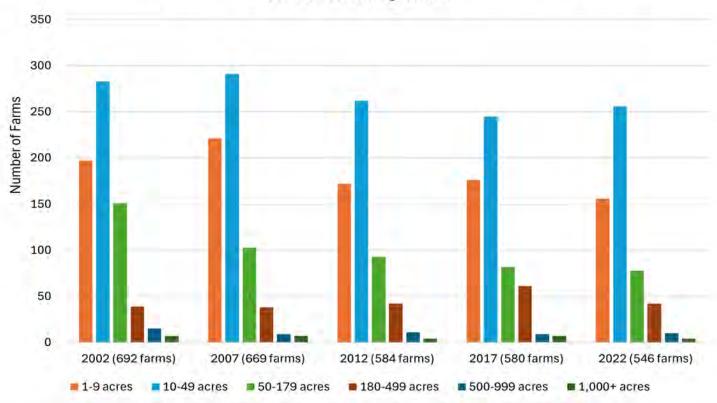


Figure 1. Principal aquifers in New Jersey: A, Geographic distribution: *B*, Physiographic diagram and divisions. *C*, Generalized cross section (A.A.) of the Coastal Plain, (See table 2 for more detailed description of the aquifers. Sources: A, G, Compiled by O. S. Zapecza from U.S. Geological Survey flues. *B*, Overes and Sohi, 1999; Raiza; 1964.)

Figure 4. New Jersey Aquifers (USGS)



Gloucester County: Number of Farms by Farm Size (2002-2022)

Source: Census of Agriculture

Figure 5. Gloucester County Farms by Size

According to the 2023 Farmland Tax Assessment data there are 57,213 acres of farm assessed land in the County. Of this:

- 30,748 acres (54%) is harvested cropland.
- 827 acres (1%) is cropland pasture.
- 1,506 acres (3%) are permanent pasture.
- 23,904 acres (42%) is woodland/or wetland (Figure I-6).

The loss of farm acreage in Gloucester County has been seen across all categories. The total amount of farm assessed land has declined 25% from 2000, when it totaled 76,603 acres:

- Harvested cropland decreased 37%.
- Pastured cropland decreased 52%.
- Permanent pasture decreased 59%.
- Woodland/wetland increased 7%.

In Gloucester, the only category of farmland to increase in acreage between 2000 and 2023 was woodland/wetland This increase in woodland maybe due to cropland left fallow for extended periods of time, which undergoes ecological succession into forested land.

Land in active agriculture is defined by the NJ Farmland Tax Assessment as: cropland harvested, cropland pasture, and permanent pasture. The total land in active agriculture in the County is 33,081 acres. Active agriculture includes the following NJDEP LU/LC types:

- Agricultural wetlands.
- Cropland and pastureland.
- Former agricultural wetland.
- Orchards/ vineyards/ nurseries.
- Other agriculture.

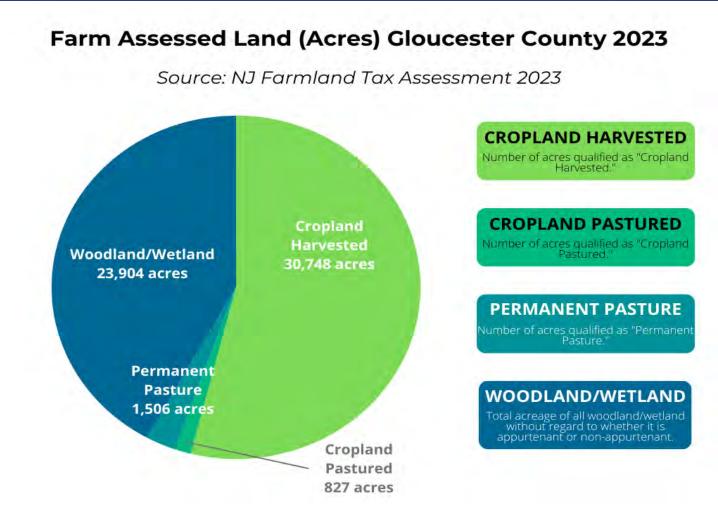


Figure 6. Farm Assessed Land, Gloucester County

Table 5. Active Agriculture: Gloucester County (2000-2023) (acres)									
Year	Cropland Harvested	Cropland Pastured	Permanent Pasture	Total Active Agriculture					
2000	48,776	1,714	3,667	54,157					
2005	40,809	1,747	3,102	45,658					
2010	38,055	1,101	3,350	42,506					
2015	35,689	623	2,582	38,894					
2019	31,742	758	1,959	34,459					
2023	30,748	827	1,506	33,081					
% Change	-37%	-52%	-59%	-39%					
Source: NJ Farm	Source: NJ Farmland Assessments ¹⁰								

Active agricultural area declined less than overall farm assessed acreage, with a 39% decrease for Gloucester County. The largest loss was found in permanent pasture with a 59% decrease (**Table I-5**). The Farmland Tax Assessment report for 2023 breaks down acreage of active agriculture by municipality. Franklin Township has the most land in active agriculture with 6,429 acres (**Table I-6**). The increasing costs of farming and farmland in the State and the County may compel smaller farmers to sell their land to some of the County's larger farms, as well as developers. As farmers retire, current small operations cannot compete to purchase non-preserved farmland as the economic pressure from other industries maybe too high.

Table 6. Acres of Active Agriculture by Municipality (Gloucester County)								
Municipality	Acres of Active Agriculture	Acres in Taxing District						
Clayton Borough	250	5,133						
Deptford Township	504	11,110						
East Greenwich Township	2,416	7,539						
Elk Township	4,451	12,922						
Franklin Township	6,429	34,643						
Glassboro Borough	181	5,907						
Greenwich Township	492	6,144						
Harrison Township	3,345	12,570						
Logan Township	1,804	15,430						
Mantua Township	1,758	12,346						
Monroe Township	1,866	29,760						
National Park Borough	-	634						
Newfield Borough	136	1,114						
Paulsboro Borough	33	1,280						
Pitman Borough	8	1,504						
South Harrison Township	3,937	10,118						
Swedesboro Borough	-	493						
Washington Township	562	14,266						
Wenonah Borough	-	691						
West Deptford Township	429	10,189						
Westville Borough		666						
Woodbury City	-	1,363						
Woodbury Heights Borough	-	755						
Woolwich Township	4,482	13,728						
Total	33,081	210,305						
Source: NJ 2023 Farmland Tax Asses	sments 2023							

Gloucester County Comprehensive Farmland Preservation Plan

Literature Cited

Chapter 1

1 United States Department of Agriculture: Census of Agriculture. <u>http://www.agcensus.</u> <u>usda.gov/Publications/</u> Accessed February 2024.

2 NJDEP Bureau of GIS. (2024). Land Use/Land Cover of New Jersey 2020 (DRAFT). map. Retrieved from <u>https://gisdata-njdep.opendata.arcgis.com/documents/njdep::draft-land-use-2020-for-new-jersey/about</u>

3 USDA, Natural Resources Conservation Service. Web Soil Survey. <u>http://websoilsurvey.</u> <u>nrcs.usda.gov/app/HomePage.htm</u> Accessed February 2024.

4 U.S. Department of Agriculture, Natural Resources Conservation Service. Soil Survey Geographic (SSURGO) database for Gloucester County, New Jersey. <u>http://websoilsurvey.</u> <u>nrcs.usda.gov/app/WebSoilSurvey.aspx.</u> Accessed March 2024.

5 USDA, Soil taxonomy. Natural Resources Conservation Service. Accessed March 2024, from https://www.nrcs.usda.gov/resources/guides-and-instructions/soil-taxonomy

6 Census of Agriculture, Appendix B: *General Explanation and Census of Agriculture Report Form*, <u>https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_2_County_Level/New_Jersey/njappxb.pdf</u> Accessed October 2024.

7 State of New Jersey Farmland Assessment. (rep.). Data From FA-1 Forms For 2023 Tax Year (Vol. Fifty-eight report). <u>https://www.nj.gov/treasury/taxation/pdf/lpt/2023farmland.pdf</u> Accessed February 2024

8 USGS, Major aquifers in New Jersey. (1984) <u>https://www.usgs.gov/centers/new-jersey-water-science-center/major-aquifers-new-jersey</u> Accessed, July 2024.

9 NJDEP, Englishtown Aquifer System. (2014). <u>https://www.nj.gov/dep/njgs/enviroed/</u> infocirc/englishtown-aquifer.pdf Accessed July 2024

10 New Jersey Department of Agriculture, State Agriculture Development Committee. New Jersey Farmland Assessment. Gloucester County Summaries for 2000, 2005, 2010, 2015, 2019, and 2023

Gloucester County (2015) *Gloucester County Farmland Preservation Update*. Accessed February 2024



Wellacrest Dairy, East Greenwich

Chapter II.

Agricultural Industry

The *Census of Agriculture* reports on market value of agricultural sales. Statewide, Gloucester County ranks:

- Fourth for total agricultural sales (Figure II-1).
- Third for the market value of crops sold.
- Seventh for livestock sales.

For the crop sales, Gloucester ranks:

- Third for value of vegetable sales.
- Fifth for fruits.
- Fourth for nursery and greenhouse.

For livestock, the County ranks third for value of sales of hogs and pigs, milk from cows and for cattle and calves sales.¹

TOTAL AG. MARKET VALUE BY COUNTY (\$1,000)

_	Cumberland Atlantic Salem	\$305,002 \$149,860 \$138,080
(Gloucester	\$136,583
#4	Burlington Warren Monmouth Hunterdon Middlesex Camden	\$135,225 \$128,259 \$119,532 \$115,193 \$41,613 \$34,182 riculture

Figure 1. Total Agricultural Market Value by County

In terms of production, Gloucester ranks:

- Third among counties for acres of land in orchards and number of milk cows.
- Fourth for acres of soybeans harvested and nursery stock acreage in the open.
- Fifth for harvested acres of corn for grain, all berries harvested, and number of cattle and calves.
- Sixth for corn for grain.²

Farming in Gloucester County is an important part of the local economy. Agriculture accounted for more than \$136.6 million in sales during 2022 compared to:

- \$102.5 million in 2017.
- \$87.7 million in 2012.

Although there was a 3% decline in the amount (acres) of farmland in Gloucester County between 2012 and 2022, there was a 56% increase in sales. Statewide, farmland declined by only 0.5% while sales rose by 48%. During the same time period, average sales per farm within the County were up 67% to \$250,153. From 2012-2022 there was no major crop commodity that saw a decrease in sales. Between 2017 and 2022, the largest decrease was in the vegetables category, down 4%.³

Farms provide indirect support to the local economy as well. They offer seasonal employment opportunities for young residents and temporary workers who, in turn, patronize local stores and businesses.

Agritourism is thriving as well. Being near cities and towns with many different customers helps bring people to the County. Tourists who visit Gloucester County enjoy its scenic agricultural landscapes, patronize its farm stands, markets and other on-farm activities, and also support local restaurants and motels. In 2023, the NJ Legislature passed a *Special Occasions Event Bill* which allows farmers to have a permit to hold events on their farms. Gloucester County itself has had very few applications and the program as a whole is underutilized to date.

Another sector that has seen strong sales with significant potential is the winery business. Local wineries have had strong sales in the County. Legislation that allows for mail-order wine out of state has helped wineries establish an online presence. The County has one farm distillery that uses local products to produce spirits. Craft breweries have gained popularity in the County but there are no farm breweries. As the agricultural industry changes, there may be room for this industry to expand into Gloucester County.

Additionally, farms generate a positive cash flow to the Gloucester County economy by selling their products to buyers based outside the County, such as distributors and agritourists. Local farmers spend the revenue earned from these sales locally, which supports the County's economy.

Gloucester County is well-positioned to benefit from positive cash flows from agricultural production. Retailers, wholesalers, and tourists from the greater-Philadelphia region produce a large demand for locally grown farm goods. This market will help sustain agriculture in Gloucester County into the future. However, many of Gloucester County's farmers are facing the challenge of rising prices, increased transportation costs, broker fees, higher wages at all levels, packaging costs for processed foods, and all stages of food handling after leaving the farm.

Statistical Resources

Agricultural production and market value trends were calculated using data from the United States Department of Agriculture's (USDA) National Agriculture Statistics Service (NASS), including the census that is undertaken every five years. The 2022 Census was released in February 2024. The agricultural yields for many products have been tabulated annually since 1953, while the yields of other products have been recorded in more recent years. Historical pricing information for some of these products is also available. These historical trends are supplemented by weather and production information from the annual reports of the New Jersey Department of Agriculture (NJDA).⁴ New Jersey Farmland Assessment data, which quantifies the land area devoted to agricultural uses and products by County and municipality, is also referenced in sections of this document.

A. Trends in Market Value of Agricultural Products Sold

Gloucester County's agricultural industry supports a wide variety of farmers, farming operations, and support businesses. Career farmers as well as part-time, second career, and "hobby" farmers produce agricultural goods within the County. Gloucester County's farms range in size from five acres to more than 2,000 acres, and its farms sell anywhere from a few hundred to a few million dollars worth of agricultural products annually. The County relies upon its staple nursery and vegetable crops, but also produces substantial harvests of other crops as well as dairy and livestock goods. This diversity forms the basis of the strong and sustainable agricultural industry that exists in Gloucester County.

Farm Units

The 2022 Census of Agriculture reports that there are 546 farm units in Gloucester County. down from 584 in 2012 and 580 in 2017. These farms decreased in average size between 1997 and 2002 (Figure II-2). Farm size increased in 2017 and dropped in 2022. The decrease in farm sizes can be attributed to many factors. One is the continued increase of cost of inputs, especially labor and energy. Many of the county's farms utilize the H2-A program for migrant worker hires. In 2024, the hourly rate is \$17.20 per hour which includes the farmer covering transportation and housing costs for the workers. Labor is seen as the highest input costs for fruit, vegetable, nursery and greenhouse farmers. Energy is the other main input cost and has stifled farm incomes over the past three years. Most farm machinery runs on diesel fuel and do most of their own transporting. When these costs increase. farmers tend to feel it immediately.

Record high land values during the early 2000's prompted many farmers to subdivide and sell portions of their properties while continuing to farm on their remaining lands. Today, the majority of the County's farms are small (median size 16 acres).

333 farms, or 60% of the farms in Gloucester County, produce less than \$10,000 in agricultural products each year. These farms together occupy less than one percent of the total agriculture sales in the County (**Figure II-3**). Comparatively few, 46, high-earning farms sell more than \$500,000 worth of goods annually. These farms form the backbone of the County's agricultural economy, accounting for 88% of its total sales. In 2022, these farms brought in a combined \$119.6 million out of the total \$136 million reported (**Figure II-4**).

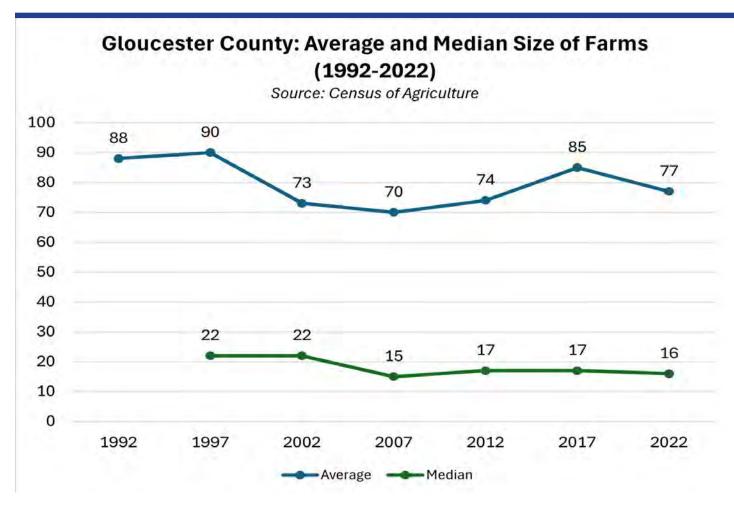


Figure 2. Average and Median Size of Farms (1992-2022)

High-yielding producers have secured a larger portion of the County's agricultural sales over the last twenty-five years, by increasing their market share from 45% in 1992 to 88% in 2022. In addition, the number of farms in each category has changed over the years, with farms selling less than \$1,000 showing the most volatility, spiking in 2002 at 270, perhaps due to drought conditions that may have depressed sales overall.

Farms with sales between \$1,000 and \$9,999 have remained most stable between 1992 and 2022, while farms with sales from \$10,000 to \$500,000 have shrunk by 58%. They currently make up 12% of Gloucester County's agriculture sales (**Figure II-5**). Farms with sales of \$500,000 and above have doubled, from 23 in 1992 to 46 in 2022.

Agricultural Sales

The Census of Agriculture separates agricultural activities into two categories: crops, including nursery and greenhouse, and livestock, poultry and their products. County sales of crops, including nursery and greenhouse, increased steadily from \$49.7 million in 1992 to \$62 million in 2002 despite drought conditions that year.

Crop sales spiked to \$88 million in 2007, and then declined to \$82.3 million in 2012. Over the last ten years, crop sales have increased as sales reached \$94.8 million in 2017 and \$130.5 million in 2022. Crop sales in 2022 accounted for 96% of the County's total agricultural sales, which is higher than the state average of 91%.

Gloucester County: Number of Farms/Value of Sales (1992-2022) Source: Census of Agriculture

Sales from livestock, poultry and their products for the same period experienced a high of \$7.6 million in 2017, falling to \$6 million in 2022. Livestock sales statewide increased between 2017 and 2022. **Figure II-6** shows the total agriculture sales in Gloucester County from 1992-2022.

Both in Gloucester County and statewide, the number of farms involved in crop sales declined during this period. At the state level, the number of



Figure 3. Number of Farms/Value of Sales (1992-2022)

farms involved in livestock increased, while at the county level it decreased since 2017.

B. Crop Sales and Production Trends

The *Census of Agriculture* divides crops into several general commodity categories:

- Vegetables
- Nursery/Greenhouse
- Fruits, Nuts and Berries
- Grains, Oilseeds, Dry Beans, & Peas
- Hay & Other Crops
- Cut Christmas Trees & Short-Rotation Woody Crops

Reported crop sales by categories are shown in **Figure II-7** and **Figure II-8. Figure II-9, Figure II-10,** and **Figure II-11** show selected crops over time by bushels produced, number of farms, and acres in production.

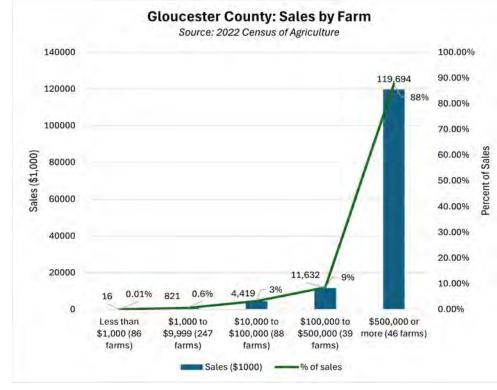


Figure 4. Sales by Farm (2022)

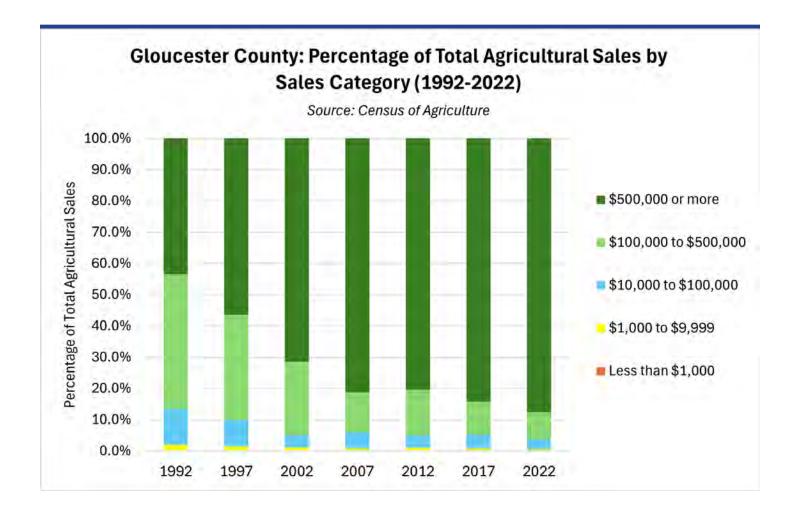


Figure 5. Percentage of Total Agricultural Sales by Sales Category (1992-2022)

As of 2022, soybeans for beans led in both number of farms and acreage. However, corn for grain was first in bushels produced with slightly less than 700,000 in 2022.

Figure II-7 displays an increase in sales in nearly all categories over the past 30 years. Sales records for short-rotation woody shrubs were not recorded until 2002, when in the past 15 years on record, sales in this area have decreased slightly.

The most significant increase in sales for a commodity is recorded for nursery and greenhouse products, with total sales rising 329% since 1992. **Figure II-8** exemplifies the percent breakdown of crop commodities within the county. The highest percentage is nursery/greenhouse which makes up 53% of sales and the lowest percentage is short-rotation woody shrubs at 0.2%. **Figure II-9, Figure II-10** and **Figure II-11,** show the full breakdown of harvested crops in number of farms, acres used, and bushels produced. A more in-depth analysis of the numbers is made in the grains, oilseeds, dry beans and dry peas section.

Vegetables

Vegetables, melons, potatoes and sweet potatoes was Gloucester County's highest selling agricultural sector in 2017, but fell to second place in 2022, behind the nursery/greenhouse sector. Sales in 2012 were roughly \$29.8 million, and in 2017 the County saw sales increase to \$41.5 million, making it the number one crop

commodity in terms of sales. However, in 2022, sales dropped slightly to \$39.9 million. This is still a 99% increase in sales from 1992. Vegetables currently make up 31% of sales within Gloucester County. This is higher than the statewide average of 22% of crop sales and 20% of all agricultural sales. Vegetables made up 16% of all harvested cropland across the County in 2022. More than 50 types of vegetables, herbs, melons and potatoes were harvested from 4,745 acres during 2022. down from 6.450 acres in 2017. Vegetable acreage has decreased every year since 1992 (apart from 2007) and the full breakdown can be seen in Table II-1.

Squash (888 acres), tomatoes (546 acres), bell peppers (492 acres), and asparagus (479 acres), had the largest acreages of harvested vegetables. In addition, there were significant harvests of sweet corn (307 acres), and cucumbers and pickles (202 acres) within Gloucester County. 799 acres of vegetables on 12 farms were harvested for processing and 3,946 acres on 89 farms were harvested for market. Farms that grow vegetables and vegetable products tend to be among the highest earning operations in Gloucester County. Roughly 31% of the County's agricultural sales come from vegetables, yet vegetable crops occupy 16% of County farmland and are grown on 90 out of 546 farms.

Table 1. Vegetables											
Census Year 1992 1997 2002 2007 2012 2017 2022											
Number of Farms	198	139	121	124	91	105	90				
Total Acreage	9,298	8,348	7,248	9,907	7,070	6,450	4,745				
Sales (\$1000's)	\$20,063	\$24,252	\$26,719	\$39,616	\$29,828	\$41,557	\$39,914				
Source: Census of Agriculture											

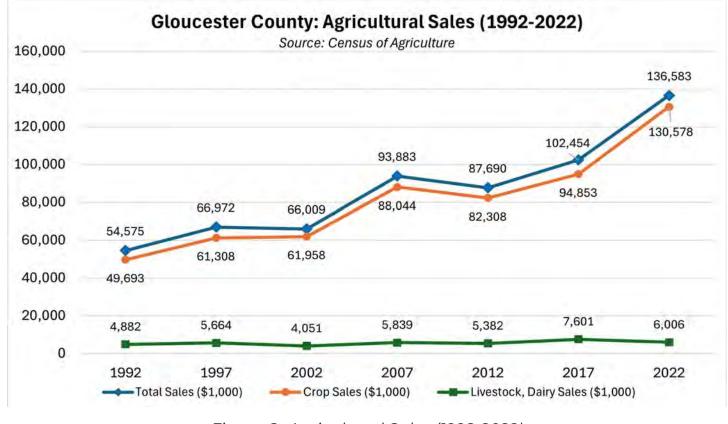


Figure 6. Agricultural Sales (1992-2022)

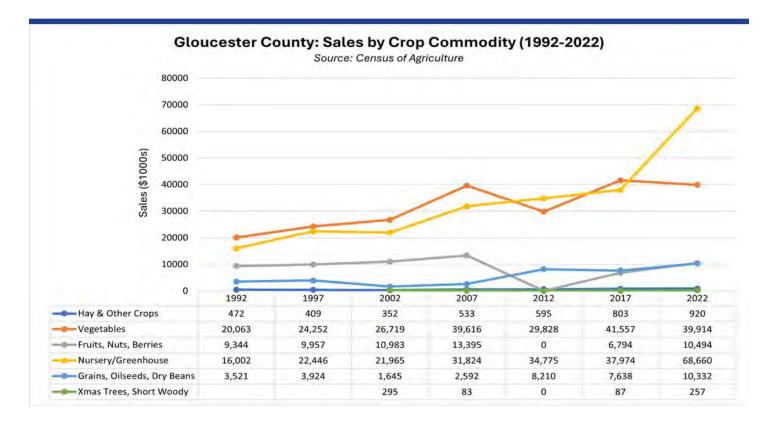


Figure 7. Sales by Crop Commodity (1992-2022)

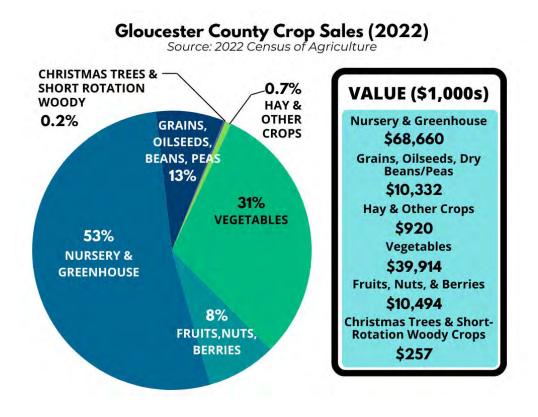


Figure 8. Gloucester County Crop Sales (2022)

While vegetable products sold by the County's farmers have much higher market values than most other agricultural goods, what is not captured by these sales figures is that vegetables require comparatively higher input costs, which reduce their net value. Economyof-scale production infrastructures, such as irrigation systems, are best able to maximize the net sales revenue that farms take in from producing and selling vegetable products. These costly, high-capital production methods are affordable primarily to larger agricultural operations, and therefore the larger operations are the most common producers of these high-intensity products. Vegetable producers within the county are also hurting financially due to competition from imports, mainly from South America.

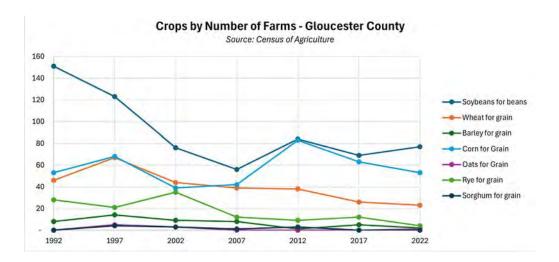


Figure 9. Crops by Number of Farms (1992-2022)

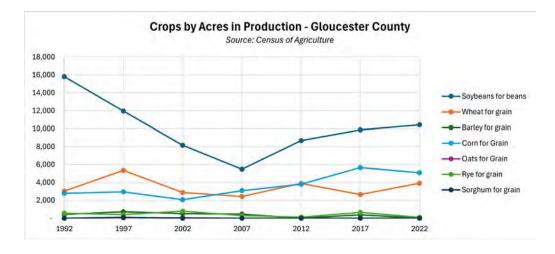


Figure 10. Crops by Acres in Production (1992-2022)

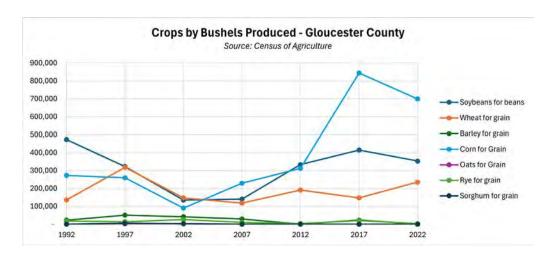


Figure 11. Crops by Bushels Produced (1992-2022)

Nursery/Greenhouse

The nursery, greenhouse, floriculture and sod sub sector – which encompasses flowers, flower seeds, landscaping plants, trees/shrubs, and other products – was Gloucester County's highest grossing crop category in 2022. Sales of these products totaled \$68.7 million, up 97% from 2012 and 329% from 1992.

The nursery sector accounted for 53% of the County's crop sales and 50% of its overall agricultural sales as seen in **Figure II-7** and **Figure II-8**. The market share of Gloucester County agricultural sales comprising nursery and greenhouse products is slightly higher than the 49% for New Jersey as a whole.

In Gloucester County, in 2022, this sector also surpassed all other categories, including vegetables, in sales per farm, with an average of \$995,072 versus \$578,464 for vegetables and an overall average per farm of \$250,153. The County's agricultural sales percentage from nursery, greenhouse, and sod operations (50%) is much higher than the proportion of the County's farms (69 of 546, or 13%) that grow these products. This section only accounts for 2% of county cropland. Nursery/greenhouse farms take in almost four times the County average in sales earnings and require comparatively little land to do so.

Nursery/greenhouse land takes up 1,440,480 square feet under cover and 442 acres in the open. That is a total of 475 acres. In 2022, bedding/garden plants were by far the largest category of plants grown under cover, occupying 865,546 square feet (approximately 20 acres), and 236 acres in the open; cut flowers and florist greens were harvested by 18 farms but acres in the open and under cover figures were not disclosed. Ten farms grew vegetables and/or herbs under 115,656 square feet of cover (approximately 3 acres). Nursery stock, including ornamentals, shrubs, shade & flowering trees, evergreens and live Christmas trees, ornamental grasses and vines, and bare root herbaceous perennials, was predominantly grown in the open, occupying 1,328 acres, with another 514,017 square feet (12 acres) under cover.

Similar to vegetable products, nursery, greenhouse, and sod goods have higher market values than most other agricultural goods, but also require comparatively higher input costs. Nursery stock, such as trees and shrubs, require costly chemical inputs, such as fertilizers and pesticides, as well as enough labor capacity to maintain and package them for sale. Economyof-scale production methods, which are mostly utilized by large-scale operations, capture the highest profit margins among producers of greenhouse/nursery goods.

Fruits, Tree Nuts & Berries

Fruits, nuts, and berries sales totaled \$10.5 million in 2022. This was up 54% from 2017 as the sales totaled \$6.9 million. However, since 1992, sales for fruits, nuts and berries are up 12%. In 2022, there were 78 operations with fruit, tree nut and/or berry sales, versus 53 in 2017 and 47 in 2012.

The share of agricultural sales that come from fruit has steadily decreased since 1992. At that time, fruit accounted for more than 19% of the County's crop sales compared to 15% in 2007 and 8% in 2022. This is due to declining acreage for this sector and rising sales for the nursery and vegetable sectors. In total, fruits, nuts and berries use 1,987 acres in the County, making up 7% of harvested crop land.

Peaches

Peaches are the strongest contributor to the fruit industry in Gloucester County. In 2022, there was 1,143 acres attributed to peach production in the county. This makes up 58% of the total fruit. nuts and berries acreage. This is down from 2,060 acres in 2012. This is an increase from 2017 where peaches totaled 929 acres. The number of operations declined from 24 in 2012 to 19 in 2022. Peach production has been steadily declining since 1992 (Figure II-12).

Apples

Apples – the County's second most important fruit product – have also been experiencing a downward trend since 1992 (**Figure II-13**). This trend has been observed across southern New Jersey and is attributable largely to stiffening competition from growers outside the state. Acreage devoted to apple production totaled 312 in 2022 down from

1,376 in 1992; operations declined from 38 to 23. Many of the smaller farms have seen decreases in both apple and peach production. However, the larger producers are still upholding the production numbers.

Tree fruit has been on the decline due to low prices, competition from imports and other U.S. regions, and a high cost of

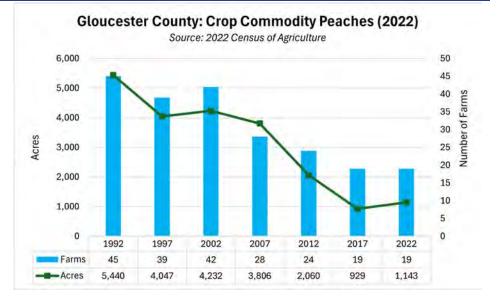


Figure 12. Crop Commodity Peaches (1992-2022)

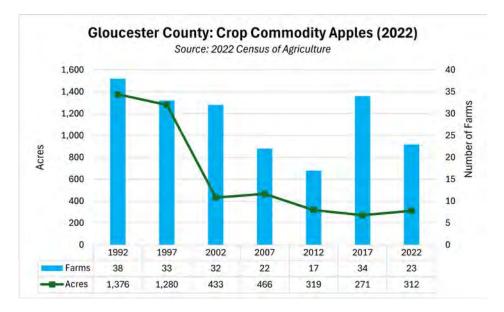


Figure 13. Crop Commodity Apples (1992-2022)

inputs. Former tree fruit acres are now growing vegetables and field crops. Like vegetables and nursery products, fruit crops require significant investments to maximize profitability. Regular applications of pesticides are particularly important for growing peaches and apples, and agricultural labor is usually required for harvesting, packaging, and selling them. These requirements make fruit more suitable for large and well-financed farms. However, fruit is also a popular product among smaller operations that support agritourism facilities, such as pick-your-owns and roadside farm markets. Agritourism facilities that feature fruit products contribute to the economic viability of smaller farms in Gloucester County.

Grains, Oilseeds, Dry Beans and Dry Peas

Sales of products within the grains sector rose 193% between 1992 and 2022, to \$10.3 million. From 2012 the change was less significant, rising 26% from \$8.2 million. The number of farms with sales also rose from 115 in 2002 to 124 in 2022, and average sales per farm rose from \$14,000 in 2002 to \$83,300 in 2022. Grains are more affected by weather than most other field crops because they are rarely provided with additional nutrients or water inputs via fertilizers or irrigation. Grains made up 8% of the County's crop sales (Figure **II-8**). Grain production tends to experience sharp increases and decreases from year to year. The 2002 Census saw among the worst grain harvests on record.

Grains, oilseeds, dry peas, and dry beans occupy the most land in Gloucester County. This category includes predominantly soybeans, corn, and wheat, totaling 19,405 harvested acres in 2022 and representing 66% of all harvested cropland and 61% of total cropland acreage (**Figure II-9**, **Figure II-10**, and **Figure II-11**).

Soybeans

In 2022, soybeans accounted for the greatest subsector of grain production at 10,424 acres (33% of harvested cropland), followed by corn for grain with 5,072 acres (16% of harvested cropland), and wheat at 3,909 acres (12% harvested cropland).

Soybean production occupied 77 farms in 2022, which brings in sales valued \$4,151,000. The acreage, number of farms, and market value of soybeans has increased over the past twenty years, but only after the commodity experienced a downward trend between 1992 and 2007. Between 2007-2022 acreage used for growing soybeans increased 28% from 8,165 acres to 10,424 acres (Figure II-14). Market value from soybean sales increased 281% from \$1,090,000 in 2007 to \$4,151,000 in 2022. In 2007, 140,662 bushels of soybeans were harvested for sale which increased to 353,225 bushels in 2022, a 50% increase (Table II-2). Only corn operations produced more bushels in 2022.

Soybean operations have consistently been at the top of the County in all statistical categories and have continued

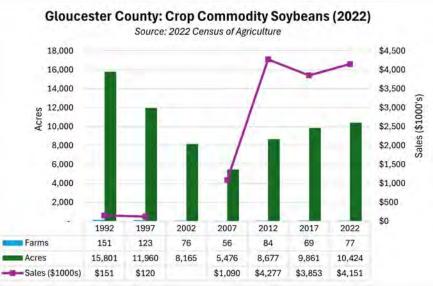


Figure 14. Crop Commodity Soybeans (1992-2022)

Table 2. Soybean Production, Bushels									
Census Year 1992 1997 2002 2007 2012 2017 2022							2022		
Bushels Produced	472,553	322,443	135,096	140,662	333,018	414,321	353,225		
Source: Census of Agriculture									

to trend upwards. Soybeans will most likely continue to play an important role in the future of cropland in Gloucester County.

Corn

In 2022, corn produced for grain accounted for the second greatest subsector of grain production at 5,072 acres (16% of harvested cropland). The combined 5,307 acres of all corn produced (corn for grain and corn produced for silage/green chop) accounts for 18% of harvested cropland, 17% of Gloucester County's total cropland, and 13% of total agricultural land.

Corn production occupied 53 farms in 2022, which brings in sales valued \$4,406,000. The acreage, number of farms, and market value of corn has been steadily increasing over the past thirty vears between 1992 and 2022. Between 1992-2022 acreage used for growing corn for grain increased 83% from 2,775 acres to 5,072 acres (Figure II-15). Market value from corn for grain sales increased 814% from \$482,000 in 1992 to \$4,406,000 in 2022. In 1992, 272,642 bushels of corn were harvested for sale which increased to 698,635 bushels in 2022, a 156% increase (Table II-3). Corn operations produced the most bushels in the County in 2022.

Much of the County's grain is produced on local horse and livestock farms that, in turn, use it as feed for their animals. This grain is never sold and is not recorded in the Census sales figures. Consequently, grain plays a much larger role within the local agricultural industry than its sales numbers may indicate.

Hay and Other Crops

Sales of hay and other crops totaled \$920,000 in 2012, with 127 farms reporting sales, as compared to 106 farms reporting sales of \$595,000 in 2012. This made up 0.7% of crop sales within the County. However, much of the County's hay is produced on local horse and livestock farms that, in turn, use it as feed for their animals. This hay is never sold and is not recorded in the Census sales figures.

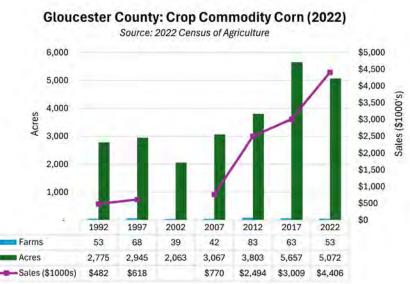


Figure 15. Crop Commodity Corn (1992-2022)

Table 3. Corn Production, Bushels									
Census Year 1992 1997 2002 2007 2012 2017 2022							2022		
Bushels Produced	272,642	259,050	89,189	228,950	312,380	844,381	698,635		
Source: Census of Agriculture									

Consequently, hay plays a much larger role within the local agricultural industry than its sales numbers indicate. Although, as shown in **Figure II-16**, hay sales have been rising steadily since 1992.

146 operations reported harvesting hay and/or haylage in 2022 versus 175 in 2017 and 155 in 1992. Acres harvested in those three years were 3,238, 4,442 and 3,669, respectively. The yield in tons per acre in 2022 was 1.8, lower than in 1992 or subsequent reporting years. The county saw less production per acre than it has in past years. Hay is a low-intensity crop as it does not require the substantial inputs of fertilizers, irrigation, or labor that are necessary with other field crops. Increases in the costs of these inputs have encouraged farmers in Gloucester County sales have decreased by 13% coming in at \$257,000 in 2022. This was a 195% increase from 2017 which totaled \$87,000. Overall, sales for this category made up 0.2% of the County's total crop sales.

Livestock

The livestock sector in Gloucester County is composed of sales from dairy, cattle, hog/ pig, equine, poultry and other livestock operations. Gloucester County livestock products sold for \$6 million in 2022, or 4% of the County's total agricultural sales (**Figure II-17**). The livestock industry consumes other agricultural products, such as feed crops, and uses a wide range of agricultural services including large animal veterinarians, creameries, and processing plants.

to continue to rely on hay production. Hay will continue to play a role in the County's agriculture industry in the future.

Cut Christmas Trees and Short Rotation Woody Crops

32 farm operations had sales in this sector in 2022 versus 42 in 2012. Sales records for this category started in 2002, when sales were \$295,000. Over the last twenty years,

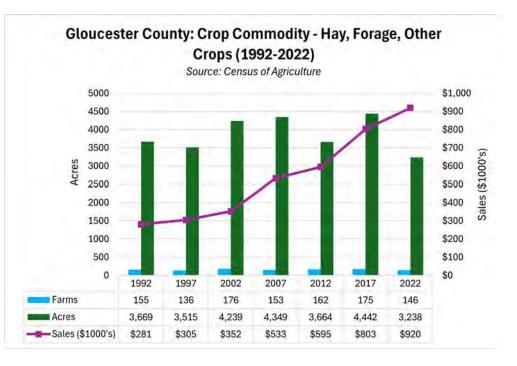


Figure 16. Crop Commodity Hay (1992-2022)

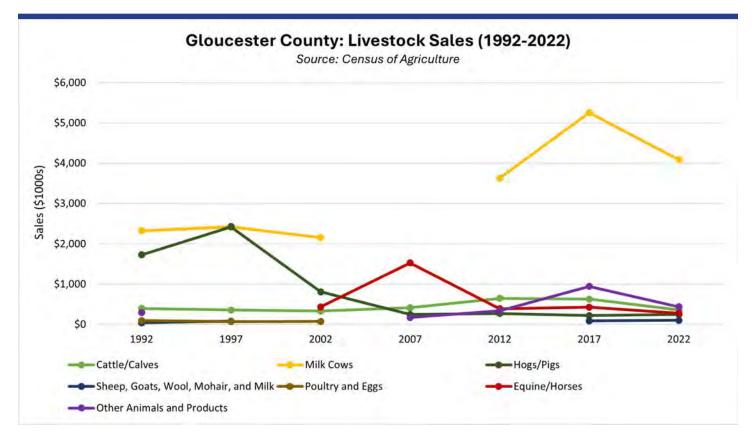


Figure 17. Livestock Sales (1992-2022)

The number of farms in production and sale of livestock & poultry products are on the decline, contributing to the recent decline in total farms county-wide. Since 1992, only two major livestock categories have experienced a net increase or have stayed the same in participating farms: sheep and lambs (no change) and poultry (167% increase in farms) (**Figure II-18**).

Despite the growing number of farms participating in the poultry subsector, the total number of animals has declined 80% between 1992 and 2022. The general trend within the livestock industries is a decline in the number of farms, animal inventory and overall sales. Only sheep/lambs increased in total number of animal units, rising by 90%. All other industries fell by at least 10%, with the biggest decrease seen in hogs and pigs with a loss of 90% of the inventory from 1992 to 2022 (**Figure II-19**).

Dairy and Milk Cows

In 2022, sales of milk from cows (dairy) accounted for 68% of livestock sales in the County (\$4.1 million). and placing it third in the State rankings. This is a 1% decrease from 2017, as sales totaled \$5.3 million. However, this is the same percentage as in 2012 when dairy sales totaled \$3.6 million. The percentage of livestock sales that dairy has occupied has been consistently growing over the last twenty years. In 2002, dairy represented 55% of the category (\$2.16 million). Dairy sales were not reported in the 2007 Census (**Figure II-17**).

In 2022, there were 3 farms that produced milk cows. This is an 85% decrease from 1992, when there were 20 farms with milk cows. The total inventory of milk cows also decreased from 1992 by 29%, from 1,044 to 742 total inventory (**Figure II-20**).

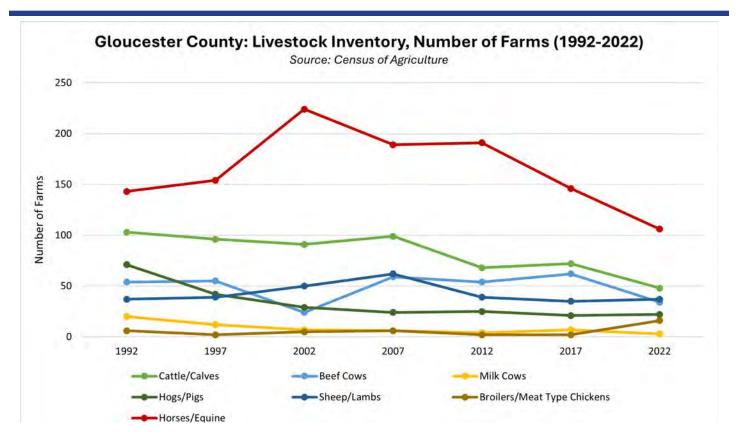


Figure 18. Livestock Inventory, Number of Farms (1992-2022)

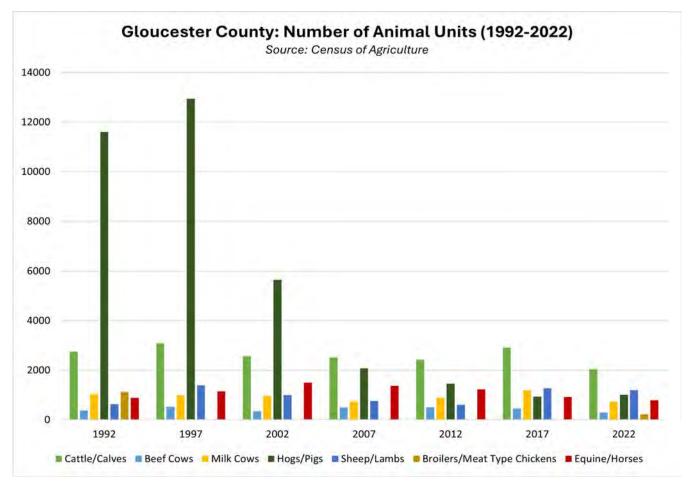


Figure 19. Number of Animal Units (1992-2022)

Gloucester County Comprehensive Farmland Preservation Plan

Cattle/Calves

Sales of cattle and calves represented 6% of livestock sales in the County, totaling \$363,000, ranking third in the County and eighth in the state. While the number of farms with cattle inventory has declined 53% from 103 in 1992 to 48 in 2012, the inventory has declined by 26% from 2,754 in 1992 to 2,047 in 2022 (**Figure II-21**).

The number of farms producing beef cows has fallen from 54 in 1992, to 34 in 2022. This is a 37% decrease. The total inventory of beef cows has also decreased from 382 in 1992, to 289 in 2022, a 24% decrease. Beef cows have been consistently less popular than milk cows within the County. Local meat producers have a strong following from customers and smaller operators have been thriving.

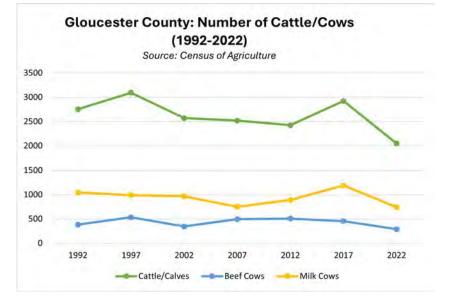
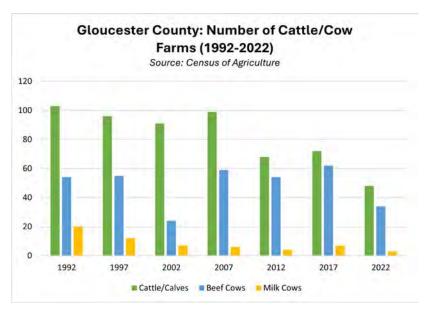


Figure 20. Number of Cattle/Cows (1992-2022)



Equine

The equine sector, horses

and ponies, accounted for 5% of sales in the County. Sales in this category totaled \$435,000 in 2002, and spiked to \$1.5 million in 2007, then dropped to \$390,000 in 2012. Over the last ten years, sales have continued to fluctuate as they rose to \$946,000 in 2017 and fell back down to \$440,000 in 2022, nearing the 2002 sales mark. The number of animals sold dropped over the last three censuses, with

Figure 21. Cattle/Cows Farms (1992-2022)

173 sold in 2012, 135 in 2017 and only 50 in 2022.

However, sales do not accurately reflect this category's importance in the County. 15 of the County's 106 farms that keep horses sold them during 2022. The remaining farms boarded horses, provided riding lessons, or offered other equine services. The earnings from these activities are not embedded within the equine figures (**Figure II-22**). Inventory levels have been declining steadily from 1,499 in 2002 to 788 in 2022. The number of farms with horses and ponies has generally followed the same curve and has been declining since 2002.

Hogs and Pigs

Sales of hogs and pigs, at \$246,000, ranked third in the state in 2022 behind Warren and Middlesex Counties. These sales represented 4% of the Countv's total livestock sales, down from 20% in 2002 and 35% in 1992. In 2012, sales from hogs and pigs made up 5% of livestock sales totaling \$271,000. In 1992 the County had 11,606 hogs and pigs but in 2022, the County's 1,009 hogs and pigs accounted for 14% of the statewide inventory. The pig and hog inventory has fallen by 91% since 1992. This industry has seen the largest decrease across the County. Participating farms have also decreased since 1992, from 71 to 22 in 2022, a 69% loss of farms.

Sheep and Goats

The \$104,000 of sales from sheep, goats, wool, mohair, and milk do not contribute

to total sales from the livestock and poultry. These industries make up 2% of the livestock and poultry market value, making it the lowest contributing category. However, it has increased from \$89,000 in 2017 and \$39,000 in 1992.

Market values for the sale of sheep and wool were not recorded by the Census until 2012. However, there is data beginning in 1997 on number of farms, sheep inventory, number of farms by inventory, and pounds of wool sold. Most sheep farms in Gloucester County have smaller flocks between one and 24 animals. In 2022, these farms made up 92% of all sheep farms. Over the past three decades, this percentage has not changed greatly, ranging from 70% to 95% of sheep farms with 1- 24 sheep. From 2012 to 2022, 20 total farms had flocks of 25-99 animals. Three farms in Gloucester County had an inventory of 100-299 sheep, and one farm had between 300-999 sheep (**Figure II-23**).

While the number of farms participating in the sheep and lamb subsector has not varied, the overall inventory of sheep and lamb has increased over the last ten years (**Figure II-24**). In 2022, 1,191 sheep were present, increasing by 98% from 603 sheep in 2012. In 2012, the value from sheep sales was recorded at \$46,000. In 2022, sales increased 33% to \$61,000.

The Census began publishing the total number of goat farms and inventory of goats in 2007. It breaks goats into three types: milk, angora, and meat goats, and began recording sales data from all goats

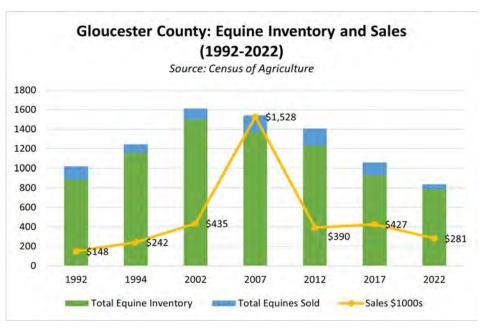


Figure 22. Equine Inventory and Sales (1992-2022)

Gloucester County Comprehensive Farmland Preservation Plan

in 2012. In 2007, 78 farms reported raising a total of 742 goats. By 2022, 35 farms and 291 goats were reported, a decrease of 43 farms and a 61% decrease in total number of goats. Like the sheep and lamb sub sector, market value data on goat sales were not recorded until 2012. In 2022, sales accounted for \$37,000 as 213 animals were sold. This is an increase from 2017 as sales totaled \$32,000. The number of goats both sold and total inventory has been decreasing over the last ten years (Figure **II-24**).

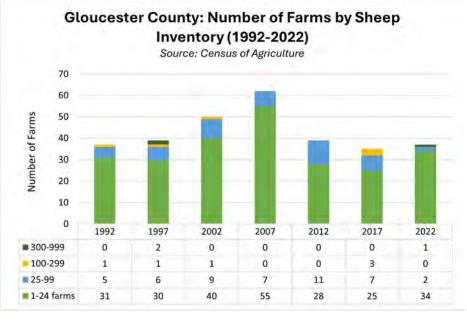


Figure 23. Number of Farms by Sheep Inventory (1992-2022)

C. Support Services within Market Region

Poultry and Other Animals

Since 2007, sales in the poultry sector have not been reported; it has been included in the other livestock category (**Figure II-17**), along with other animals and animal products, including sheep, goats, alpacas, llamas and their products such as wool and milk. Mules, burros and donkeys,

included in the other livestock sector through 2007, were included in the equine sector in 2012, but were not a major contributor, with minimal sales and inventory and this trend has remained consistent through 2022. This totaled \$440,000 in sales in 2022, making up 7% of the County's livestock sales. This was down from \$946.000 in 2017, but up from \$342,000 in 2012.

Gloucester County farmers patronize a variety of agricultural businesses in towns within the County, including Pitman, Clayton, Glassboro, Mullica Hill, Swedesboro, and Williamstown. They also are within proximity to businesses in neighboring Salem, Cumberland, and Atlantic Counties.

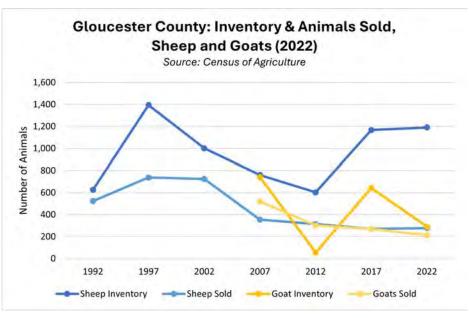


Figure 24. Inventory of Animals Sold, Sheep and Goats (1992-2022)

Gloucester County has a high concentration of veterinary offices and animal hospitals. These are valuable services for farmers who deal with the livestock and equine industries. The most recently updated list of veterinary practices was created for *Gloucester County's Emergency Management Plan.*⁵ The list includes:

- All Creatures Veterinary Care Center 352 Greentree Road, Turnersville, 856-209-3381.
- Dr. Ernest Beier (Large Animal Vet), 825 Kings Highway, Mickleton, 856-467-1036.
- Bethel Mill Animal Hospital, 585
 Woodbury-Glassboro Rd, Sewell, 856-589-7388.
- Black Horse Pike Animal Hospital 4250 Route 42, Turnersville, 856-728-1400.
- Clayton Veterinary Assoc., 820 N. Delsea Drive, Clayton, 856-881-7470.
- Crosskeys Animal Hospital, 207 N Black Horse Pike Williamstown, 856-740-3700.
- Delaware Valley Animal Hospital, 400 Swedesboro Rd, Mullica Hill, 856-241-1100.
- GC Animal Hospital 354 Egg Harbor Road, Sewell, 856-582-2127.
- Greenfield Veterinary Assoc 111 Parkville Station Road, Mantua, 856-242-7966.
- Grey Fox Animal Hosp. 207 N. Glassboro Road, Woodbury Heights, 856-848-7070.
- Pitman Animal Hospital 654 N. Delsea Drive, Pitman, 856-582-7500.
- Raccoon Valley Hospital, 301 Bridgeton Pike, Mullica Hill, 856-769-4246 or 856-478-6500.
- Swedesboro Animal Hospital, 392 Kings Highway, Swedesboro, 856-467-0004.

Local support businesses are often insufficient to meet all the supply needs of the County's farmers. As is the case across the state, farmers rely upon mail order retailers and non-local processing facilities. Farmers tend to specialize in some kind of agricultural repair and supplement their incomes by offering their services to other farmers. Rutgers Cooperative Extension of Salem County Green Pages was a good website for farmers to find suppliers, services. As of this writing, this website no longer exists, and the status of a potential update is unknown.

D. Other Agricultural Related Industries

The agricultural economy extends further than crop and livestock production. Pickyour-own farms and farmers markets can connect residents and visitors with farmed products while providing social and community services. Numerous farmers markets provide residents with access to locally grown, fresh, nutritious produce and farm products. They provide a space for farmers to engage locally in the economy and to network with other farmers and representatives from support services and farm-or landrelated government organizations and institutions. Farmers markets off valueadded farm items to be sold, including honey, candles, sauces, fibers, and crafts Gloucester County's Tourism website has nearly every farmers market, agritourism spot on a map of the county. It also has tabs for the county's wineries and breweries.

Future of Agriculture

Gloucester County is experiencing a loss of farms, both by number and acreage, in part due to high land values, taxes, operation and maintenance expenses, and competition for land from residential and commercial developers. Younger generations pursue more lucrative occupations, making it difficult for farmers to pass their land on to the next generation. Long-term farms are being sold for development, especially near major highway corridors. Farmland has consistently been an easy target for housing and business development, and warehousing projects. It is expected that wineries, craft-breweries, and agritourism will continue to thrive in the County. These businesses have had strong sales and being close to population centers allows for a good supply of retail customers.

Literature Cited

Chapter 2

1 United States Department of Agriculture: National Agricultural Statistics Service, 2022 Census of Agriculture. <u>https://www.nass.usda.gov/Publications/AgCensus/2022/Full_</u> <u>Report/Volume_1, Chapter_2_County_Level/New_Jersey/</u> Accessed February 2024.

*Used Census of Agriculture from 1992-2022.

2 New Jersey Department of Agriculture. "New Jersey Agriculture 2023 Annual Report." <u>https://www.nj.gov/agriculture/pdf/2023AnnualReportFinal.pdf</u> Accessed July 2024.

3 U.S. Census of Agriculture. 2022. (referenced above).

4 New Jersey Department of Agriculture. Annual Reports. <u>https://www.nj.gov/agriculture/pub/general.html</u> Accessed May 2024.

5 Personal communication with Michelle Infante-Casella, Gloucester County NJAES-RCE. July, 2024.



Wellacrest Dairy, East Greenwich

Chapter III.

Land Use Planning

The land use patterns of Gloucester County exert considerable influence on its agricultural industry. The growth of urban and suburban communities in the County has benefited some local farmers by establishing a larger consumer base for their products and creating niche agricultural markets for organic goods and equine services.

However, changing land use patterns and expanding development have also reduced the availability of the farmlands and agricultural infrastructure that farmers depend upon to remain profitable. As the landscape of Gloucester County continues to evolve, appropriate and effective land use planning efforts will be instrumental in the preservation of farmland and local farmers.

A. State Development and Redevelopment Plan Planning Areas, Designated Centers and Endorsed Plans

2001 New Jersey State Development and Redevelopment Plan

The 2001 State Development and Redevelopment Plan (SDRP) identifies five principal Planning Areas where different sets of goals and guidelines are considered appropriate to determine development activities. The SDRP also identifies Designated Centers where future development and redevelopment activities are most appropriate and will be actively promoted. The combination of

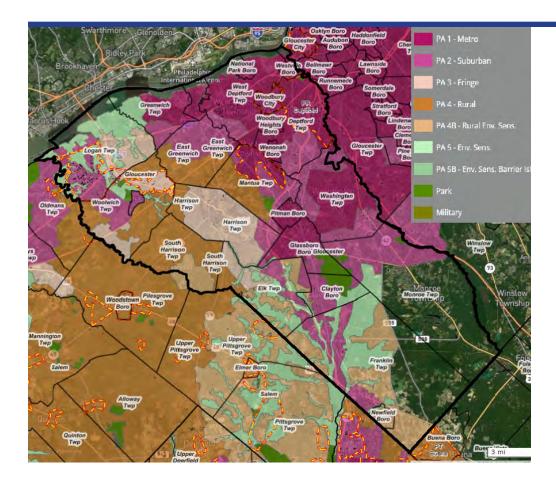


Figure 1. Policy Map of the NJ State Development and Redevelopment Plan (SDRP), Gloucester County

Planning Areas and Designated Centers establishes a comprehensive framework for pursuing land use and development regulation. The *State Plan* map for Gloucester County is shown in **Figure III-1**.

The 2001 SDRP is in the process of being updated to reflect current planning practices. Intended for publication in 2025, the new plan sets ambitious goals concerning environmental justice, climate change, development, economic growth, affordability, and preservation.¹

Planning Areas

The Planning Areas include Metropolitan, Suburban, Fringe, Rural, Environmentally Sensitive and parklands, where different levels of agricultural production occur. The acreages for each of these areas in Gloucester County are included in **Table III-1** and described below. Metropolitan Planning Areas (PAI) comprise the most densely developed regions. The goals for PAI revolve around revitalizing cities and towns by encouraging compact growth and redevelopment. Gloucester County has 42,344 acres in PAI. Much of this is located along the Delaware River in Westville, National Park, West Deptford, Paulsboro, and Greenwich. PAI also extends along N.J. 45 south into Woodbury, Woodbury Heights, Deptford, Wenonah, and Mantua. Another portion of PAI extends west from Camden County farther south into Washington, Pitman, and Glassboro.

Suburban Planning Areas (PA2) are relied upon to support most of the new development that will occur in New Jersey while maintaining the character of its existing communities. Growth in suburban town centers is especially encouraged to help protect and preserve the natural resources that are sustained in these areas. There are 45,647 acres in PA2, making it the most common Planning Area in the County. Areas of PA2 are located adjacent to the Metropolitan Planning Area in the northeast region of Gloucester County. A concentration of PA2 is found farther west along the Delaware River in Logan, Woolwich, and Swedesboro. PA2 also extends south along principal arterials roads such as N.J. 55 and N.J. 47 through Clayton, Franklin, and Elk Townships.

Fringe Planning Areas (PA3) serve as an interface between suburban and rural areas. They are often the front lines of urban sprawl. Gloucester County contains 19,369 acres designated as PA3 in two concentrated pockets: between U.S. 130 and the NJ Turnpike in Logan and Woolwich Townships and around the intersection of U.S. 322 and N.J. 45 in Harrison and Elk Townships.

Rural Planning Areas (PA4A) are

suitable for the preservation of large

contiguous areas of farmland. 24,893 acres of Gloucester County are in PA4A encompassing portions of East Greenwich, Mantua, Harrison, South Harrison, Woolwich, and Elk Townships.

Rural-Environmentally Sensitive Planning

Areas (PA4B) are suitable for agriculture but contain environmentally sensitive features. 16,204 acres of Gloucester County fall within PA4B. This encompasses farmlands that border sensitive water bodies, such as Oldmans Creek in South Harrison Township and the Maurice River tributaries (Scotland Run, Still Run, Reeds Branch, Indian Branch, and Burnt Hill Branch in Franklin and Elk Townships).

Environmentally Sensitive Planning Areas

(PA5) contain lands where natural resource preservation should be the primary planning consideration. Development is minimized or constrained to existing centers while large contiguous natural areas are to be preserved as open space.

Table 1. State Plan Areas in Gloucester County									
State Planning Area	Total Acres	Active Agriculture	Percent, Active Ag.						
Metropolitan (PA1)	42,344	1,076	2.5%						
Suburban (PA2)	45,647	7,831	17%						
Fringe (PA3)	19,369	7,009	36%						
Rural (PA4A)	24,893	11,849	47.6%						
Rural Env. Sens. (PA4B)	16,204	6,015	37%						
Environ. Sensitive (PA5)	24,354	2,167	9%						
Parks (PA8)	3,259	66	2%						
Total	176,070	36,014	20%						
Source: NJ Office for Planning Advocacy, NJDEP Land Use/Land Cover									

A total of 24,354 acres are designated as PA5. These areas are adjacent to the PA4B areas and sensitive water bodies in South Harrison, Elk, and Franklin Townships as well as the tidal marshlands on the Delaware River between Raccoon Creek, Cedar Swamp, and Repaupo Creek in Logan and Greenwich Townships.

Parks and Natural Areas comprise Planning Area 8 (PA8). These areas make up 3,258 acres in Gloucester County and occupy lands that are permanently deed restricted for open space or natural resource preservation. Areas of PA8 are scattered throughout the County, but the largest concentration is the 2,000 acre Glassboro Wildlife Management Area in Glassboro, Clayton, and Monroe Township. The distribution of active agricultural land in the planning areas is shown in **Figure III-2** and also included in **Table III-1**.

Centers

Centers are defined by the State Planning Commission as compact forms of development that consume less land, deplete fewer natural resources.² Urban Centers serve as concentrations for corporate headquarters, industry, residential areas, and culture. The County has no proposed/potential Urban Centers.

Regional Centers are smaller urban areas that provide the various commercial, cultural and residential needs of a geographically defined region. In Gloucester, the State Plan Map indicates:

- Designated Regional Center: Woolwich Township, along the 322 corridor;
- Proposed Center: Center Square-Swedesboro, Logan Township at the Pureland Industrial Complex to Swedesboro via Center Square Road;
- Proposed Center: PAI within Deptford.

Towns are smaller, usually less than two square miles in size. They support residential neighborhoods and offer access to local goods and services. The State Plan Policy Map indicates:

- Proposed Town Center: PAI in Mantua Township; and
- Proposed Town Center: City of Woodbury.

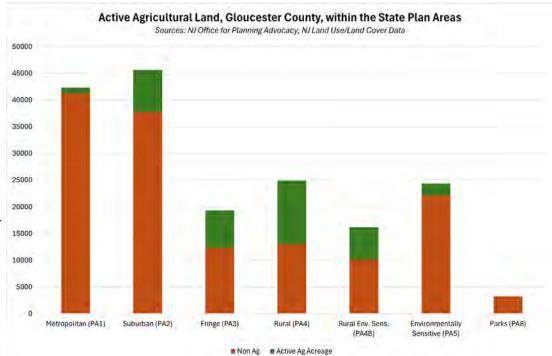


Figure 2. Active Agricultural Land, NJ State Planning Areas for Gloucester County *Villages* are residential neighborhoods that have access to some local public and commercial facilities. Villages are small, occupying less than one square mile.

Hamlets are the smallest type of Center. They are small residential communities that are oriented around a local focal point. Gloucester County contains no proposed Villages or Hamlets.

B. Special Resource Areas

Pinelands Comprehensive Management Plan

The Pinelands region encompasses over one million acres of southern New Jersey (**Figure III-3**). It has sandy soils, pine trees, and red-running rivers. It supports a wide variety of imperiled plant and animal species, such as the Atlantic White Cedar and the Pinelands Tree Frog. The Pinelands rests on top of the Kirkwood-Cohansey Aquifer, which is among the State's primary drinking water sources.

The Pinelands Region is managed by the Pinelands Commission's *Comprehensive Management Plan* (CMP).³ 33,565 acres of

southern Monroe and Franklin Townships fall within its management areas and are outside the purview of the SDRP. The CMP created the **Pinelands Development Credit** (PDC) Program, a **Transfer of Development Rights** (TDR) program that has preserved roughly 1,765 acres of agricultural lands in Gloucester County.⁴

This plan identified nine management areas that govern land use and development within the region. Four of these management areas, which contain land with varying capacities for support agriculture, exist in Gloucester County (**Table III-2**). The U.S. 322 corridor is designated as a Pinelands Regional Growth Area; land along the Great Egg Harbor River is designated as a Pinelands Forest Area; and the remaining lands within the Pinelands are designated as either part of the Pinelands Rural Development Area or the Pinelands Agricultural Production Area.

- Agricultural Production Area (APA) denotes lands where active agriculture is an approved land use. 7,536 acres of APA fall within Gloucester County.
- Rural Development Area (RDA) is a transitional region between natural

Table 2. Active Agricultural Land, Pillelands Management Aleas (Gloucester County)									
Pinelands Management Areas	Total Acres	Active Agriculture	Percent of Active Agriculture						
Agricultural Production Area	7,536	1,836	24%						
Rural Development Area	12,821	2,220	17%						
Regional Growth Area	5,877	402	7%						
Forest Area	7,409	340	5%						
Total:	33,643	4,799	14%						
Source: NJ Pinelands Commission, NJDEP Land Use/Land Cover									

Table 2. Active Agricultural Land, Pinelands Management Areas (Gloucester County)

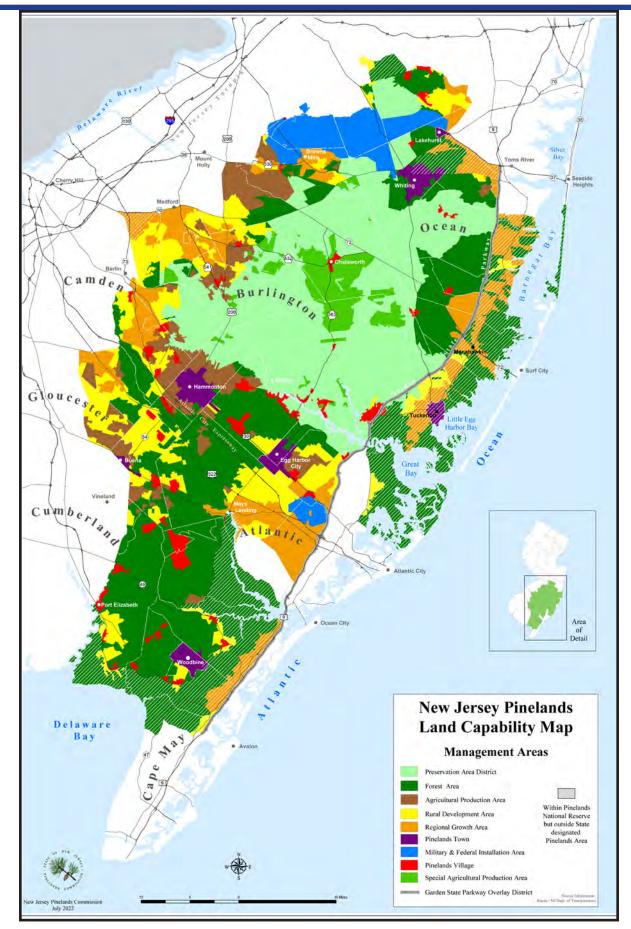


Figure 3. 2005 New Jersey Pinelands Land Capability Map (NJ Pinelands Commission)

resource preservation areas and lands that are more appropriate for development. Residential densities should average no more than one home on five acres of land. 12,821 acres of RDA are within Gloucester County.

- Regional Growth Areas (RGA) are areas of existing growth that are capable of accommodating future development. Commercial and industrial uses, as well as residential developments of approximately three homes per acre, are permitted in this area. RGAs should have available sewer service. 5,877 acres of RGA lie within Gloucester County.
- Forest Area is largely undeveloped, and supports high quality water resources, wetlands, and suitable habitat for many threatened and endangered species.
 Development in the Forest Area should be minimal, with permitted residential densities not to exceed one unit per 28 acres of land.⁵ This area makes up 7,409 acres along the Great Egg Harbor River in Gloucester County.

C. County Master Plan and Development Regulations

1982 Gloucester County Development Management Plan

The Gloucester County Development Management Plan, created in 1982, is currently under revision. Among its goals is preserving and enhancing the existing rural, agricultural areas, including preventing "the continued decline of agriculture by helping to limit the consumption of valuable farmland, as well as the mislocation of land uses that severely conflict with agricultural activities."⁶

The Plan identifies six major categories of land use in the County: existing development, growth, limited growth, environmentally sensitive, rural agriculture and publicly owned open space. The rural agricultural areas are identified as containing large, preferably contiguous, tracts of active farmland located on prime agricultural soils that can sustain the necessary support services and help to ensure the long-term viability of agriculture. In the rural agricultural areas, the Plan encourages the longterm retention of agricultural activity and recognizes farmland as the preferred, but not exclusive, land use. It identifies Harrison, South Harrison, Elk and Franklin Townships as municipalities with large tracts of such areas.

2005 Gloucester County Northeast Region Strategic Plan

The Gloucester County Northeast Region Strategic Plan was developed to provide a uniform growth strategy for the 14 municipalities in the northeastern portion of the county, including Deptford, East Greenwich, Glassboro, Greenwich, Mantua, National Park, Paulsboro, Pitman, Washington, Wenonah, West Deptford, Westville, Woodbury, and Woodbury Heights.⁷ It identifies five principal landscapes in which different development and preservation goals (listed below) are applicable.

Corridors:

- Retrofit corridors so that they complement their suburban context and maintain a scale and character that is compatible with the suburban and rural qualities of the area.
- 2. Ensure that corridors function smoothly and efficiently at acceptable levels of service through all of the County's communities.
- 3. Ensure the economic sustainability of well-designed corridors and their economic compatibility with the region's towns.

- 4. Incorporate corridors into the networks of towns, neighborhoods and regional commercial nodes.
- 5. Create compact, focused, mixed-use developments that enable the surrounding farms and open spaces to be preserved.
- 6. Plan new developments so that they are linked by walking, biking, and driving routes to adjacent residential communities.

Subdivisions:

- 1. Create intra- and inter-connected neighborhoods as an alternative to traditional isolated subdivisions.
- 2. Provide meaningful, useful open spaces and appropriate community facilities in all new neighborhoods.
- 3. Ensure that new residential developments provide a variety of housing types for a variety of family types.
- 4. Plan for new compact and walkable neighborhoods that will complement and connect to existing neighborhoods, and to commercial developments.

Open Space:

- 1. Create a natural network of open space located throughout the entire county, which is protected in perpetuity.
- 2. Preserve one or more large, contiguous, active, low-density agricultural areas that have a long-term economic viability and visual permanence.
- 3. Create several regional parks strategically located near high-growth, high need populations.

Delaware River Waterfront:

1. Enhance the waterfront's role as an environmental, cultural and community asset.

- 2. Preserve the natural beauty of the riverfront including its water quality, scenic vistas and habitats.
- 3. Provide public access for the recreational enjoyment of the riverfront.
- Provide carefully managed and designed water oriented and water dependent redevelopment and economic development opportunities.
- 5. Recognize and capitalize on potential tourism and economic development connections with Philadelphia.

1997 Gloucester County Farmland Preservation, Open Space Protection, and Recreational Needs Study

Gloucester County's 1997 Farmland Preservation, Open Space Protection, and Recreational Needs Study outlined the potential for agricultural preservation in the County and made recommendations to guide future preservation efforts.⁸ The plan identified key criteria to be followed when prioritizing preservation projects, including soil quality, proximity to streams and highways, contiguity to preserved farms, and municipal contributions. Based on these criteria, nearly 82,000 acres were identified as high priority land for farmland preservation.

2019 Gloucester County Open Space & Recreation Plan

The 2019 Open Space & Recreation Plan's vision was to provide the residents of Gloucester County with an integrated parks, recreation, and open space system that enhances their quality of life by: providing safe and accessible recreatoin spaces which can be used by people of all ages and abilities to exercise, play. and relax; preserving open spaces that protect the rural character of the

County; and safeguarding the integrity of the natural environment.⁹ The County hopes to maintain the historic rural and pastoral character within the growing communities. In terms of preservation, the county hoped to acquire or permanently preserve 3,000 acres of additional open space and recreation areas within the County by 2045. This would be representative of 10 percent of the total land area of the County when added to the existing 18,000 acres of parks and open space.

2008 Gloucester County Comprehensive Farmland Preservation Plan

The 2008 Comprehensive Farmland Preservation Plan identified 10,559 acres of preserved farmland and 50,753 acres of active, productive farmland remaining in the County.¹⁰ With 40,194 acres remaining unpreserved, the Plan set a goal of preserving 1,000 acres of farmland per year for 10 years, with the goal of 20,559 acres preserved by the end of 2017.

2015 Gloucester Comprehensive Farmland Preservation Plan Update

The 2015 Comprehensive Farmland Preservation Plan Update reported the preservation of an additional 6,453 acres of farmland, surpassing the goals set in its 2008 plan and bringing total preserved farmland since 1989 to 16,624 acres." With a total of 43,265 total acres of productive farmland, this leaves 26,641 unpreserved. Recognizing the threat that development poses to agricultural lands in Gloucester, the plan identified a ten-year target of preserving an additional 8,000 acres

Gloucester County Population by Municipality: 1930-2020										
Municipality	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020
Clayton Borough	2,351	2,320	3,023	4,711	5,193	6,013	6,155	7,139	8,179	8 <i>,</i> 807
Deptford Twp	4,507	4,738	7,304	17,878	24,232	23,473	24,137	26,763	30,561	31,977
East Greenwich Twp	2,031	2,121	2,336	2,722	3,280	4,144	5,258	5,430	9,555	11,706
Elk Twp	1,623	1,656	2,074	2,635	2,707	3,187	3,806	3,514	4,216	4,424
Franklin Twp	3,563	3,464	5,056	7,451	8,990	12,396	14,482	15,466	16,820	16,380
Glassboro Borough	4,799	4,925	5,867	10,253	12,938	14,574	15,614	19,068	18,579	23,149
Greenwich Twp	2,361	2,563	3,152	4,065	5,676	5,404	5,102	4,879	4,899	4,917
Harrison Twp	1,827	1,805	2,225	2,410	2,661	3 <i>,</i> 585	4,715	8,788	12,417	13,641
Logan Twp	1,860	1,630	2,222	1,924	1,840	3 <i>,</i> 078	5,147	6,032	6,042	6,000
Mantua Twp	2,677	2,433	3 <i>,</i> 548	7,991	9,643	9,193	10,074	14,217	15,217	15,235
Monroe Twp	4,064	4,310	5,531	9,396	14,071	21,639	26,703	28,967	36,129	37,117
National Park Borough	1,828	1,977	2,419	3,380	3,730	3,552	3,413	3,205	3,036	3,026
Newfield Borough	880	889	1,010	1,299	1,487	1,563	1,592	1,616	1,553	1,774
Paulsboro Borough	7,121	7,011	7,842	8,121	8,084	6,944	6,577	6,160	6,097	6,196
Pitman Borough	5,411	5,507	6,960	8,644	10,257	9,744	9,365	9,331	9,011	8,780
South Harrison Twp	680	686	868	974	1,226	1,486	1,919	2,417	3,162	3,395
Swedesboro Borough	2,123	2,268	2,459	2,449	2,287	2,031	2,024	2,055	2,584	2,711
Washington Twp	2,068	2,048	2,496	4,923	15,741	27,878	41,960	47,114	48,559	48,677
Wenonah Borough	1,245	1,311	1,511	2,100	2,364	2,303	2,331	2,317	2,278	2,283
West Deptford Twp	3,956	4,336	5,446	11,152	13,928	18,002	19,380	19,368	21,677	22,197
Westville Borough	3,462	3,585	4,731	4,951	5,170	4,786	4,573	5,400	4,288	4,264
Woodbury City	8,172	8,306	10,931	12,453	12,408	10,353	10,904	10,307	10,174	9,963
Woodbury Heights Bor.	997	1,137	1,373	1,723	3,621	3,460	3,392	2,988	3,055	3,098
Woolwich Twp	1,196	1,193	1,343	1,235	1,147	1,129	1,459	3,032	10,200	12,577
Gloucester County Total	70,802	72,219	91,727	134,840	172,681	199,917	230,082	255,573	288,288	302,294
Gloucester County Growth Rate		2.00%	27.01%	47.00%	28.06%	15.77%	15.09%	11.08%	12.80%	4.86%
Source	e: Workforce	New Jersey	Public Info	rmation Ne	twork; U.S.	Census; NJ	Dept. of Lab	or		

Table 3. Gloucester County Population by Municipality (1930-2020)

The 2015 Plan also updated the County's Agricultural Development Area and reaffirmed the 11 Project Areas outlined in the 2008 report. It provided updated statistics agricultural productivity and economic trends.

D. Current Land Use and Trends

Historically, Gloucester County has been an area of concentrated development. Gloucester County's primary clusters of commercial and industrial activity were located in Woodbury, Paulsboro, and Pitman, along with manufacturing centers located along the Delaware River. The remainder of the County's landscape was predominately rural and its population spread evenly throughout the countryside. Following World War II, residential development expanded southward from Philadelphia and Camden. This caused Gloucester County's population to grow by 88% between 1950 and 1970 (Table III-3). Government incentives encouraged the construction of singlefamily homes, prompting developers to seek out larger and cheaper parcels of land on which to build. Simultaneously, the nation began constructing interstate and regional highways, which increased the ease of living in rural communities, far from traditional employment centers. Gloucester County contained the critical combination of abundant, inexpensive land and automobile accessibility to existing employment centers that made it ideal for rapid residential growth.

Gloucester County towns closest to Philadelphia and Camden were the first to experience substantial growth. Between 1940 and 1960, the northeastern towns of Deptford (277%), Mantua (238%), and West Deptford (157%) experienced growth rates well above the County-wide average of 87%. Towns along the Route 47 corridor – the major thoroughfare for shore-bound traffic from Philadelphia – also boomed. Transportation improvements after 1960, especially the completion of the Atlantic City Expressway, continued to exert development pressure in Deptford and West Deptford, but brought development farther to the south as well. Washington Township was the fastest growing town during the 1960's, increasing by 220%. Monroe, a distant second, grew by 50%.

Since 1970, development continued expanding south and west across Gloucester County. Continual road and highway development, such as completion of State Route 55, have made communities that were once far from the urban-rural interface, such as Franklin, Monroe and Woolwich, highly accessible to the job centers in Philadelphia and Camden County. Between 2000 and 2020, the County grew by 18%. The Delaware Valley Regional Planning Commission predicts a population increase for Woolwich Township of 100% between 2015 and 2045, with a total population reaching 24,657 (versus 3,032 in 2000). Washington Township is expected to grow 15.7% to 55,366 by 2045.12

Gloucester County's 2015 Farmland Plan Update noted that the county remains desirable to new residents because of its excellent highway access to job centers, proximity to services (such as schools, parks, and other amenities), and desirable development densities; consequently, natural and agricultural lands continue to be lost. This trend has persisted. Between 1995 and 2020, the increase in urban land (33% or 19,456 acres) almost paralleled the loss of agricultural land (-28% or -15,020 acres). The other categories of land did not change nearly as much as urban land and agricultural land (**Figure III-4**).

Today the more developed (urban) part of the County is located primarily north of Interstate 295 and between N.J. 45 and

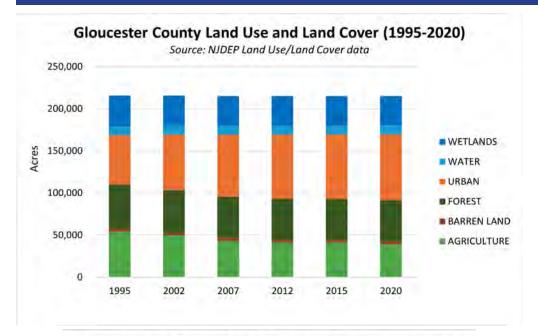


Figure 4. Gloucester Land Use and Land Cover 1995-2020

Gloucester County Land Use and Land Cover 2020 Source: NJDEP Land Use/Land Cover 2020

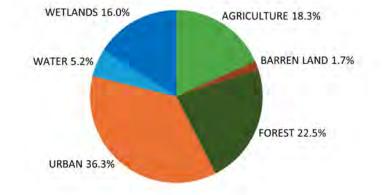


Figure 5. Gloucester Land Use and Land Cover 2020

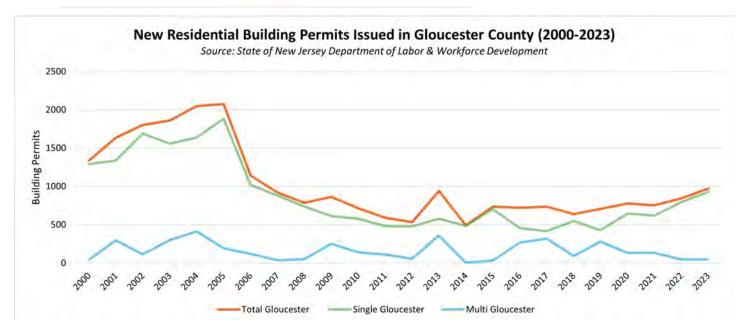


Figure 6. New Residential Building Permits Issued in Gloucester County (2000-2023)

Gloucester County Comprehensive Farmland Preservation Plan

U.S. 322 to the Camden County border. Most of Gloucester County's agricultural areas lie along its border with Salem County. The highest concentration of farmland falls within a cluster between Elk and South Harrison Townships. There is also a wide swath of farmland south of the Delaware River in Logan, Woolwich, East Greenwich, and Greenwich Townships. Forested areas are concentrated in the southern Townships of Franklin and Monroe, which border the Pinelands region (**Figure III-5**). 2000 shows a general decline from 2005 to 2012, with a spike in 2013 followed by a gradual incline – especially for single family buildings – from 2014 to the present (**Figure III-6**). Of the 24,634 residential building permits issued since 2000, 20,800 were for single family residences and 3,834 were for multi-family units. Building permit data also indicates that most areas that were converted to urban land uses fell within large municipalities along or near the fringe between suburban and rural areas (**Table III-4**). The municipalities with permits exceeding the 75th percentile, with total building permits from the

New residential building permit data since

New Residential E	Quilding	Pormit		d in Gla	ucosto	r Count	v (201/	1-2023)			
New Residential	2014	2015	2016	2017	2018	2019	201 4	202 3) 2021	2022	2023	Total
Clayton borough	54	69	66	117	104	126	100	72	15	8	731
Deptford township	43	58	41	49	49	23	30	31	13	26	363
East Greenwich township	45	50	67	38	90	60	71	61	71	34	587
Elk township	7	13	41	22	7	6	11	17	13	7	144
Franklin township	21	22	17	18	18	20	31	46	37	149	379
Glassboro borough	68	342	64	93	56	127	72	93	91	122	1,128
Greenwich township	13	9	7	1	1	0	5	2	5	3	46
Harrison township	48	17	77	28	23	17	18	19	16	83	346
Logan township	0	0	0	1	0	1	0	12	5	3	22
Mantua township	0	15	14	6	15	60	60	46	35	31	282
Monroe township	37	27	120	50	74	71	108	112	183	161	943
National Park borough	0	0	0	0	0	0	0	24	59	48	131
Newfield borough	0	0	0	0	3	6	7	5	5	20	46
Paulsboro borough	3	5	4	1	0	0	1	2	6	6	28
Pitman borough	5	5	2	0	4	2	1	0	0	0	19
South Harrison township	12	6	5	6	2	4	5	4	11	6	61
Swedesboro borough	49	45	28	1	0	3	5	2	4	4	141
Washington township	0	0	0	253	96	98	102	101	75	57	782
Wenonah borough	1	2	2	0	0	2	4	1	1	0	13
West Deptford township	13	6	3	2	13	8	11	15	36	16	123
Westville borough	0	1	0	2	2	2	1	1	2	1	12
Woodbury	1	0	3	1	6	3	2	3	5	4	28
Woodbury Heights borough	0	0	0	0	1	0	0	2	4	2	9
Woolwich township	71	44	163	47	76	67	133	84	152	180	1,017
Gloucester County Total	491	736	724	736	640	706	778	755	844	971	7,381
Source: Source: State of New Jersey Department of Labor & Workforce Development											

Table 4. New Residential Building Permits Issued in Gloucester County (2014-2023)

Gloucester County Comprehensive Farmland Preservation Plan

past 10 years falling above 431, includes Glassboro, Woolwich, Monroe, Washington, Clayton, and East Greenwich. The municipalities with permits below the 25th percentile, includes Paulsboro, Woodbury, Logan, Pitman, Wenonah, Westville, and Woodbury Heights.

E. Sewer Service Areas / Public Water Supply Service Areas

Gloucester County is part of the Tri-County Water Quality Management Planning Area, which includes Camden, Gloucester and Salem Counties.

Sewer Service Areas

The County is divided into the Gloucester County Utility Authority (GCUA) Consolidated District and the Non-Consolidated District.

The GCUA Consolidated District comprises all or portions of 16 municipalities, including all of Clayton, Deptford, Glassboro, Mantua, National Park, Paulsboro, Pitman, Washington, Wenonah, West Deptford, Westville, Woodbury, and Woodbury Heights, and portions of East Greenwich, Elk and Monroe Townships. These communities have their own local collection piping and machinery, which are connected to the GCUA conveyance system at designated locations throughout the county. Most of the County's existing public sewerage facilities are found in the Consolidated District.

The Consolidated District Wastewater Management Plan was adopted in 2008. While local sewer service areas have been mapped, the NJDEP has yet to approve a county-wide sewer service area map. The treatment plant is currently permitted at 27 million gallons per day (mgd) and treats 6.3 billion gallons per year. Its 2019 audit indicated that the Consolidated District serves approximately 231,146 residents (as well as some industries and businesses), about 80% out of an estimated countywide population of 291,408.¹³

The Non-Consolidated District includes Franklin, Greenwich, Harrison, Logan, South Harrison and Woolwich Townships, Newfield and Swedesboro Boroughs and portions of East Greenwich, Elk and Monroe Townships. This area includes the majority of Gloucester's farmlands and much of the district is mapped as areas to be served by septic systems with design flows of 2,000 gallons per day or less.

In January 2016, NJDEP adopted amendments to the *Tri-County Wastewater Quality Management Plan* to expand the GCUA Wastewater Treatment Plant (WTP) sewer service area (SSA) to:

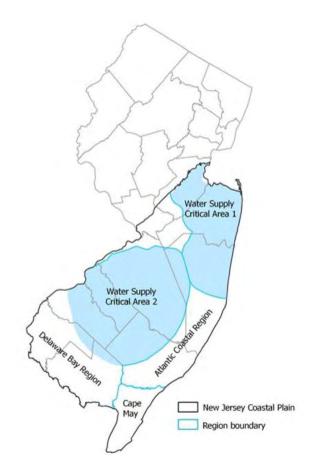


Figure 7. Water Supply Critical Areas of NJ (NJDEP, NJ Water Supply Plan 2017-2022)

- Include Future Wastewater Service Area (FWSA) identified on the Gloucester County Non-Consolidated District FWSA map of Elk Township;
- Expand the GCUA WTP SSA to include new SSA from the Non-Consolidated District; and to
- Increase the GCUA WTP SSA in the Consolidated District.¹⁴

At the same time, the NJDEP adopted additional amendments modifying SSA delineation in the Pinelands areas of each county to be consistent with the Pinelands *Comprehensive Management Plan*.¹⁵

Public Water Supply Service Areas

Most of the communities that are served by the GCUA sewerage system are also served by public water from local groundwater wells. Additionally, large portions of Gloucester County fall within the NJDEP Water Supply Critical Area #2 (Figure III-7). As a result of water-level declines and saltwater intrusion within confined aguifers in the central coastal plain, the state mandated reductions in pumpage from Potomac-Raritan-Magothy (PRM) aguifer system, and instituted a prohibition on future annual increases in use from the PRM. Although not included in the Critical Area #2 declaration, withdrawal from the Wenonah/Mount Laurel aquifer were another source of concern. Following these restrictions, reports indicate that groundwater levels in the PRM system are recovering. The primary alternative source has been the NJ American's pipeline, which pumps water from the Delaware River.

F. Municipal Master Plan and Zoning

Municipal Planning

Municipal planning priorities for Gloucester's 24 municipalities are recorded in the County's 2005 *Cross-Acceptance Report.*¹⁶ The majority of Gloucester County's municipalities identified preservation of environmental and agricultural resource lands as a planning priority.

Some towns in Gloucester County have gone beyond general policy by adopting land use regulations that advance their preservation goals.

- Franklin and Monroe Townships have established cluster provisions that encourage development units to be confined on a small portion of the parcel while the remaining land is preserved as agricultural land or open space (*Franklin Township Code §253-105; Monroe Township Code §175-68*). In both towns, this may be accomplished via non-contiguous density transfers within certain zones.
- In Harrison Township, clustering on 50% of the development site is mandatory within the Residential Conservation Design District. (Township of Harrison Code §225-14.1)
- Ten towns, including East Greenwich, Elk, Franklin, Harrison, Logan, Mantua Monroe, Newfield, South Harrison and Woolwich Townships, have passed Right-to-Farm ordinances that provide legal protection to local farmers.

In addition to local ordinances, some Gloucester County municipalities have embarked on planning initiatives that aggressively pursue farmland preservation. Woolwich, Elk and Franklin Townships have completed farmland preservation plans. Additionally, Woolwich Township had a municipal transfer-of-development rights program from 2008 to 2023.

General Use Type and Minimum Lot Size Categories and Distribution

The municipal zoning patterns that exist in Gloucester County are instrumental in determining the land use patterns that will emerge there. In 2005 (the most recent year in which County-wide municipal zoning densities were compiled) zoning densities consistent with:

 Very low levels of residential development (5 or more acres per unit) occupied a relatively small area of Gloucester County (8,665 acres, 4%) in only three towns – Monroe, Washington and Woolwich.

- Low development densities (3-5 acres per unit) were permitted occurred on only 10,897 acres (5%) in four towns – Franklin, Logan, Monroe and National Park.
- Medium density development (1-3 acres per unit) were the most common, covering 73,377 acres and 35% of the County.
- High density development zones (less than one acre per unit) occupied 54,672 acres and 26% of the County.
- Commercial and industrial-zoned areas also covered much of Gloucester County, predominately around roadways and ship-accessible areas.
- Mixed-use, "other" and preservation zoning (found mostly within the

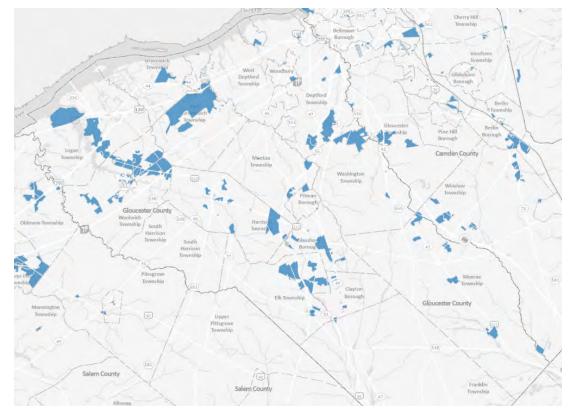


Figure 8. Redevelopment Areas in Gloucester County (NJDCA NJ Areas in Need of Redevelopment)

Pinelands area of Franklin Township) were far less common.

Identification of Adopted Redevelopment Areas

Redevelopment areas are designated by municipalities under the authority of the Local Redevelopment and Housing Law. The state has approved 77 resolutions creating and amending redevelopment areas in Gloucester County (**Figure III-8**). Examples include:

- The Borough of Glassboro's Redevelopment Plan for its Central Business District was adopted in 2000.¹⁷
- The Townships of Mantua and Harrison, as well as the Borough of Glassboro, have designated the Route 322-Rowan West Campus as an area In Need of Redevelopment, resulting in the development of a Regional Redevelopment Plan.¹⁸
- At the request of Harrison Township, the CADB will exclude the property in Harrison Township identified for a future pumping station and reduce the ADA correspondingly.

The CADB reviews applications for redevelopment areas on a case by case basis as they relate to undeveloped, targeted farms within the ADA.

Innovative Planning Techniques

The viability of farming in Gloucester County can be maintained and even advanced by implementing innovative preservation techniques that minimize conflict between agriculture and development. The most damaging impact of development on agriculture occurs when large areas of active farmlands are converted to non-agricultural land uses. Planning methods are available that can effectively reduce the amount of farmland that is subsumed by development without placing economic hardship on local residents or precluding growth. These planning methods also help preserve the rural character of areas where they are employed and contribute to the positive impacts the farming has on local economies.

On August 7, 2013, Governor Christie signed into law the Cluster Development Act (P.L.2013, c.106), which amends the Municipal Land Use Law to make it easier for municipalities to control growth and preservation in their towns. These changes modified the process by which existing tools work, strengthening municipal authority.¹⁹ The three tools – lot-size averaging, contiguous cluster and noncontiguous cluster—are summarized below.

Cluster Zoning

Cluster zoning is a tool that allows builders to reduce the overall area of their projects without reducing the number of structures they construct. A cluster zoning ordinance, for example, may allow a developer with a 200-acre parcel zoned for a density of 10 acres per unit to construct the permitted 20 units on only a portion of the property. If the builder, through a cluster zoning option, constructs the 20 units on only 100 acres of the parcel at a density of 5 acres per unit, the remaining 100 acres are left open. The open area of the parcel must remain in an undeveloped state in perpetuity, but may be used for farming. This area may also be conveyed to a separate person or entity, which was not previously the case.

Cluster zoning provides both the ability to develop a site to its full extent based on zoning and the preservation of contiguous agricultural lands. This option is often attractive to builders because there tend to be fewer infrastructure costs associated with roadway construction, power lines, and sewage connections in more compact developments. Clustering is attractive to local residents and farmers because it retains some agricultural areas and the rural character they create. Additionally, the undeveloped portions of clustered developments are permanently deedrestricted, which helps to ensure the permanence of local farming. Clustering has added effectiveness when open space set-asides on adjacent properties are linked in a coordinated fashion. This requires pre-planning on the part of the municipality.

Lot Size Averaging

Similar to cluster zoning, lot size averaging is a planning technique that authorizes deviation from standard lot sizes within a subdivision for the purpose of protecting features existing on a particular tract of land. Lot size averaging provides a flexibility to subdivision development where a tract can be developed with lots of varying sizes, some of which can be large enough to continue to support agriculture and retain some of the agricultural characteristics that would otherwise be lost with development.

Non-Contiguous Cluster Zoning

In contrast to cluster zoning, non-contiguous cluster zoning permits the transfer-of-development density between instead of only within parcels. First, a "sending" parcel (where the permitted development density is reduced) and a "receiving" parcel (where the permitted development density is increased) are designated. Then, the total development potential on both properties is calculated. In a case where two fifty-acre parcels are undergoing non-contiguous clustering under ten-acre zoning, there are five permitted units on each lot and ten permitted units overall. Finally, the overall development potential (10 units in this case) is applied to the receiving parcel while the sending parcel is permanently protected from future development.

Non-contiguous clustering allows for development to be moved out of prime agricultural areas and concentrated into more appropriate and desirable locations. The possibility for landowners and developers to utilize non-contiguous clustering is affected through amending the municipality's master plan and development ordinances. Successful implementations of this tool include Monroe Township, Middlesex County, where 257 acres in the RR-FLP rural residential farmland preservation zone were preserved as farmland and deed restricted. In Hillsborough Township, Somerset County, 156 acres were preserved, most of them as part of the Township's Farm Lease Program; and in Robbinsville Township, Mercer County, 193 acres were preserved, including 133 acres of preserved farmland.²⁰

Transfer-of-Development Rights (TDR)

A TDR program is a realty transfer tool that allows owners of land suitable for preservation to separate the development rights of their property from the property itself and sell them for use elsewhere. Developers who purchase these development credits may then develop areas deemed appropriate for growth at densities higher than otherwise permitted by zoning ordinances. Once the development rights of a property are sold, the land is permanently restricted from further development.

Transfer-of-development rights can be used as a tool to advance both redevelopment and preservation efforts. Redevelopment areas can benefit from being designated as receiving zones, which would allow them to accept additional development density beyond what is permitted by existing zoning. Transit-oriented developments and apartment/condominium projects in growth centers are particularly suitable as receiving areas. Simultaneously, TDR facilitates the preservation of land within designated sending areas by prohibiting future development there. Development rights have not been removed in sending areas; individual landowners are choosing to sell their development rights. Without development rights, these properties have been placed in a de facto state of preservation at no public cost. Gloucester County contains both communities that can benefit from redevelopment and areas that are in need of additional preservation.

The New Jersey State Transfer-of-Development Rights Act (N.J.S.A. 40:55D-140)²¹ authorizes the transfer-ofdevelopment rights by municipalities and outlines what a town must do in order to adopt or amend a TDR ordinance. First, the municipality must prepare a Real Estate Market Analysis (REMA) that quantifies the development potential of the sending zone(s) and the capacity of the receiving zone(s) to accommodate additional development. It must then amend its master plan to include a Development Transfer Plan Element that outlines a mechanism for assigning development credits to areas in the sending zone and reapplying them to areas in the receiving zone. An updated Utility Service Plan and Capital Improvement Program for the receiving zone should be adopted as well. Finally, a town must receive approval from the State Planning Commission to adopt the TDR ordinance. (N.J.S.A. 40:55D-140)

There are different transfer-ofdevelopment rights programs that may be instituted in Gloucester County. One is the intra-municipal TDR in which sending and receiving areas are located within the same town. Intra-municipal TDR may be appropriate for the Gloucester County towns that have proposed centers and large amounts of agricultural or natural resource lands.

Regional or inter-municipal TDR programs also may be appropriate for parts of Gloucester County. Regional TDR's can be operated by the County or by a higher level of regional government. In regional TDR programs, development density is transferred from areas with significant agricultural or natural resource lands to existing centers within a geographically defined region. Sending and receiving areas are often located in different municipalities. A tax-based revenue sharing system, such as that run by the New Jersey Meadowlands Commission, can help balance municipal expenditures between sending and receiving communities.

Mandatory vs Voluntary Options

Mandatory TDR involves allocating credits in the sending area based on the zoning prior to TDR enactment. To encourage TDR participation and discourage new development in sending areas, those sending areas are downzoned. Under a voluntary TDR program, there is no associated downzoning and TDR becomes another preservation option for landowners.

The New Jersey Pinelands Commission has established a mandatory regional TDR program that allocates Pinelands Development Credits (PDCs) to landowners in the Preservation Area District, Agricultural Production Areas, and Special Agricultural Production Areas. These credits can be purchased by developers owning land in Regional Growth Areas and used to increase the densities at which they can build. Since the inception of the Pinelands Development Credit Program in 1981, more than 50,000 acres of environmentally sensitive forest and agricultural land in the Pinelands have been protected.²²

The State of New Jersey facilitates the implementation of TDR in many ways. The New Jersey State TDR Bank offers Planning Assistance Grants to municipalities looking to establish municipal TDR programs, and directly funds some purchases of development credits. The State TDR Bank can also provide financial banking on loans secured using development credits as collateral, and keeps records of all development credit transfers in the State.

From 2008 to 2023, Woolwich Township had a voluntary, municipal transfer-ofdevelopment rights program that targeted agricultural districts as sending areas. 882 acres were preserved as a collaboration between the Woolwich TDR Bank and the State TDR Bank.²³ Over the course of the program, much of the receiving area was approved for development without credit purchase requirements. As noted in the 2022 Woolwich Township *Master Plan Reexamination*, the receiving area was either already developed or approved for development, or subject to other exemptions and restrictions that limited the effectiveness of the TDR requirements.

In addition to the TDR Bank, Woolwich Township also received \$5 million from the Bank Board with the expectation it be reimbursed proportionally upon sale or extinguishment of credits by the Woolwich TDR Bank. The Township also received a \$100,000 Transportation and Community Development Initiative (TCDI) from Delaware Valley Regional Planning Commission (DVRPC) for master planning as part of this program.²⁴

Literature Cited

Chapter 3

1 New Jersey Update to State Development and Redevelopment Plan. <u>https://www.nj.gov/state/bac/planning/state-plan/development/</u>. Accessed October 2024.

2 New Jersey State Planning Commission. (March 2001). *New Jersey State Development and Redevelopment Plan.* <u>http://nj.gov/state/planning/spc-state-plan.html.</u>

3 New Jersey Pinelands Commission. (January 1981). *Pinelands Comprehensive Management Plan.*<u>https://www.nj.gov/pinelands/cmp/.</u>

4 New Jersey Pinelands Development Credit Bank. (2023). *Annual Report*. <u>https://www.nj.gov/pinelands/pdcbank/reports/PDC%20Bank%20Annual%20Report%202023%20--%20</u> Final.pdf.

5 New Jersey Pinelands Commission. *Management Areas*. <u>http://www.state.nj.us/pinelands/cmp/ma/.</u>

6 Gloucester County Planning Board. (February 1982). *Gloucester County Development* Management Plan.

7 Gloucester County Planning Board. (January 2005). *Gloucester County, New Jersey* Northeast Region Strategic Plan.

8 Gloucester County Planning Department. (June 1997). Gloucester County Farmland Preservation, Open Space Protection, and Recreational Needs Study.

9 Gloucester County Office of Land Preservation. (October 2019). Open Space & Recreation Plan, Gloucester County New Jersey.

10 Morris Land Conservancy with Gloucester County Agriculture Development Board. (April 2008). *County of Gloucester Comprehensive Farmland Preservation Plan – 2008.*

11 The Land Conservancy of New Jersey with Gloucester County Agricultural Development Board. 2015 Gloucester County Comprehensive Farmland Preservation Plan Update. (October 2015).

12 Delaware Valley Regional Planning Commission. *County and Municipal-Level Population Forcasts, 2015-2045.* <u>http://www.dvrpc.org/webmaps/PopForecast/</u>.

13 Gloucester County Utility Authority (2019). *Report of Audit Year Ended October 31, 2019*. <u>https://gcuanj.com/about-the-gcua/audit-reports/</u>.

14 NJDEP. (January 15, 2016). Adopted Amendments to the Tri-County Water Quality Management Plan Public Notice. <u>https://www.nj.gov/dep/wqmp/docs/wqmp/</u> <u>tricounty/20160115-elk-twp-gcua-ssa.pdf</u>. 15 NJDEP. (January 15, 2016). Adopted Amendments to the Atlantic County, Cape May County, Lower Delaware, Ocean County, and Tri-County Water Quality Management Plans. <u>https://www.nj.gov/dep/wgmp/docs/wgmp/tricounty/20160115-elk-twp-gcua-ssa.pdf.</u>

16 Gloucester County Planning Board. (2005). *Gloucester County Cross Acceptance Report: New Jersey State Development and Redevelopment Plan.*

17 Borough of Glassboro. (2004). Borough of Glassboro Master Plan. <u>https://staticl.squarespace.com/static/577196f35016e1776170568d/t/57be3f15e58c62676f21</u> 2e7d/1472085803417/Master-Plan-2-20-2013.pdf.

18 Township of Mantua, Township of Harrison, and Borough of Glassboro. (2018). *Route 233-Rowan West Campus Regional Redevelopment Plan.*

19 New Jersey Future. *Noncontiguous Cluster Development*. <u>https://www.njfuture.org/issues/environment-and-agriculture/land-preservation/tdr-clustering/noncontig-cluster-development/</u>.

20 Chris Sturm and Nicole Heater. (April 2012). *Preserving Land Through Compact Growth: Case Studies of Noncontiguous Clustering in New Jersey*. New Jersey Future. <u>http://www.njfuture.org/wp-content/uploads/2012/05/NJ-Future-Non-Contiguous-Clustering.pdf</u>.

21 New Jersey Statutes Annotated 40:55D: Municipal Land Use Law.

22 Realizing the Promise: Transfer of Development Rights in New Jersey. New Jersey Future August 2010. <u>http://www.njfuture.org/wp-content/uploads/2011/06/TDR-report-FINAL-081110.pdf</u>.

23 Woolwich Township Municipal Code § 2023 – 14.

24 New Jersey Office of Smart Growth. (2008-2009). *Annual Report*. <u>https://dspace.njstatelib.org/server/api/core/bitstreams/f8a75bd7-1db9-498b-bed6-54491bf64ecb/content</u>.



Elk Run Farm, Elk Township

Chapter IV.

Farmland Preservation Program

As of June 2024, Gloucester County has 347 preserved farms, permanently protecting 20,866 acres. Farms have been preserved using a variety of programs, and the County Commissioners remain firmly committed to farmland protection. Completing the farmland plan, and updating it every ten years, ensures the County remains eligible for the State Agriculture Development Committee (SADC) Planning Incentive Grant (PIG) program.

There are 57,968 acres of farm assessed land in Gloucester County.³ More than a third (36%) of this farmland is permanently protected. Since the completion of the *2015 Farm Plan*, Gloucester County has preserved an additional 96 farms, totaling 4,232 acres.

A. Gloucester County Agricultural Development Area (ADA)

The County Agricultural Development Areas (ADA) serves as a general focus area for the County's preservation efforts. In order to qualify for the SADC PIG program, farms must be located in the ADA. The Gloucester County Agriculture Development Board (CADB) developed the County ADA based upon the statutory (NJ Rev Stat 4:1C-18) criteria where agriculture is the preferred, but not necessarily the exclusive, use of land if that area:

a. Encompasses productive agricultural lands which are currently in production or have a strong potential for future production in agriculture and in which agriculture is a permitted use under the current municipal zoning ordinance or in which agriculture is permitted as a nonconforming use;

b. Is reasonably free of suburban and conflicting commercial development;

c. Comprises not greater than 90% of the agricultural land mass of the county; and

d. Incorporates any other characteristics deemed appropriate by the board.

The CADB uses these additional criteria to identify the County ADA:

- Farmland is preserved or is in the term farmland preservation program.
- Farmland in the Woolwich and Franklin Townships municipal PIG project areas.

Excluded were the following:

- Farmland under development.
- All farmland in Planning Area 1 (PA1), including the three receiving areas in Woolwich Township's TDR Plan.

In addition:

 Areas within PA1, PA2, and sewer service areas were generally excluded except where farmland is concentrated, the primary land use, and contains existing preserved farms or farms with pending applications for preservation.

Project Areas

Five project areas encompass the primary ADA. These are based upon the watersheds:

- Delaware River: Logan and the western portion of Greenwich Township.
- Repaupo-Mantua Creek: East Greenwich, West Deptford and Mantua Townships.
- Oldmans Creek: Woolwich Township, but excludes its TDR receiving areas.

- Raccoon Creek: Harrison and South Harrison Townships.
- Still Run: Elk Township, with a small portion of Glassboro and Clayton Boroughs, and the northern section of Franklin Township.

In the Pinelands are two project areas:

- Pinelands North
- Pinelands South

These project areas were based upon the Agricultural Production Area by the Pinelands Commission in the NJ Pinelands Land Capability Map. This includes parts of Franklin and Monroe Townships.

The final project areas includes four small, distinct regions within the eastern part of the County. These include:

- Washington North: Washington Township with farms south of CR-635.
- Chapel Heights: Runs along Duffield Run in Washington Township.
- Pitman Downer: North of the Glassboro Wildlife Management Area in Monroe Township.
- New Brooklyn: North of the Pinelands in Monroe Township.

Since the 2015 Plan, the CADB and Office of Land Preservation made the following amendments to the ADA:

- 2017 Expansion: Added a small number of eligible farm properties in Clayton Borough, Franklin and Monroe Townships to the Pinelands North Project Area. (Map 4).
- 2. 2023 Expansion: As part of its Fiscal Year (FY) 2025 PIG application, the CADB conducted a review of the ADA and determined that further expansion of the ADA was needed in the:
- Pinelands South Project Area (Franklin Township)

 Still Run Project Area (Clayton Borough and Elk Township)

This was necessary to accommodate parcels not previously included. The farms added were tillable, had agricultural soils, zoning permitted agriculture, the farms were reasonably free of conflicting development, and were not in a sewer service area (**Map 5** and **Map 6**).

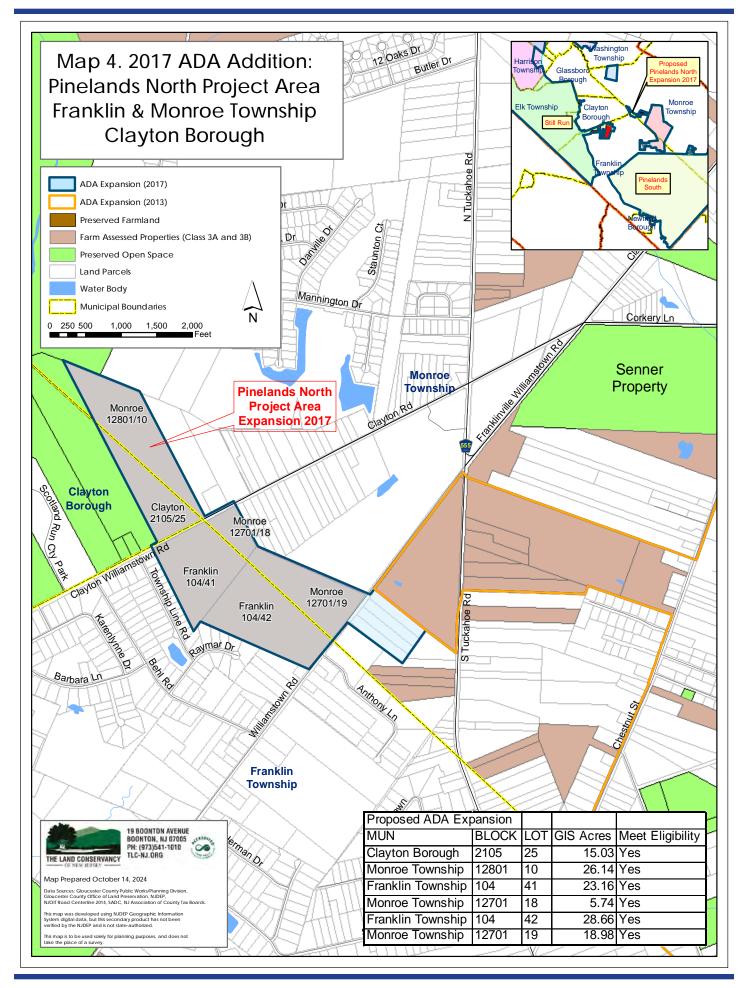
For the current plan update, the CADB undertook a review of the existing ADA and based upon location and productivity determined whether changes needed to be made to the ADA to add those which meet the minimum eligibility requirements for soils and tillable land, and are part of a grouping of eligible/ preserved farms. In addition, all farmland preserved through by the County directly, as an independent purchase, were added to the ADA. The CADB included the following:

- Bethel Mill Project Area (new): This ٠ new project area is located in Mantua Township and captures five farm parcels adjacent to the James Atkinson Memorial Park. Mantua Creek runs behind these properties. Four of the five lots are owned by the same individual who has expressed interest in seeing their property preserved. Inclusion in the ADA ensures the properties are eligible for future funding through the soil conservation programs (Map 7). If preserved as a farm unit, the remaining properties either meet or are close to meeting the minimum eligibility requirements. This new project area adds 66 acres of farmassessed land to the ADA.
- Pinelands South Project Area (expansion): Located at the southern tip of the County, the expansion of the Pinelands South Project Area is in Franklin Township, east of Newfield Borough. It adds 16 farm parcels

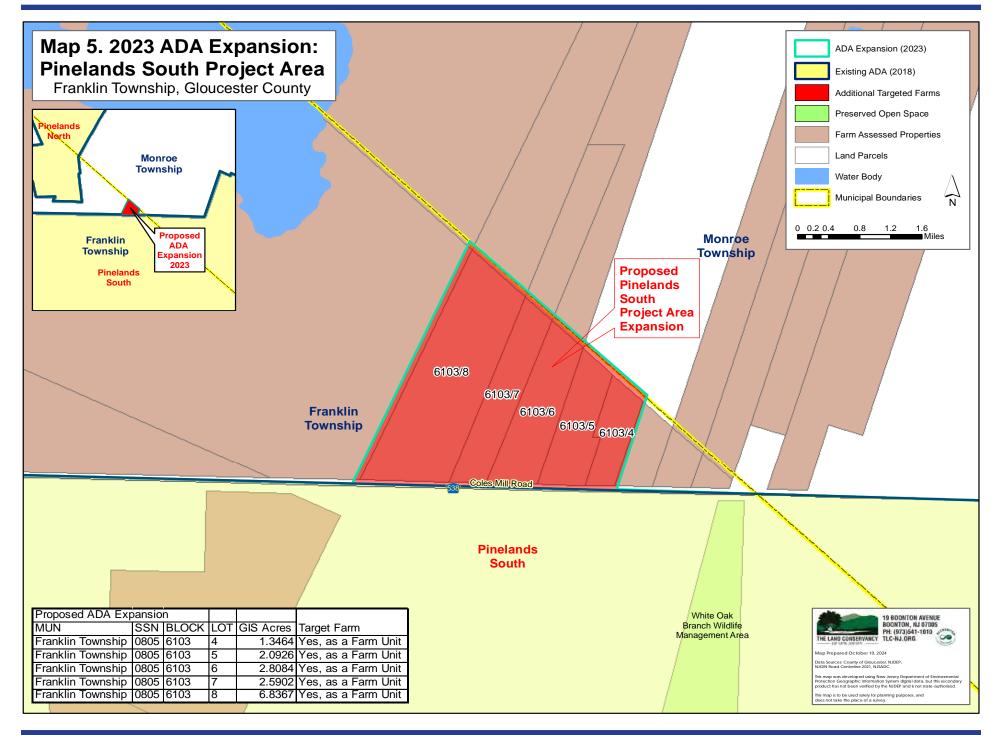
Gloucester County Comprehensive Farmland Preservation Plan

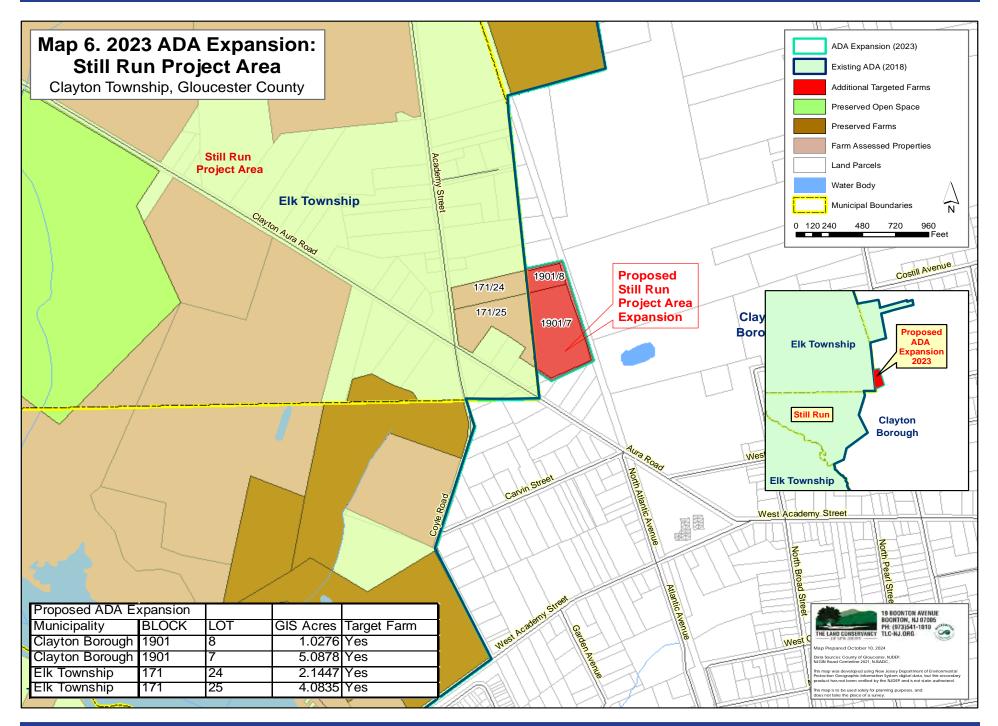
totaling 172 acres of farm-assessed land. Of these, 11 are eligible for preservation through the state and county program, totaling 135 acres (79% of the newly added lots). The owner of 13 acres of farmland in this expanded project area is committed to preserving their farm. This may serve as the domino in which the other farm owners follow (**Map 8**).

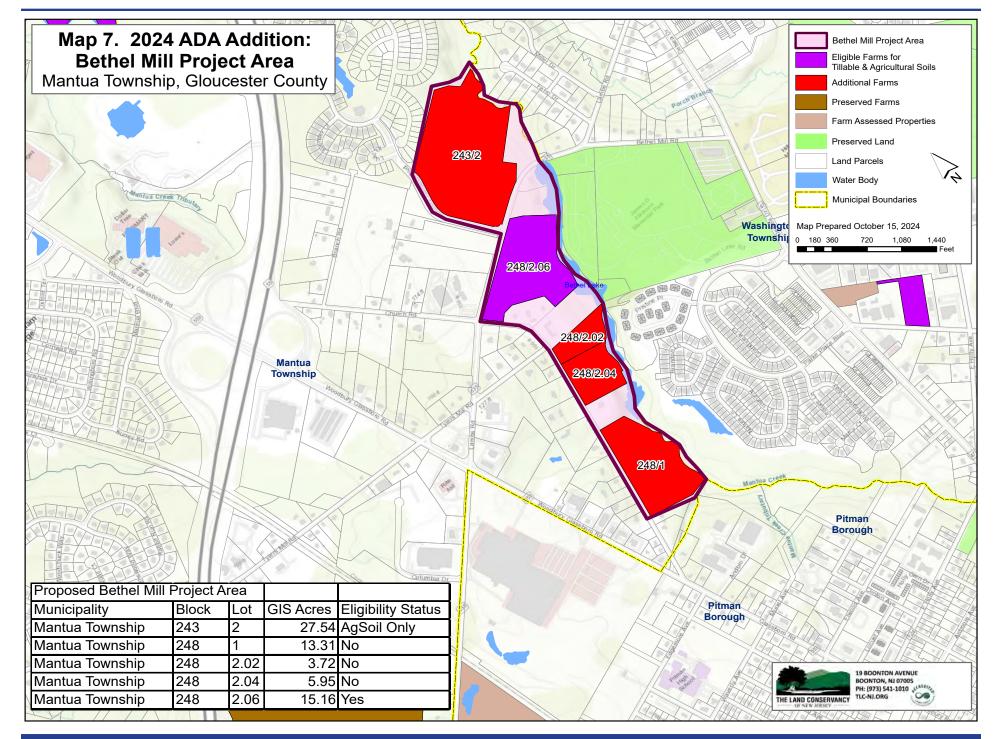
- Mantua Creek Project Area (new): Located immediately south of Rowan University in Deptford Township, this new project area adds 16 farm assessed properties to the ADA, including several which are part of larger farm units. Of these, five meet both the soils and tillable land criteria, and eight meet the agricultural soils requirement. This new area adds 344 acres of farm-assessed land to the ADA, including 239 acres which meet the minimum eligibility criteria for preservation (Map 9).
- Repaupo-Mantua Creek Project Area (expansion): Joining the Repaupo-Mantua Creek Project Area, this expansion adds three eligible farms to the ADA. The owner of two of the parcels is anxious to see their farm preserved. The expansion of this project area adds 29 acres of eligible farmland to the ADA in Gloucester County (Map 10A). In addition, two preserved farms in East Greenwich Township, which had been previously been located outside of the ADA, have been included (Map 10B).
- Raccoon Creek Project Area (reduction): The ADA in Harrison Township was reduced to allow the municipality to move forward with a development application. (Map 11). The CADB makes decisions regarding ADA changes for infrastructure improvement on a case by case basis.

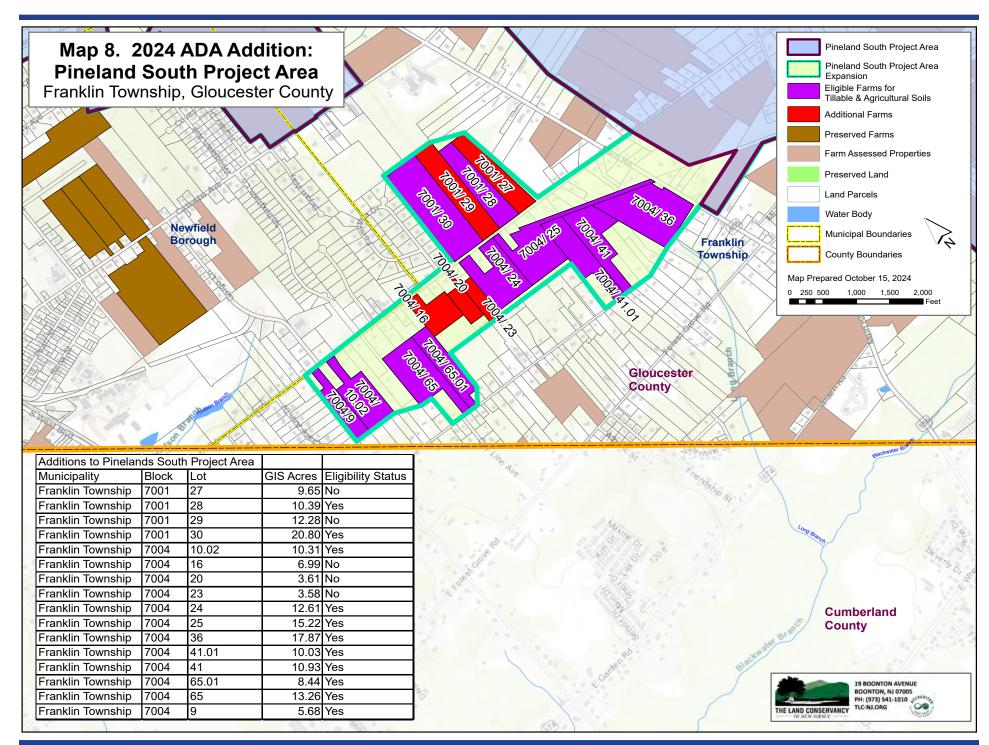


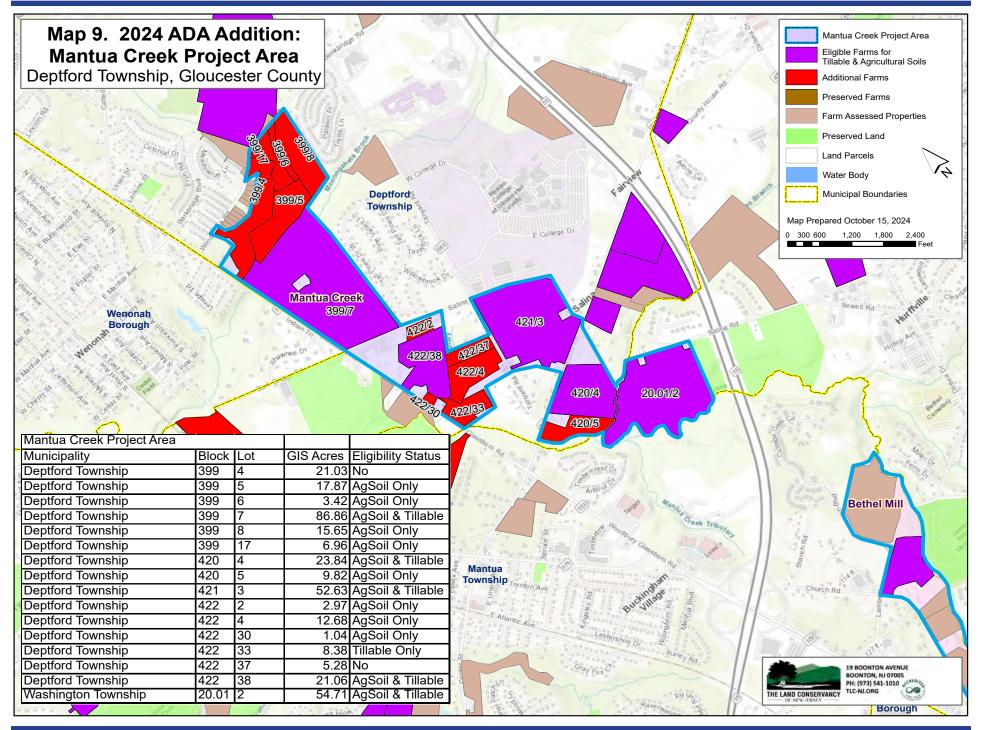
Gloucester County Comprehensive Farmland Preservation Plan

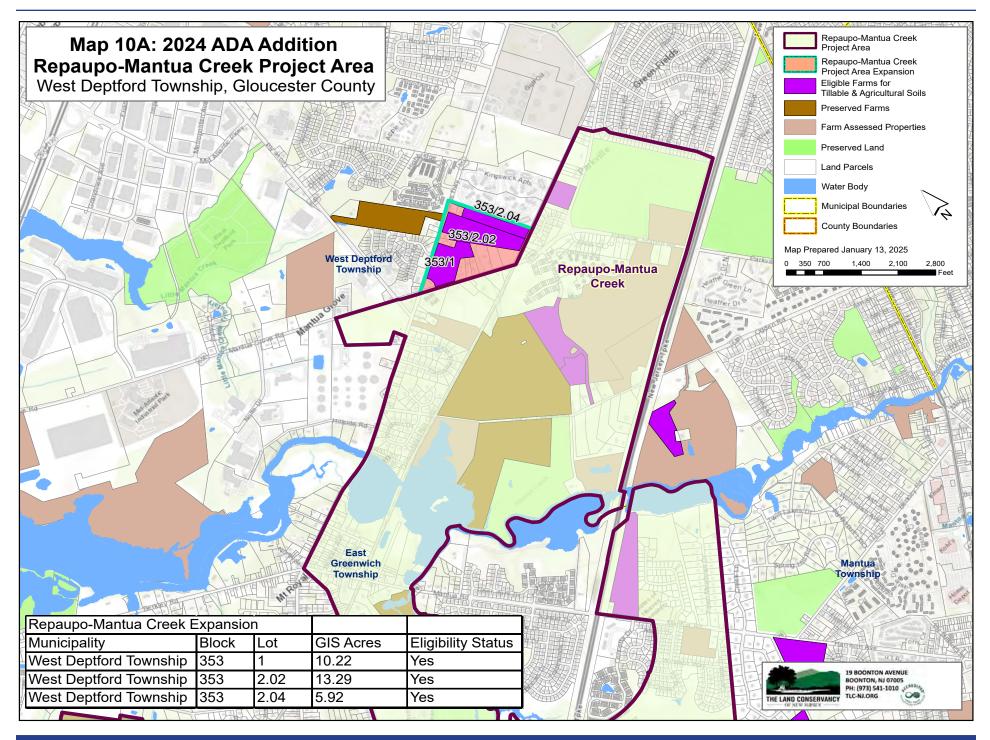


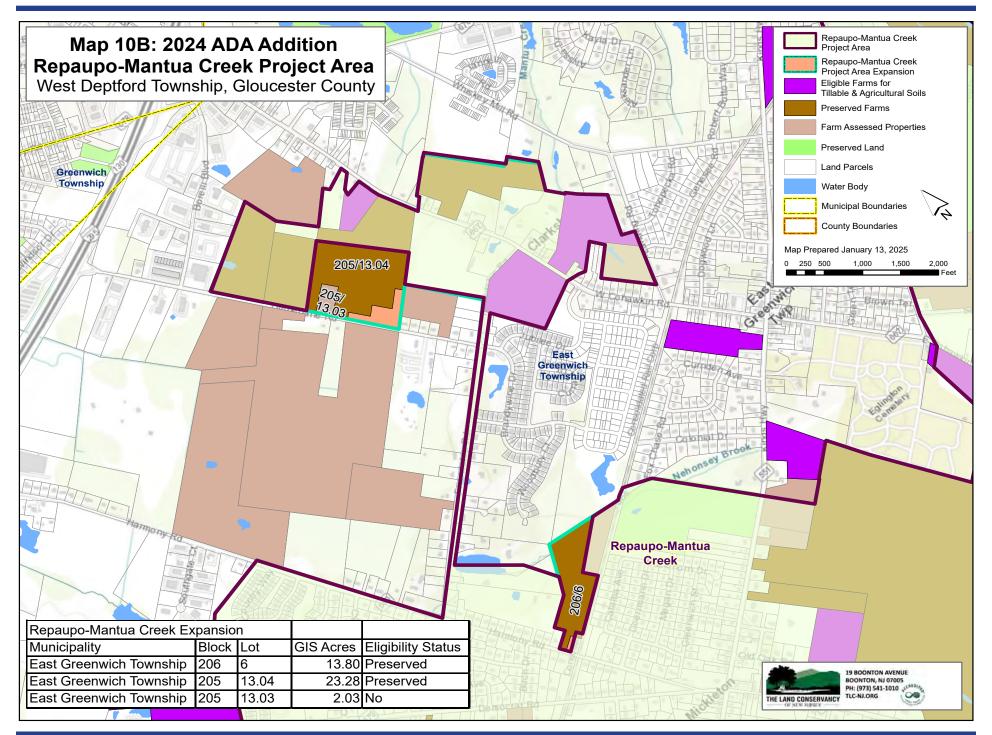


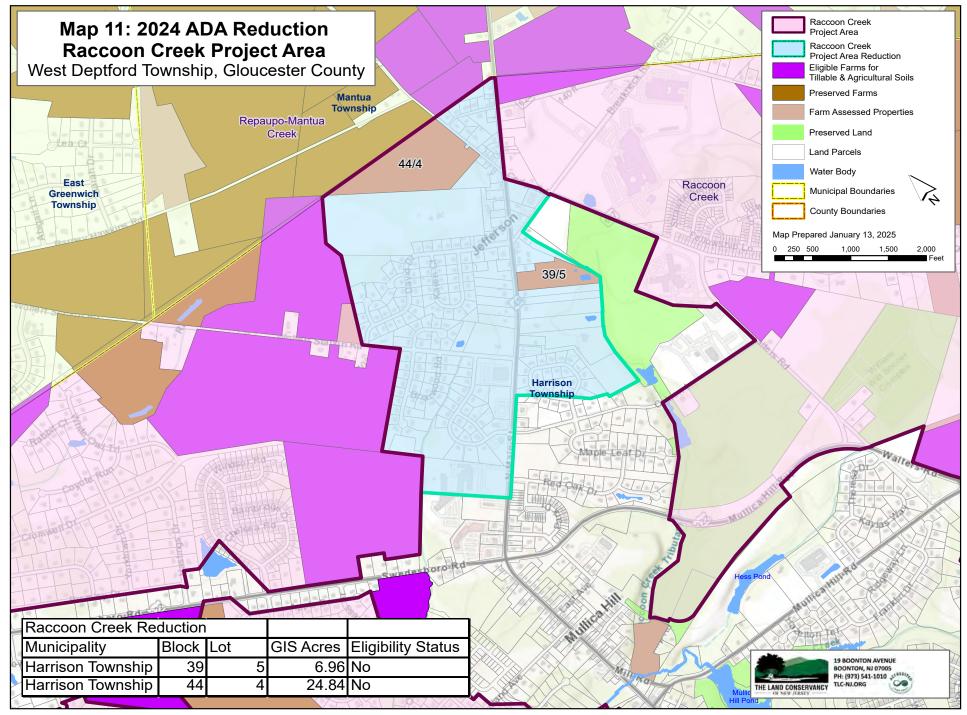




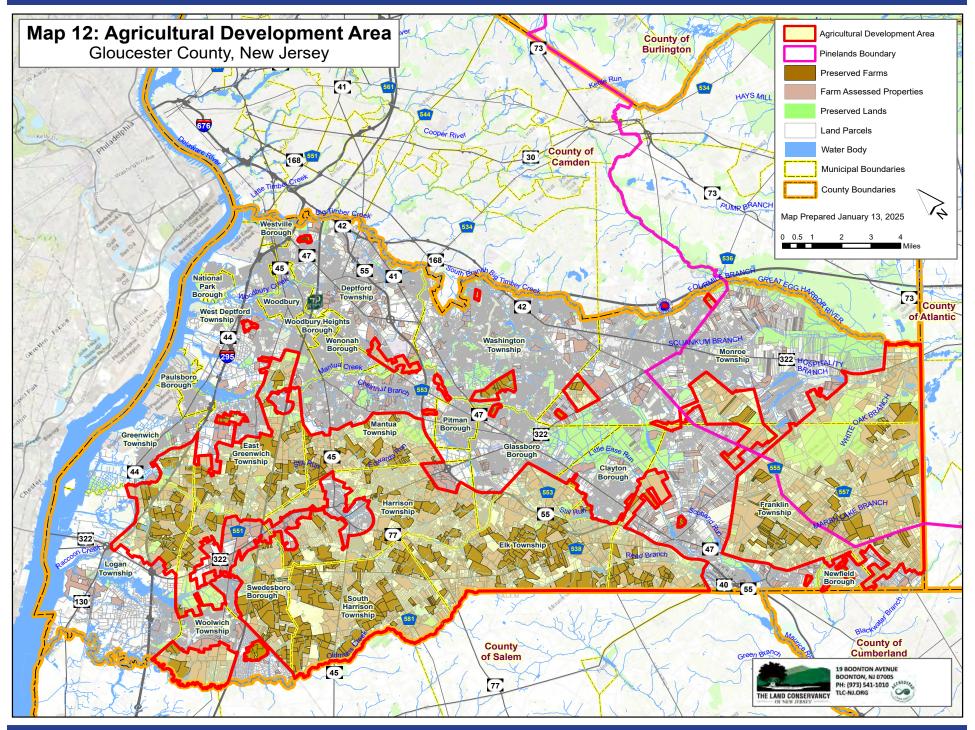




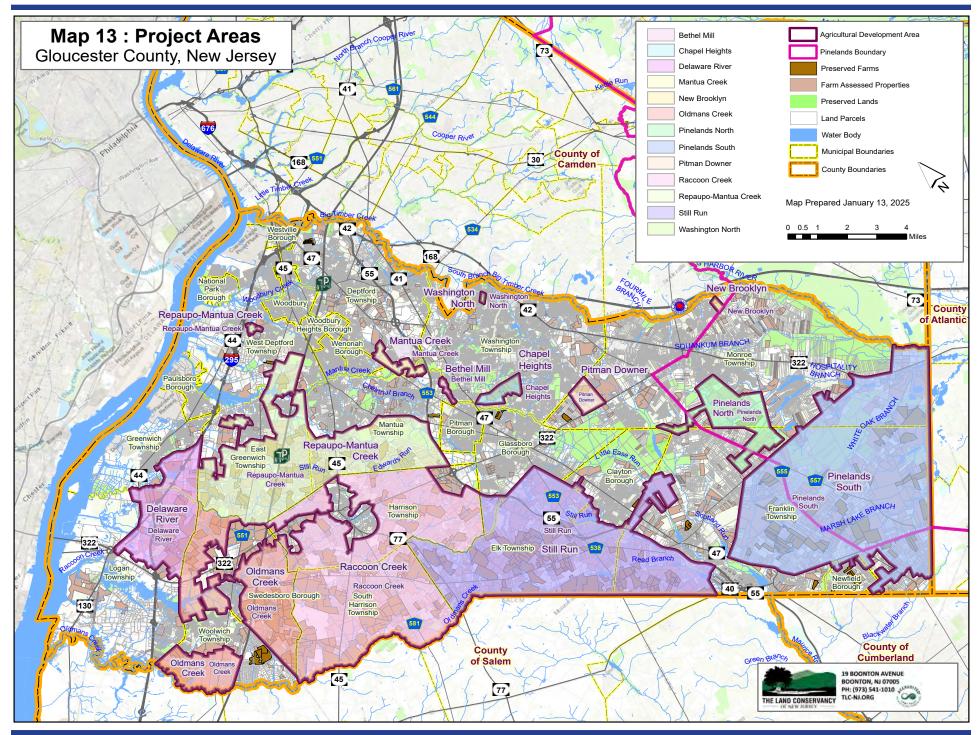




Gioucester County Comprehensive Farmiand Preservation Plan



Gloucester County Comprehensive Farmland Preservation Plan



Geographic Information Systems (GIS) Mapping and the ADA

The County's ADA does not exceed 90% of the agricultural land base. The ADA comprises 82% of the farm-assessed land in Gloucester County (**Map 12**). In summary:

- ADA: 91,322 acres.
- Preserved farms in Gloucester County: 20,866 acres.
- Targeted Farms in ADA: 15,686 acres.
- Farm Assessed Property in ADA: 47,279 acres.
- Total Farm Assessed Land in County: 57,968 acres.
- Percent of Farm Assessed Property in ADA (2024): 82%.
- 42% of the unpreserved farmland is potentially eligible for preservation.

The County's project areas are listed below and shown in **Map 13**:

- Bethel Mill (new project area, 2024);
- Chapel Heights;
- Delaware River (reduced in 2015);
- New Brooklyn;
- Mantua Creek (new project area, 2024);
- · Oldmans Creek (reduced in 2015);
- Pinelands North (expanded 2015, 2017);
- Pinelands South (expanded in 2015, 2023 and in 2024);
- Pitman Downer;
- Raccoon Creek (reduced in 2015 and 2024);
- Repaupo-Mantua Creek (revised in 2015 and expanded in 2024);
- Still Run (expanded in 2015 and 2023); and
- Washington North.

B. Farmland Preserved to Date by Program

As of January 2025, Gloucester County has 347 preserved farms, permanently protecting 20,866 acres. South Harrison Township has the highest amount of preserved farmland in the County (3,785 acres) and Franklin Township has the highest number of farms preserved (65). In the first half of 2024, the County preserved three farms in East Greenwich and Greenwich Townships, protecting an additional 155 acres of farmland.

A total of \$182 million has been spent in Gloucester County, with the state contributing \$88.1 million (48% of the total contributed) and Gloucester County spending \$88.8 million (49%) (**Table IV-1** and **Appendix C**).

The remainder of the funds came from:

- Municipalities: \$5.2 million (3%). Elk (\$295,750), Franklin (\$1,442,786), West Deptford (\$95,504), and Woolwich Townships (\$3,384,819) each contributed local dollars to preserve farms in their towns.
- Pinelands: \$30,000 from the Pinelands Commission to preserve a farm in Franklin Township.
- Federal: \$289,476, in partnership with the New Jersey Conservation Foundation, to preserve a farm in South Harrison Township.

At the time of the **2008 Farm Plan**, County had preserved 10,559 acres. It has now doubled the amount of farmland protected to 20,866 acres!

Gloucester County has used a variety of programs to achieve their farmland preservation goals (**Table IV-2**):

State Programs:

- Fee Simple (SADC Fee)
- Easement Purchase (SADC EP)
- Pinelands (SADC EP, Pinelands)
 County Programs:
- Independent Purchase (Cty IEP)
- Easement Purchase (Cty EP)
- Planning Incentive Grant (Cty PIG)
 Municipal Programs:
- Planning Incentive Grant (Muni PIG)
- Transfer of Development Rights (Muni TDR)

Non-Profit Programs (NP)

Pinelands Development Credits (PDC)

State Programs

SADC Fee Simple: An SADC fee simple acquisition involves an entire property being purchased directly by the state. The SADC pays the survey and title costs, the landowner is exempt from paying rollback taxes for farmland assessment, and the transaction can be completed in a matter of months. The property is then resold at auction, and the SADC does not retain ownership. To participate in this program, the farmland must be within an ADA, and be eligible for farmland assessment.

SADC Easement Purchase: The SADC EP program allows a landowner to apply directly to the SADC for the sale of development rights. In most cases, the

Table 1. Total Dollars Spent to Preserve Farms in Gloucester County						
Municipality	#	Acres	Total Cost SADC		County	
Clayton Borough	4	123.99	\$1,296,593.32	\$656,168.40	\$640,424.92	
Deptford Township	1	36.00	\$743,606.00	\$0.00	\$743,606.00	
East Greenwich Twp.	36	1,638.87	\$24,922,757.84	\$9,444,644.98	\$15,478,112.85	
Elk Township	47	3,730.72	\$15,984,828.51	\$10,383,995.54	\$5,305,083.08	
Franklin Township	65	3,387.11	\$15,028,004.19	\$7,602,590.97	\$5,913,426.47	
Glassboro Borough	5	88.99	\$750,418.96	\$265,734.36	\$484,684.60	
Greenwich Township	4	248.60	\$5,708,153.70	\$3,214,154.99	\$2,493,998.71	
Harrison Township	36	1,702.48	\$21,217,685.65	\$6,577,594.20	\$15,130,887.48	
Logan Township	22	1,316.08	\$14,483,619.40	\$6,199,758.39	\$8,283,861.01	
Mantua Township	24	1,089.67	\$15,164,916.46	\$7,261,921.17	\$7,902,995.29	
Monroe Township	9	668.94	\$2,503,123.80	\$614,939.74	\$1,781,991.35	
Newfield Borough	4	85.00	\$509,167.00	\$0.00	\$509,167.00	
South Harrison Twp.	53	3,784.90	\$30,657,048.52	\$16,803,407.60	\$13,474,434.92	
Washington Twp.	5	233.79	\$3,280,069.00	\$1,332,416.81	\$1,947,652.19	
West Deptford Twp.	2	132.10	\$1,488,317.00	\$606,480.00	\$786,334.17	
Woolwich Township	54	2,599.11	\$28,460,289.83	\$17,151,470.55	\$7,923,999.95	
Total	347	20,866	\$182,198,599.91	\$88,115,277.70	\$88,800,660.01	

Source: SADC and Gloucester County Office of Land Preservation. There are a number of farms which span municipal borders and are located in two (or even three) towns. Thus the total number of farms (347) is less than what the municipal totals are.

State will pay up to 100% of the certified appraised easement value. Two farms in the Pinelands have also been preserved through this program.

County Programs

County Easement Purchase: County Easement Purchases (EP) and Independent Easement Purchase (IEP) involve the sale of farmland development rights to the County by the landowner. To be eligible for the EP program, the land must be in the ADA and be eligible for farmland assessment. In the traditional EP program, the SADC cost shares with the County on the purchase of the easement. A farm preserved through the County's IEP does not include state funds as part of the acquisition. The County has since replaced the EP program with the County PIG Program.

County Planning Incentive Grant:

The goal of the County PIG program is to protect and preserve large pieces of contiguous farmland through the purchase of development easements. Gloucester County completed their 2008 Comprehensive Farmland Preservation Plan to bring the county into compliance for the PIG program. The 2015 Plan Update ensured continued consistency and compliance with local and state programs. The current PIG program typically provides the County with up to 60% of the cost of a property's fee for easement acquisition, as determined by two independent appraisals. Per NJAC 2:7-6-6.11, the state cost-share can be more or less than 60% depending on the cost per acre.

Table 2. Farmland Preserved by Program in Gloucester County					
Program	# Farms	Acreage	Percent	Cost	
SADC Fee	5	1,191	6%	\$4,751,634	
SADC EP	15	1,816	9%	\$16,184,433	
SADC EP, Pinelands	2	128	1%	\$330,215	
State Programs:	22	3,136	15%	\$21,666,282	
Cty IEP	106	3,761	18%	\$43,544,496	
Cty EP	115	8,078	39%	\$47,095,983	
Cty PIG	67	3,251	16%	\$47,678,422	
County Programs:	288	11,938	72 %	\$138,318,901	
Muni PIG	40	1,439	7%	\$13,708,683	
Muni TDR	18	828	4%	\$7,059,541	
Municipal Programs:	58	2,282	11%	\$20,768,223	
Non-Profit	1	90	0.4%	\$1,739,000	
Pinelands Credit (PDC)	2	283	1%	_	
Total Preserved:	347	20,866		\$182,198,599	

Source: SADC and Gloucester County Office of Land Preservation. There are a number of farms which span municipal borders and are located in two (or even three) towns. Thus the total number of farms (347) is less than what the municipal totals are.

Municipal Programs

Municipal Planning Incentive Grants:

Municipal PIGs are very similar to the County PIGs in their goals, requirements, and implementation. Like the County PIGs, Municipal PIGs require a local financial commitment for preserving farmland. To qualify for this program, the municipality must have an agricultural advisory board and a source of funding for farmland preservation. Municipal PIGs also must establish and maintain a dedicated source of funding for farmland preservation pursuant to P.L.1997, c.24 (C.40:12-15.1 et seq.). Farms to be preserved through a municipal PIG need to be approved by the CADB.

The SADC employs a sliding scale funding policy for County and Municipal PIGS (SADC regulation NJAC 2:76-6.11(d)) which is dependent on the overall cost per acres value, farm size and criteria ranking. The SADC typically funds 60% and may contribute as much as 80% of the funds to acquire a farm's development easement. Agricultural easements valued lower than \$9,000 per acre are funded at a higher rate, up to 80%, and easements valued at over \$50,000 per acre are funded at a lower rate.

The County typically shares the remaining local cost share on a 50-50 basis. Elk, Franklin, and Woolwich Townships have preserved farmland with Gloucester County and the SADC through the Muni PIG program.

Municipal Transfer of Development

Rights: TDR is a growth management tool that transfers development rights from one location, a sending or preservation area, to another, an identified growth or receiving area. Woolwich Township had a very successful TDR program focused on preserving farmland in their municipality. The town adopted their TDR ordinance in 2008. The town and state each contributed funding to close on the properties (the County did not contribute funds).

Non-Profit Programs

Grants from the SADC to non-profit organizations fund up to 50% of the fee simple or development easement values on farms. In order to qualify for state and county cost share, farms preserved through the non-profit program must fall within the ADA and county project area and meet the other minimum eligibility criteria set forth by the SADC and CADB. One farm has been preserved through this program in Gloucester County by the New Jersey Conservation Foundation (NJCF) in South Harrison Township.

Pinelands Development Credits

The Pinelands Development Credit (PDC) Program is a regional TDR program that preserves agricultural and ecological land. PDCs are allocated by the Pinelands Commission to landowners in the Preservation Area District, Special Agricultural Production Area and Agricultural Production Area, which are the sending areas. These credits can be purchased by property owners and developers who are interested in developing land in Pinelands Regional Growth Areas, which serve as the receiving areas.¹ Two farms in Franklin Township have been preserved using this program.

C. Term Farmland Preservation Programs

The Term Farmland Preservation Programs are cost sharing programs for soil and water conservation projects, in which the farmer receives up to 50% of the costs for these projects, as well as protection against nuisance complaints, emergency fuel and water rationing, zoning changes and eminent domain actions. In return, the farmer signs an agreement that restricts the land to agricultural use for either eight years or sixteen years. For entrance into these programs and to qualify for benefits, a farm must be located within the county ADA. Technical assistance for the soil and water practices comes through the Natural Resource Conservation Service. The CADB views the Term Programs as a stepping-stone to preservation, introducing participants to preservation and allowing them to participate in grants for needed projects. Eight farms in Gloucester County are enrolled in the 8-year program, for a total of 237 acres (Table IV-3).

D. Coordination with Open Space Preservation Initiatives

A cooperative project involves a partnership and/or funding from more than one agency. This kind of project leverages county farmland preservation dollars and makes use of municipal open space trust funds or grants to non-profit organizations. These "hybrid" projects are an opportunity to use traditional open space funds, where appropriate, to help preserve farm properties, especially where those properties are a mixture of cropland and woodland areas. Publicly preserved open space is shown on the Farmland Map (Map 1) in Chapter I. To date, no open space purchases have been completed as part of a farmland project. The County strives to avoid conflicts between agricultural operations and adjoining public open space and supports buffers between adjacent land uses. Trail easements and adjacency to proposed and existing active recreational facilities are potential areas of concern for farmers.

E. Farmland Preservation Program Funding Expended to Date by Source

The Gloucester County Farmland and Open Space Preservation Fund was first established in 1993 as a one-cent tax levy, passed by a 69% majority. In 2000 an additional one-cent levy was approved by a 67% majority, bringing the total tax to two-cents. An additional two-cents was approved in 2004 by a 61% majority. The County continues to collect a four-cent tax levy. A summary of the current levy is:

- \$ 11,302,836: 2023 Levy
- \$34,105,878: Reserve Funds
- \$45,408,714: Total Trust Fund Revenues

2023 Appropriations for the Trust Fund:

- \$1,593,475: Development of land for recreation and conservation
- \$0: Maintenance of lands for recreation and conservation
- \$2,113,700: Historic preservation
- \$38,369,369: Acquisition of land for recreation, conservation, farmland
- \$3,332,170: Debt service (payment of bond principal and interest on bonds)

84% of the Trust Fund is set aside for acquisition of land. Of this, 90% (\$34,533,112) is appropriated for farmland preservation. The County has used the Trust Fund to acquire 23,189 acres of land for farmland, recreation and conservation (since they raised the levy in 2004).²

F. Monitoring the Easements

Monitoring is the responsibility of the easement holder. The County is only responsible for easements preserved under the County EP, County and Municipal PIG program. The SADC is responsible for SADC Direct Easement

Table 3. Farms Enrolled in the Term Programs, Gloucester County						
Municipality	Block and Lot	Acres Enrolled	Expires			
East Greenwich Township	B: 1207, L:12	86	March 30, 2030			
Franklin Township	B: 6502, L:3	9	December 4, 2030			
Harrison Township	B: 44, L: 2, 2.01	44	April 17, 2031			
Harrison Township	B: 33, L: 7	16	May 20, 2013			
Mantua Township	B: 1, L: 4	7	April 17, 2031			
Woolwich Township	B: 46, L: 9.01 B: 47, L: 5.03	29	June 9, 2026			
Woolwich Township	B: 47, L: 2, 2.01	40	June 15, 2029			
Woolwich Township	B: 55, L: 4.02	6	August 27, 2030			
	Total:	237 acres				
Source: Gloucester County Office of Land Preservation						

and Fee Simple farms and non-profits must monitor easements they hold. The inspectors take note of the following:

- Change in ownership since the previous inspection.
- Changes in residential, agricultural and non-agricultural uses.
- Evidence of mining or removing of materials such as sand, gravel, rock, etc.
- Evidence of dumping or fallow fields.
- Whether or not the farm has an approved conservation plan.
- Any issues which may be in violation of the Deed of Easement and determination of what corrective actions may be necessary.

G. Coordination with Transfer of Development Rights Programs

TDR may be used in conjunction with the traditional Purchase of Development Rights (PDR) program; these two programs are not mutually exclusive. As previously described, Woolwich Township used a Municipal TDR program to preserve 18 farms. Gloucester County has supported this initiative.

Literature Cited

Chapter 4

1 New Jersey Pinelands Commission. Pinelands Development Credit Program. <u>https://</u> www.nj.gov/pinelands/landuse/perm/pdc/. Accessed October 2024.

2 Gloucester County. 2023 Budget. <u>https://www.gloucestercountynj.gov/ArchiveCenter/</u> <u>ViewFile/Item/607</u>. Accessed October 2024.

3 The acreage data for **Chapter 4** and **Chapter 5** was derived using ArcGIS mapping. Accessing the data is via the New Jersey Geographic Information Network (NJGIN) Open Data portal (<u>njogis-newjersey.opendata.arcgis.com</u>).



Hill Creek Farm, Harrison Township

Chapter V.

Future Farmland Program

A. Preservation Goals

Gloucester County is 215,073 acres (336 square miles) in size. Of this 57,968 acres, or 27%, of total land area, are under farmland assessment, which encompasses croplands, woodlands, farm structures, and wetlands/waterways that occur on agricultural property. The 2022 *Census of Agriculture* identified 42,076 acres as farms, which excludes those farmland assessed parcels that are not in active agricultural production.

As of January 2025, Gloucester County has 347 preserved farms, permanently protecting 20,866 acres. Gloucester County has doubled the amount of farmland preserved since the publication of its 2008 Comprehensive Farmland Preservation Plan. Milestones for Gloucester County's farmland preservation program include:

- 1989: Program Start
- 2008 Farm Plan: 10,559 acres preserved
- 2015 Farm Plan: 16,634 acres preserved
- 2024 Farm Plan: 20,866 acres preserved

Based upon a parcel based analysis of the State's Minimum Eligibility Criteria for productive soils and tillable land, 15,686 acres are potentially eligible for farmland preservation in Gloucester County within the County's ADA.

Using the inventory of farmland eligible for preservation, landowner interest, and the amount of potential funding available, the following preservation goals are presented for Gloucester County:

- One year target: 1,000 acres
- Five year target: 3,000 acres
- Ten year target: 5,000 acres.

B. Project Area Summaries

The Gloucester CADB has identified 13 projects areas within the ADA. The County's project areas are listed below and shown in **Map 14**. These are described in more detail in **Chapter IV:**

- 1. Bethel Mill;
- 2. Chapel Heights;
- 3. Delaware River;
- 4. Mantua Creek;

- 5. New Brooklyn;
- 6. Oldmans Creek;
- 7. Pinelands North;
- 8. Pinelands South;
- 9. Pitman Downer;
- 10. Raccoon Creek;
- 11. Repaupo-Mantua Creek;
- 12. Still Run; and
- 13. Washington North.

Table V-1 includes a summary of each of the project areas, including total acreage, farm assessed land, preserved (and unpreserved) farmland, land in the Term Programs, and those farms pending preservation.

Table 1. <u>Gloucester County Project Areas: Summary of Farm Assessed Land</u>					
Project Area	Total Acres	Farm Assessed Land (acres)	Preserved Farmland (acres)	Land in Term Programs (acres)	Farms Pending Preservation (acres)
Bethel Mill	95.17	65.67	0	0	0
Chapel Heights	449.28	242.54	287.11	0	0
Delaware River	4,668	2,731.95	1,583.5	0	84.88
Mantua Creek	403.62	344.20	0	0	0
New Brooklyn	71.59	45.92	30.22	0	0
Oldmans Creek	8,413.64	4,571.05	2,338.18	75.90	593.62
Pinelands North	2,732.9	1,403.24	203.2	0	74.67
Pinelands South	23,854.03	11,619.14	2,818.43	8.72	0
Pitman Downer	502.15	118.93	76.56	42.37	0
Raccoon Creek	19,588.36	10,212.46	5,610.01	62.67	67.87
Repaupo-Mantua Creek	12,431.82	6,145.86	2,870.78	85.11	94.83
Still Run	17,344.11	9,403.75	4,468.69	0	12.34
Washington North	32.32	20.65	7.05	0	0
Total (Project Areas):	90,587	46,957	20,813	275	928.22
Total (Outside Project Areas):	124,486	11,011	518.93	0	168.54
County Total:	215,073	57,968	20,813	274.76	1,096.76
Source: Gloucester County Office of Land Preservation and SADC					

C. SADC Minimum Eligibility Criteria

Minimum Eligibility Criteria are based upon the SADC's rules for farmland preservation and project eligibility (Adopted by the SADC May 21, 2007 and July 25, 2019). In order to be eligible for preservation the site must be developable, have soils capable of supporting agricultural or horticultural production, and meet minimum tillable land standards (N.J.A.C. 2:76-6.20).

To determine farms that are potentially eligible for preservation, a series of queries were made using ArcGIS digital mapping software for soils and table land. The minimum eligible analysis involved a parcel-based screen of tax lot characteristics. Farmland preservation applications often include multiple lots; combining these lots may increase the acreage eligible for SADC cost share funding in Gloucester County. **Appendix D** describes the state's requirements and the methodology for mapping these on the ArcGIS.

For a farm application to qualify for SADC cost share, the farm must have at least one parcel listed on the targeted farm list; comprise an assemblage of substandard parcels which together meet SADC minimum standards; or have sufficient justification by the CADB that the parcels were not identified as targeted due to a specific mapping issue or other error.

Farms which meet the minimum eligibility criteria for tillable land in Gloucester County are shown on **Map 14** and those which meet the minimum criteria for soils are shown on **Map 15**. Farms which are potentially eligible for preservation and meet the minimum eligibility criteria for both soils and tillable land are shown on **Map 16**. Farms which meet the minimum eligibility criteria and are within the County's ADA are shown on **Map 17** and listed in **Appendix E.**

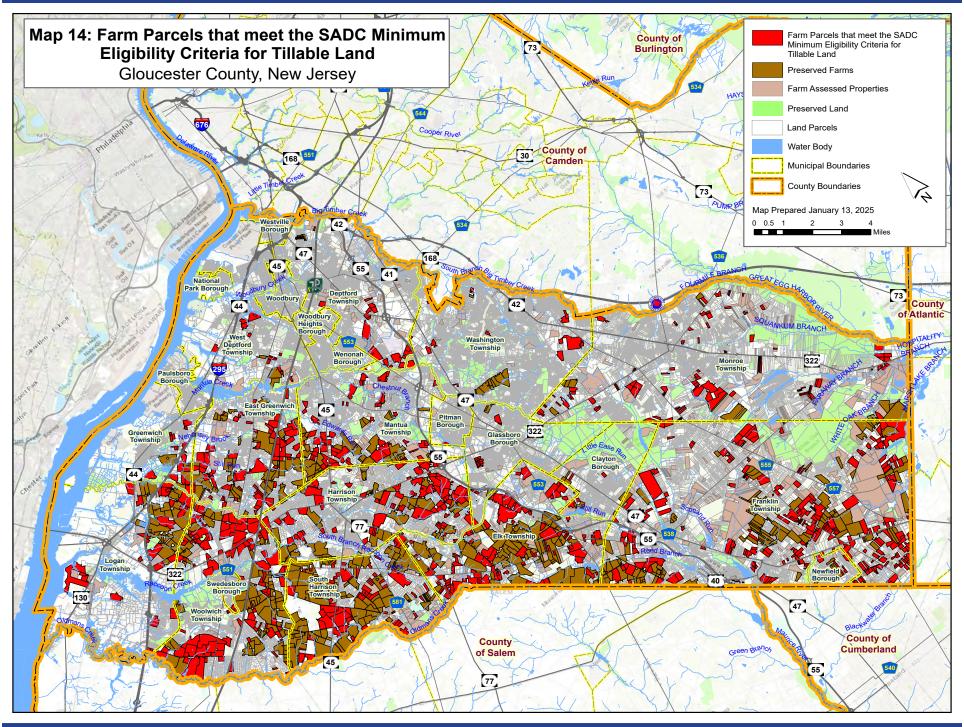
Overall, there are 15,686 acres of farm assessed land which meet the minimum eligibility criteria for the state's farmland preservation program and are located within the ADA. These are the County's targeted farms. There are 57,968 acres of farm assessed land in Gloucester County, and 47,279 acres of farm assessed property is located within the County's project areas (**Table V-1** and **V-2**):

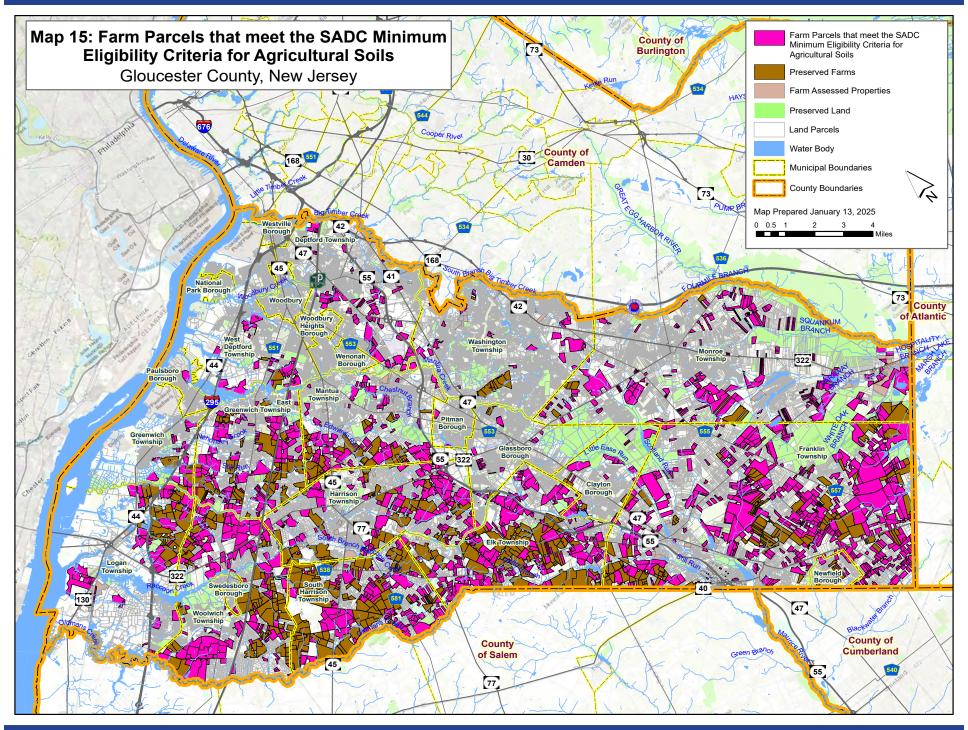
- 20,866 acres of farm assessed land are preserved within the project areas.
- 15,686 acres of unpreserved farmland meet both the soils and tillable land minimum eligibility criteria for farmland preservation.
- 42% of the remaining unpreserved farm assessed land in Gloucester County is potentially eligible for preservation through the state and county programs.

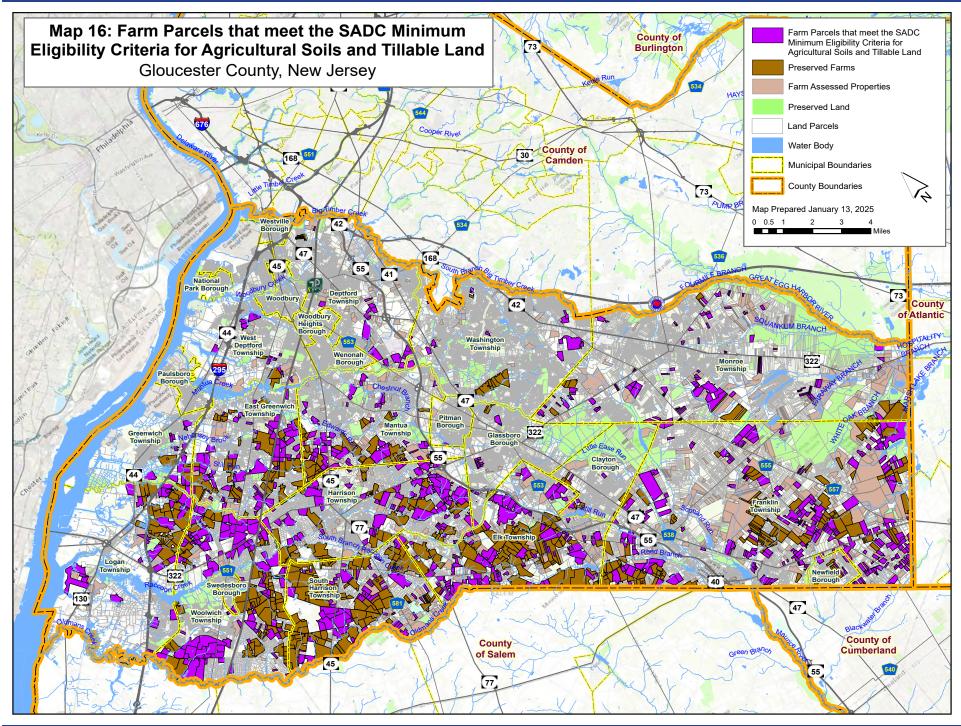
D. County Ranking Criteria

The Gloucester CADB uses the SADC's ranking criteria as the basis for qualifying farms for preservation. The CADB supplements this ranking with an on-site visit for each applicant. Determination whether an application will be submitted to the County PIG program, to other SADC programs or through independent preservation strategies without state cost share, is made on an application by application basis as to which program is most suited for that project

The County Commissioners are committed to preserving as much of the agricultural land base as possible and supports innovative funding mechanisms and preservation tools.







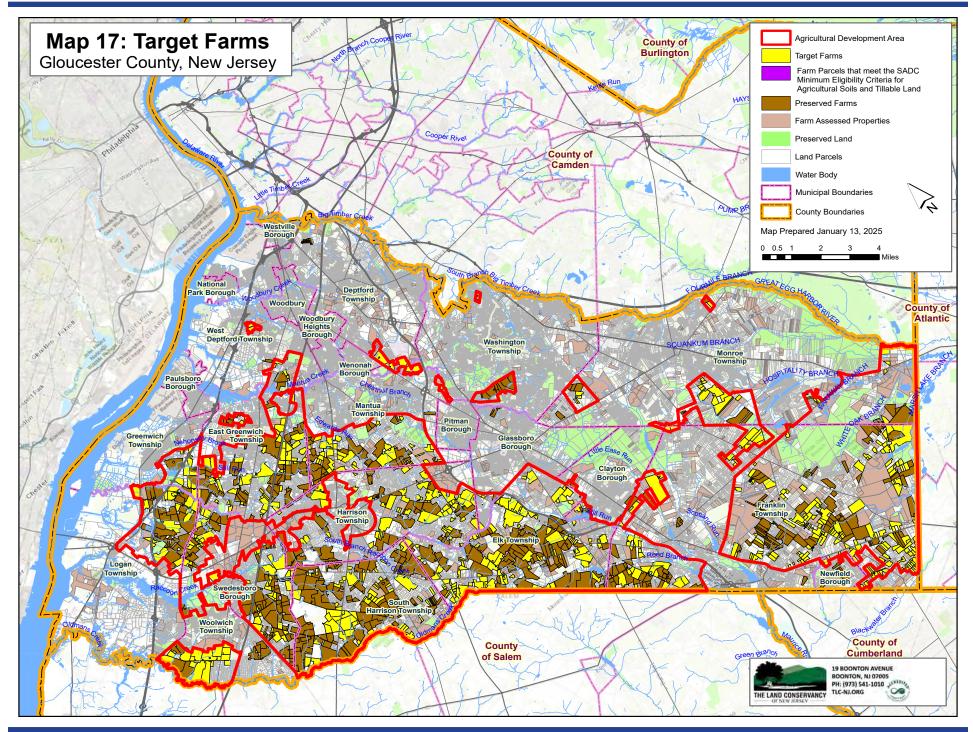


Table 2. <u>Target Farms in Gloucester County</u>					
Project Area	Total Acres	Farm Assessed Land (acres)	Target Farms (acres)		
Bethel Mill	95.17	65.67	15.16		
Chapel Heights	449.28	242.54	0.79		
Delaware River	4,668	2,731.95	947.72		
Mantua Creek	403.62	344.2	239.10		
New Brooklyn	71.59	45.92	15.70		
Oldmans Creek	8,413.64	4,571.05	2,005.86		
Pinelands North	2,732.90	1,403.24	807.19		
Pinelands South	23,854.03	11,619.14	3,007.59		
Pitman Downer	502.15	118.93	42.37		
Raccoon Creek	19,588.36	10,212.46	3,082.82		
Repaupo-Mantua Creek	12,431.82	6,145.86	2,168.74		
Still Run	17,344.11	9,403.75	3,342.23		
Washington North	32.32	20.65	10.60		
Total (Project Areas):	90,587	46,957	15,686 acres		
Total (Outside Project Areas):	124,486	11,011	0		
County Total: 215,073 57,968 15,686 acres					
Source: Gloucester County Office of Land Preservation and SADC					

E. Municipal and County Policies Related to Farmland Preservation Applications

The Gloucester CADB follows the SADC's policies regarding housing opportunities, division of premises and exception areas; there have been no changes to these policies since the 2008 Comprehensive Farmland Preservation Plan. Below is a brief summary of the state policies for each of these issues.

1. Approval of Housing Opportunities

Residential opportunities on preserved farmland are limited because the development rights on the farm have been purchased. The CADB policies closely follow those of the SADC, which restrict residential opportunities on preserved farmland and govern division of premises, agricultural labor housing, and exception areas. Housing opportunities are subject to municipal approval. Since the publishing of the 2008 Comprehensive Farmland Preservation Plan, there have been limited changes to the state and county policies regarding these policies.

a. Agricultural labor housing

The requirements for constructing agricultural labor housing are less stringent than Residual Dwelling Site Opportunities (RDSOs), provided that the house is for non-family related farm labor. Any number of agricultural units may be constructed on permanently preserved farmland as long as the number of units are commensurate with the agricultural production need. It must also be approved by the Grantee and the SADC, and is consistent with the state's requirements, including the updated soil standards.

Once an agricultural labor unit is no longer inhabited by an agricultural laborer, the unit must be vacated. When labor housing issues are brought up before the CADB, the board looks closely at the application to prevent potential misuse.

b. House Replacement:

The CADB is understanding when it comes to housing replacement on preserved farmland, so long as the applicant is not excessive in their choice for a replacement house. When the existing dwelling is located on the preserved portion of farmland, the request for replacement must first go through the local entity which holds the easement and then submitted to the SADC for approval.

While the CADB understands that there may be a need for expansion of the house footprint, it should be within reason. It will be reviewed on a case-by-case basis by the CADB and SADC.

The location of the proposed replacement dwelling also plays a role in the approval for replacement. It should be sited in such a way that minimizes the impact on the current and future agricultural activities and refrains from taking farmland out of efficient production.

If the dwelling being replaced is located on an exception area, the replacement will not need approval from the CADB or SADC but will be required to comply with local zoning regulations, local approval is always required.

c. Residual Dwelling Site Opportunity Allocation: Residual Dwelling Site Opportunities (RDSOs)

SADC regulations permit up to one dwelling unit per 100 acres of undeveloped farmland including existing dwellings, an RDSO. By designating an area as an RDSO, the landowner is implying that the land will be used for a residential unit or other structure as referred to in NJAC 2:76-6.17. The RDSO must be approved by the CADB and SADC and the purpose of the building must be for single-family residential housing and its appurtenant uses only.

To qualify as an RDSO, the SADC requires that the use of the residential unit be for agricultural purposes where at least one person residing in the residential unit is regularly engaged in common site farm practices. After the farm has been preserved, the landowner may exercise the RDSO, where the location of the dwelling must first be approved by the CADB to ensure it will have minimal impact on the existing agricultural operations.

2. Division of the Premises

The deed of easement sets forth legal restrictions that apply to a farm once it is preserved. Even if the farm consists of multiple lots, whether they are contiguous or not, the farm is effectively tied together under one deed. The goal of the SADC is to preserve large tracts of farmland and, therefore, a division of the premises is not an encouraged practice. However, when division does occur, it must be for agricultural purposes and must result in agriculturally viable land parcels.

When reviewing an application for division, the SADC and CADB consider total tillable acreage, quality of soils, configuration of new parcels, existing agricultural infrastructure, proximity to other farms, proposed agricultural uses, and the benefit to production agriculture. The proposed division will have to pass the SADC's *agricultural purpose test* and *agricultural viability test* which examine how division will impact production activities such as agricultural expansion or diversification, and how viable each parcel will be at sustaining a variety of agricultural operations.

3. Approval of Exception

An exception area is a portion of the farm that is removed from the deed restriction. An applicant may be interested in providing for an exception area if their plans for the future include any non-agricultural production activities such as providing a building lot for a child, operating a non-agricultural business out of the home or a barn, or having the flexibility to replace the home without preservation program approvals. Without an exception area, existing non-agricultural uses cannot be expanded in the future even if they are recognized and allowed at the time of preservation.

There are two types of exception areas: severable and non-severable. Once the farm is preserved, the exception area cannot be moved or expanded, so it is important for landowners to select a location for the exception area that addresses their current and future needs.

The landowner may also consider multiple exceptions so long as the number is not excessive, the size of exceptions is reasonable, and the purpose and planned use of the exception area is sensitive to the farming operation and will not negatively impact the farming use. In all cases, the acreage of exception areas are not included in the final purchase price of the easement.

a. Severable:

Severable exception areas can be subdivided and sold separately from the farm provided it meets local subdivision requirements. While it is not necessary to sever or subdivide the severable exception area prior to preservation, the area should have access to a street with a driveway included in the exception.

The lot size of the severable exception area is typically the minimum lot size for the zoning district in which the property is in. Severable exceptions may present a problem because it introduces a new housing unit which is not necessarily related to the farm itself. Each application is reviewed individually for its suitability on the farm.

b. Non-severable:

The SADC defines non-severable exception areas as areas of the farm which are exempt from the easement restrictions, but which remain tied to the farm and therefore cannot be subdivided, transferred, or conveyed separately from the farm.

A landowner may want to create a non-severable exception area for the land immediately under the existing farmhouse to remove any questions in the future about possible additions or permitted uses in the house. In some cases, a non-severable exception area may be for a future house location, although it is important to consider the feasibility of that location as it pertains to septic suitability, ability to obtain water, road access, wetlands, wetland buffers and special regulations that may apply.

F. Funding Plan

County Funding Sources

As discussed in **Chapter IV**, Gloucester County's Farmland and Open Space Preservation Fund totaled \$45,408,714 in 2023. In addition to annual funds realized through the tax levy, the County has a reserve fund for open space and farmland preservation which it uses to support the acquisition and development of land.

The tax levy has been set at 4 cents since 2004 and the Commissioners remain committed to continuing the levy at that rate. The Commissioners have issued bonds in the past to support this program. A portion of the Trust Fund (7% of the \$45.4 million in 2023) was used for payment of the bond principal and for interest on the bonds.

State Funding

Through the Corporate Business Tax, the SADC has a dedicated source of funding, whereby, from 2020 onward, the disbursement for farmland preservation will be 31% or approximately \$50.8 million. Of this, 96% will be allocated for easement acquisition (approximately \$48.7 million) and up to 4% will be provided for stewardship soil and water grants (at the SADC's discretion to allocate less). Per the SADC regulation, NJAC 3:76-17A.8, this establishes a competitive pot of funds for county and municipal PIGs to access.

In late 2023, the State legislature approved P.L. 2023, c. 245, to amend the Garden State Preservation Trust (GSPT) Act (C.13:8C-38) to authorize the SADC to adopt rules establishing at Statewide Farmland Preservation Value ("statewide formula value, SFV") as an alternative method for valuation of farmland when being preserved. It is anticipated that the new SFV will generate additional interest in the farmland program. The SADC is encouraging those interested in preserving their farms to apply now, allow the state to review the farm and process the application, and then close once the SFV is adopted.

Financial Policies – Cost-Share Requirements

County Preservation Programs: Municipal contributions are not required in the County Easement Purchase or County PIG programs.

Municipal Planning Incentive Grant Programs: Farms preserved through the municipal PIG need to be approved by the CADB only when there is a county cost share. Traditionally, the SADC will fund 60% of the development easement purchase through the municipal PIG program, and the CADB and municipality split the remaining cost share equally, based upon the Certified Market Value. If necessary, the CADB will fund up to 25% of the development easement purchase price.

Donation/Bargain Sale and Installment Purchase

The GCADB is supportive of donation/ bargain sales and has not preserved farms using an installment purchase. Both of these tools serve to leverage limited funding resources.

Donation/Bargain Sale: If the landowner donates a portion of the value of the development rights when an easement is sold, this is called a bargain sale. A bargain sale can result in substantial tax savings for the landowner and can stretch farmland preservation funds. The landowner donation is a reduction in the amount of gain that is subject to the capital gains tax, and the landowner can take a tax deduction for the amount donated against his or her federal and state income taxes.

Cost Projections and Funding Plan Associated with Preservation Goals

Gloucester County is strongly committed to farmland preservation. The County Commissioners have allocated funding to purchase the development easements on farms that have not been ranked high enough by the state to qualify for state cost-share funding. A third of the total County expenditures have been spent on "county buys", where the County is the sole purchaser of development rights. The County does anticipate this may continue into the future, although it remains fully supportive of leveraging its funding with the state on farmland projects. Typically, when the state is a partner, the County contributes 40% of the cost of an easement with the State paying the remaining share.

Tax Levy: Over the past five years the amount raised by the tax levy has grown, on average, approximately 2%:

- \$11,302,836 raised in 2023 (estimated)
- \$10,901,867 raised in 2022
- \$11,232,846 raised in 2021
- \$10,988,870 raised in 2020
- \$10,780,580 raised in 2019
- \$10,700,047 raised in 2018

It is estimated that a similar pattern will follow over the next ten years. In 2023, 84% of the total funds available were allocated for acquisition of land, with 90% of those funds earmarked for acquisition of farmland. The County Commissioners have consistently supported the farmland program at this level and it is anticipated that this allocation will remain unchanged over the next ten years.

Cost Per Acre: Over the past 5 years (2019-2023) the average cost per acre has remained fairly constant, ranging from \$7500 to \$9000, with the high being in 2020:

- 2019: \$7,858 average cost/acre
- 2020: \$9,030 average cost/acre
- 2021: \$7,542 average cost/acre
- 2022: \$6,304 average cost/acre
- 2023: \$7,911 average cost/acre

It is anticipated that the market will likely rise at an incremental rate over the next 10-year period, at 3% per year.

Debt Repayment: The County will continue to pay down the existing bond and their corresponding interest. The Commissioners may consider bonding again if the need arises.

Cost Shares: Utilizing the SADC sliding scale for cost-sharing, and the estimated per acre value of the purchase of a farmland easement in Gloucester County, it is likely that the state will contribute approximately 60% of the funding on a PIG project with the County contributing the remaining 40%. Completing this Farmland Plan Update continues the County's efforts to remain eligible for state funding and to support municipal efforts, through the Muni PIG program, to preserve farms in Gloucester County.

G. Administrative Resources

Staff/Consultant Resources

Gloucester County has an Office of Land Preservation that acts as staff to the CADB and manages the farmland preservation program. The CADB has regulatory oversight for the farmland program and also hears County Right-to-Farm cases.

Legal Support

Legal support for Gloucester County's farmland preservation program is provided by the County Solicitor who works with the Office of Land Preservation.

Database Development and Geographical Information System Resources

The Gloucester County Office of Land Preservation tracks all farmland preservation projects, including their applications and status. The Office of Information Technology houses the Geographic Information System mapping and staff for the County.

The Land Conservancy of New Jersey has provided Geographic Information System mapping services for Gloucester County.

H. Factors Limiting Farmland Preservation Implementation

Competition from solar leases and pending warehouse development applications have been disincentives for farmland preservation in Gloucester County. Funding continues to be a limiting factor for the County's farmland preservation program. The implementation of the state's planned value-based formula for appraising farmland is expected to generate new interest and excitement in the program. The County Commissioners are fully engaged and supportive of protecting the agricultural economy and the farmer in the county. Funding from the state will continue to be an important part of the county's ability to leverage limited resources and secure permanent protection of additional farmland.

As the County grows and develops, the value of the land will continue to rise. Its location near the metropolitan centers of Philadelphia, New York and Delaware make it an attractive location for both residential and commercial development. There is variability in the cost of an easement in the County, but the overall trend is for increases, annually, for agricultural easements. As the County develops, there are competing demands for water and water allocation permits and usage is an ongoing challenge for water usage between residential/commercial areas and farmers for irrigation and crop management. The Gloucester CADB and Board of Agriculture are continuing to work with the NJDEP to meet the needs of their agricultural community and the participation of the SADC is crucial to this process to ensure preserved farmland receive adequate water allocation.

Development pressure continues to be the single largest threat to the agricultural economy and integrity of Gloucester County. The farmland preservation program and proactive planning efforts are the crucial link in ensuring the permanence and success of farming in Gloucester County.



Haynicz Orchard View Market, Elk Twp.

Chapter VI.

Economic Development

A. Economic Development Strategies

The Gloucester CADB and the Office of Land Preservation (OLP) are directly involved with the preservation and sustainability of farming in the County. The Gloucester County Tourism website includes a page for agritourism, as well as wineries and breweries supported by local farms.¹ The NJDA Smart Growth Tool Kit provides information to support government, businesses, non-profits, and local citizens in their efforts to achieve the goals and objectives outlined in the NJDA Agricultural Smart Growth Plan for *New Jersey*.² The Tool Kit embraces the five linked components that have been identified by NJDA as critical for the future of farming:

- Farmland Preservation
- Innovative Conservation Planning
- Economic Development
- Agriculture Industry Sustainability
- Natural Resource Conservation

The NJDA issued its 2011 Economic Development Strategies to expand and enhance various subsets of the agricultural industry of New Jersey.³ This includes produce, horticulture, aquaculture and seafood, dairy, field and forage crops, livestock and poultry, organic, equine, wine, and agritourism. While markets are still there, competition has become tougher. New Jersey must continually improve its competitive advantages, increase access to nearby markets, and strengthen consumer loyalty. Major efforts by the NJDA are directed at increasing the demand for New Jerseygrown produce through branding, agritourism, farm direct sales programs, and farm markets. The NJDA is committed to promoting agritourism through the Jersey Fresh <u>website</u>⁴ and collaboration with Rutgers University through the New Jersey Agricultural Experiment Station (NJAES-RCE), and promotion of the NJ Farmers Direct Marketing Association.

The 2011 Economic Development Strategies for produce, focused on the Jersey Fresh program and food safety. NJDA's Jersey Fresh labels program is promoted throughout the state, to strengthen the appeal of the Jersey Fresh brand to supermarket chains and other retailers. This has been largely successful, with major retailers such as Wegmans, ShopRite, Trader Joe's, Target, ACME, and Foodtown (among others) carrying and promoting produce from Jersey Fresh.

The NJAES-RCE continues research on new varieties of crops resistant to pests and disease and identify new methods of pest control. Monitoring livestock and dairy farms for disease will maintain the size and health of herds and provide dairy farmers with biosecurity and disease control.

In 2015, the Delaware Valley Regional Planning Commission (DVRPC) completed the *gc2040: Community Vision for Gloucester County*.⁵ Although not the main focus of the vision, goals surrounding agriculture and intertwining industries were involved in the vision and should play an important role as the county moves forward. It recommends that to attract new residents and visitors to the County efforts should be made to advertise the County's recreational/cultural attractions and agricultural tourism opportunities. This includes an emphasis placed on people who pass through the County to reach the Jersey Shore.

To maintain the County's rural character, DVRPC emphasizes the need to preserve open space, natural and wooded areas, and farmland. The report recommends the County increase the variety of local amenities desired by residents, such as farm stands.

As agritourism continues to grow as a major element of Gloucester County's agricultural economy, the introduction of new destination events to draw in residents and visitors can be centered around agriculture. The farm-to-table movement is being marketed to attract visitors and encourage farmers to pursue niche and high-quality products on smaller farms. Behind-the-scenes tours, "pick-your-own" activities, overnight farm trips, and winery tastings are activities that draw residents and tourists to spend money within the agricultural system.

Opportunities for promoting produce (and, in many cases, numerous other agricultural products) include:

- NJDA Jersey Fresh.
- Rutgers New Jersey Agricultural Experiment Station Cooperative Extension (NJAES-RCE) created an educational <u>website</u> dedicated to agritourism for the public, planning and policy professionals, farmers, and educators.⁶ A training <u>website</u> was also developed by the Rutgers Agritourism Team for farmers.⁷
- The New Jersey's Heartland <u>website</u> helps promote the local farmers markets within Atlantic, Cumberland, Gloucester, and Salem Counties along with many other community events to help promote small businesses within South Jersey.⁸ There are currently twenty listed farmers markets in Gloucester County on the website.⁹

They can be found <u>here</u>. They also give anyone the ability to add a farmers market that is missing from the list by going to their contact page. Each farmers market can upload a brief description and include information such as location, website, and schedule.

The NJDA identified the following strategies to support farmers:

- Farmland Assessment: Supporting farmers in filling out applications, and tax assessors in determining eligibility.
- Crop Insurance: Implementing an education initiative with the USDA Risk Management Agency and Rutgers Cooperative Extension to increase knowledge among farmers.
- Technical Assistance: The NJ Uniform Construction Code for farm buildings and the Real Property Appraisal Manual.
- Recycling and Food: Increasing participation in agricultural plastics recycling programs and finding markets for soon-to expire and expired foods.
- Motor Vehicle Requirements: Information about regulations, license plates for farm vehicles, and vehicle related provisions.
- Financing: Information on federal, state, and commercial lending institutions financing agricultural loans.

B. Agricultural Industry Retention, Expansion, and Recruitment Strategies

Using the diversity of agricultural commodities to broaden the agricultural base would help address any economic downswing in either the general economy or a specific sector of the County's agriculture industry.

1. Institutional

a. Farmer Support

The NJDA Farm Link Program serves as a resource and referral center for farmers seeking access to land and landowners who have farmland and business opportunities available. Both farmers and landowners can use the resource pages to find more information on getting started in farming, leasing land, finding farmers/ landowners, and developing farm transfer and succession plans.¹⁰

The Farm Link Program through NJDA supports farm transfer, succession, and retirement planning. Two other resources available to farmers through the SADC are a *New Jersey Farmland Leasing Guidebook*,¹¹ created as part of the Beginning Farmer Grant Project,¹² and the *New Jersey Agricultural Mediation Program Handbook*, subtitled "A Guide for Farmers, Neighbors and Municipalities."¹³

The SADC introduced a new program in 2024 to help new and beginning farmers address the challenges they face when getting started and to help them establish viable farming options. The Next Generation Farmers Program's goal is to develop and implement a comprehensive system to identify, train, equip, and support the next generation of farmers. The SADC is set to release a report in the Spring of 2025 highlighting the challenges and barriers faced by next-generation farmers, their current landscape of support, and recommendations for addressing those challenges.¹⁴

In addition, the state, NJAES-RCE, Northeast Organic Farming Association of New Jersey (NOFA-NJ) and supply companies, provide seasonal workshops for farmers. NOFA-NJ hosts an annual conference, monthly open houses, and weekly technical assistance meetings.¹⁵ Another opportunity is the NJ Agricultural Society's New Jersey Agricultural Leadership Development Program (NJALDP), administrated by Burlington County College.¹⁶ NJALDP is a two-year professional development program for individuals in farming and agribusiness. NJALDP participants explore various agricultural topics and establish an agricultural network throughout the State.

An education experience for youth is the School Gardens initiative funded by Team Nutrition Training mini-grants provided by the USDA, the NJDA and Grow Healthy, a program of the NJAES-RCE. This is a hands-on way to educate children about the importance of farming. Expanding this program to more schools in Gloucester County would be a great way to increase the awareness of both students and their parents about the benefits and value of the agricultural industry in the County.¹⁷

The Foodshed Alliance's Sustainable Agriculture Enterprise (SAgE) program is designed to make preserved farmland accessible to emerging, expanding, and underserved farmers with affordable longterm leases. Through this program, the Foodshed Alliance works with land trusts, municipalities, and other land owners that hold deed restricted farmland to offer farmers access to affordable 10-year, renewable lease agreements. SAgE leases individual plots to regenerative farm businesses who are committed to growing with organic practices. As of 2024, there are currently three SAgE Farm locations across Sussex, Warren, and Hunterdon Counties, with 12 farm businesses in the program.¹⁸

b. Marketing / Public Relations Support

The OLP, the NJAES-RCE, and the state can help by communicating to farmers the availability of various free promotional channels such as the Jersey

Fresh, Jersey Bred, Jersey Grown, Jersey Equine, Visit NJ Farms,¹⁹ the South Jersey Tourism Council,²⁰ and the Gloucester County tourism website. For those farmers who want paid advertising or free media coverage, web resources can help with the planning. For example, the New Jersey State Horticultural Society website publishes ad rates for its quarterly newsletter, Horticultural News.²¹ Community Involved in Sustaining Agriculture²², a nonprofit organization in western Massachusetts, offers a Basic Marketing Practices manual, and the Agricultural Marketing Resource Center devotes an entire section to promotion, including web promotion, advertising, publicity and promotional materials.²³

Signage. Municipal considerations of the farmer needs when drafting their sign ordinances can help support efforts to promote agricultural products. Signs that give directions to the farmstand and let customers know what's available. Having farm-friendly ordinances in place can make it easier for farmers to promote their products and can minimize right-to-farm complaints. Farm signage also can benefit the municipality by drawing more visitors to the area.

For farmers who qualify for the Jersey Fresh marketing programs, signage is available. Jersey Fresh point-of-sale signs and other materials, both free and fee-based, can be ordered using the pointof-purchase application on the NJDA's Marketing and Development Jersey Fresh page.²⁴

Getting the Word Out. The County and the NJAES-RCE can help promote agricultural activities. Examples include:

Gloucester County's website for Health & Human Services²⁵ explain that those who qualify for the Senior Farmers Market Nutrition were eligible to receive \$50 at 14 participating farmers markets in 2024.

- Development of media contacts at local and online websites, and follow-up with those contacts to encourage publication of the information.
- The NJAES-RCE distributes press releases and publishes them on its website and via Facebook.
- The County Office of Public Information can promote press releases to the media and post them on the website.
- Inclusion on the "Gloucester County Agriculture Updates" newsletter.
- State agencies, such as the SADC Jersey listings, the Visit NJ calendar of events, and the Visit NJ Farms website.

c. Community Farmers Markets

Community Farmers Markets and farm stands eliminate the need for distributors and help farmers realize a more direct profit from on-farm and market sales. Farmers markets create a centralized location for local farms and businesses There are currently at least twenty farmers markets in Gloucester County. Their operating season and hours vary. Community Farmers Markets can be found both on the Gloucester County Tourism and the NJ Heartland websites.

d. Community Supported Agriculture

Advantages of a farm which has a CSA (Community Supported Agriculture) include time efficiency, eliminating or minimizing labor and transportation costs of selling at community markets, or the time and labor of running a farmstand. A CSA can control scheduling of pick-ups to utilize existing farm personnel in labor downtimes. Similar to farmers markets, CSAs have been gaining in popularity for locally grown, accessible food.

e. Agricultural Education & Outreach

Rutgers Cooperative Extension of Gloucester County (RCE)

The goals of the RCE are to ensure healthy lifestyles, productive futures, protection, and enhancement of environmental resources, ensure economic growth and agricultural stability, and improve food safety and nutrition.

The Department of 4-H Youth Development provides educational outreach programming for children grades K-13 through 4-H clubs, special interest programs, school enrichment, and afterschool childcare and education programs. Clubs tailor their programs to promote activities and education that expose youth to agriculture and farming.

The Cooperative Extension assists commercial agriculture operations through research and demonstrations related to tree fruit, small fruit and vegetable crop management, and implementation of Integrated Pest Management Systems (IPM). This program also provides soil testing, plant diagnostics, pesticide manuals,, and offers various educational and networking events throughout the year.

NJ Agricultural Experiment Station (NJAES)

Programs focus on commercial agriculture and horticulture, fisheries and aquaculture, environmental and resource management, farm business development and marketing, pesticide safety training, IPM, and other related subjects. Educational sessions and workshops are offered as well as consultations in coordination with the Cooperative Extension County Offices. The Office of Continuing Professional Education (OCPE) provides educational opportunities for adults and adolescents through short courses, workplace training, and youth services. Extension Specialists throughout the state generate researchbased information and solutions in the areas of agriculture, food and nutrition, environmental sciences and natural resources, and youth development. Their expertise and programs are delivered through NJAES in Clarksboro.

Rutgers University School of Environmental and Biological Sciences

The School of Environmental and **Biological Sciences (SEBS) includes** undergraduate study programs in agriculture; biology, ecology, and environmental sciences; food, nutrition, and health. The Department of Animal Sciences offers a Farm Tour Program for young children and adults to learn about their cattle, goats, horses, pigs, and sheep facilities. Also at Rutgers University, the Equine Science Center at SEBS develops and shares equine-related research with the public and equine community. They are recognized locally and globally as a neutral, credible source regarding the economic impact of horses and the equine industry as it relates to horse racing.

Other

The County Commissioners, CADB and OLP can reach out to Rowan College in Gloucester County regarding the feasibility of introducing agricultural curriculum, adding continuing education workshops/ courses for agricultural operators or serving as a host location or sponsor, perhaps in concert with NJAES-RCE to keep farmers up to date on best practices, new technologies, and market trends.

2. Business

a. Input Suppliers and Services

Gloucester County farmers obtain farm supplies from a number of sources in and around the County. The RCE in Salem County had compiled a list of service providers for the agricultural community. However, this website is no longer operational, and the latest update was in 2021. Gloucester County has a number of veterinary offices and animal hospitals. The most recently updated list of veterinary practices was created for Gloucester County's Emergency Management Plan. Chapter II, Section C includes a more detailed description of the support services within Gloucester County and a list of veterinary practices.

Two county operations are listed on the Jersey Grown website as certified suppliers of nursery products The NJ Nursery & Landscape Association's "Find-a-Member" search option lists 14 growers, nurseries, landscapers, and related establishments in Gloucester County.

b. Product Distributors & Processors

Field and forage crops – Hay and other forage crops are generally sold locally, to other farms and equine operations, to landscapers, nurseries and farmstands as baled straw, or kept for the farmer's own livestock and other uses. About 80% of the hay that's grown in the County stays in the County; the rest goes to neighboring counties, except for a small number of round bales, which go to Kennett Square in Pennsylvania for mushroom compost. Most farmers sell directly from the farm.

The large growers of grain crop, such as corn and soybeans, contract to price with Perdue, trucking their product to a drop-off station in Bridgeton, Cumberland County. Operations with a larger inventory of livestock, of which there are five in the County, generally grow their own feed, but some grain crops are also sold locally to small farmers with a few animals.²⁶

Produce – There is a large acreage of processing vegetable crops, but a limited number of farms growing processing crops, and one commercial food processing operation in Swedesboro processes peppers. Peppers are one of the largest acreage crops for commercial vegetable farms in the County. Most of the fresh vegetables grown go to produce wholesale brokers and direct marketing. Besides, direct-to-wholesale brokers (mainly in Vineland, NJ) farmers also sell to terminal markets in Philadelphia, New York City, Boston, and Baltimore.

In addition, businesses that are brokerspackers-shippers are also involved in buying and distributing produce grown in the County and have facilities in the Pure Land Complex in Logan Township and in the industrial parks in West Deptford Township. Several growers ship and market their produce up and down the East Coast, sending out wholesale tractortrailer loads of product to large chain stores, and some work with East Coast Growers in Cumberland County, which markets as far away as Kansas.

There has been an uptick in farmers starting on-farm direct to the public farm markets, and increased activity at community farm markets such as Collingswood, Woodstown, Wenonah, Margate City and Ocean City, NJ, and Lansdowne, PA, and others.²⁷ Some of the larger peach growers belong to the NJ Peach Promotion Council, which helps connect buyers and merchandisers with growers and shippers. Several have hydrocooled storage facilities and ship directly to buyers.²⁸ *Livestock* – Harker's Auction in Tabernacle (small livestock every Saturday and horse sales on third Fridays), the Livestock Cooperative Auction Market in Hackettstown, Morris County, and Cedar Lanes Feed and Auction in Salem County are the only remaining livestock auctions in the state; there are several livestock auction markets in Maryland and Pennsylvania.

3. Anticipated Agricultural Trends

a. Market Location and Product Demand

From a historical perspective, livestock sales, at \$6 million in 2022, have declined below their 2017 level of \$7.6 million. Crop sales increased between 2017 and 2022 from \$94.8 million to \$130.5 million.

Nursery and greenhouse crops should continue to be a healthy and viable agricultural sector. It has historically been one of the most profitable sectors since 1992 and currently accounts for 53% of all agricultural sales. It uses a relatively small amount of land, and although it requires higher input costs, the products have higher market value than most other agricultural goods.

Vegetables have also experienced steady value increases and are a historically strong sector in Gloucester County. Vegetables make up 31% of crop sales in the County but only 16% of all harvested cropland. Like nursery and greenhouse crops, vegetables require higher input costs which helps reduce their net value.

Please see **Chapter II** for more information on current agricultural trends.

b. Potential Growth

Value-added products can bring additional income to farms involved in

direct marketing through farm stands and websites. Direct marketers can capitalize on the advantages of selling at retail rather than wholesale, selling from their location rather than having to pay transport costs.

Farmers may also adapt to increased demand for organic and natural goods. Rather than undertake the three-year process for federal organic certification, many farmers may lean toward "natural" farming methods for food crops and livestock. Similarly, an increase in interest in locally grown products may encourage more farmers to have farm stands and on-farm markets and include value-added home-made items.

Another potential avenue to increase sales and product demand is to the viability of wine, beer, and cider production and capitalize on the agritourism industry through tastings and other special events. Wine made from grapes, cider from apples, mead from honey, and beer made from wheat, barley, hops, and a variety of herbs can all be traced back to original ingredients grown on a farm.

Current legislation (N.J.S.A. 33:1-10 (1)(b)) and associated Special Rulings by the Division of Alcoholic Beverage Control do not allow for food to be sold on location or for a restaurant to operate on the premise of a winery or brewery, and retains the stipulation that tastings and sale of beer can only be in conjunction with a brewery tour. Despite this, new breweries have already found success in New Jersey and Gloucester County. This legislation also creates a cidery license permitting cider makers to sell hard cider to wholesalers, retailers, and consumers on or off-site.

Whether farmers are interested in opening a brewery, cidery, or winery, or in providing products to the growing number of establishments in the state, the combination of agritourism, valueadded products, new legislation, and marketing from beer and wine industries is making such endeavors more attainable. In Gloucester County, some organizations include:

- Gloucester County Tourism
- Garden State Wine Growers Association
- New Jersey Brewer's Association
- New Jersey Craft Beer

c. Other Potential Improvements

Using computer programs that help track production and expense data and test alternative variables will help increase profitability:

- FINPACK, Financial Software for Agricultural and Farm Management, evaluates a farm's financial position, explores alternatives, and makes farm management decisions. The software can conduct commercial and agricultural credit analysis, loan portfolio stress testing, create accurate pictures of financial situations, projections of future financial scenarios, and import data directly into plans.
- UltraFarm software exports to FINPACK and Microsoft Excel and is an accounting software that handles inventories for crops and livestock, payroll, and check writing. The software also can perform a complete enterprise analysis and uses both book and market values for products.
- FBS Systems Inc. Agriculture XPRT, is an agriculture accounting software, crop production software, livestock production software, and financial analysis software. Field application and harvest data can be imported from third party technologies to create field and crop histories and inventories. For livestock operations, the software offers tools for record-keeping, production

analysis, and planning, tracing animal inventories and feed movement, and reporting information to accounting software.

- CenterPoint Accounting for Agriculture is a Redwing software with accounting capabilities, a general ledger, production analysis tools for detailed crop and livestock information on a cost-per-unit basis, budgeting and forecasting tools, asset and liability tracking, inventory management, sales order, and purchase order modules.
- EasyFarm offers a service to track livestock and crop production and sales, check writing, payroll, and farm management. This software also allows users to print tax reports, manage liability accounts, manage asset accounts record current values, and manage household expenses separate from the farm.

Value Added Products is one of the best strategies farmers can employ to improve net profitability, open new markets, enhance the public's appreciation for the farm, and extend the marketing season. The key benefit in value-added products is that it offers farmers the potential to capture a larger share of the food dollar.

Economic development through

preservation: Selling a development right is cashing in a non-performing asset which can create new options for the farm, including transferring property to the next generation, creating new markets, improving the existing operation, or expanding into new ones.

Agricultural Enterprise District (AED):

AEDs began in Cumberland County and are included in the *Cumberland County Farmland Preservation Plan* as a potential preservation mechanism. Modeled after Urban Enterprise Zones, an AED would provide economic development advantages, particularly to preserved farms, and use taxes from farmassessed land to seed the formation of an economic development corporation and a program to support agriculture. It can be created by a county or a municipality and is designed and run by farmers and provides a mechanism to do so through specially conceived agricultural economic development.

4. Agricultural Support Needs

The American Farmland Trust considers a full-time agricultural economic development effort within a farmland preservation program essential to ensure the viability of farm operations into the future, finding ways to assist farmers in diversifying, changing crops, developing business plans, and helping them incorporating new or value-added crops and direct marketing, encouraging the continued development of agritourism and focusing on ways to reduce the costs of production. Fortunately, the state and the NJAES-RCE are actively involved in this process and.

a. Agricultural Facilities and Infrastructure

Regulatory and technical assistance is of most importance to farmers:

- Municipal support through flexible land use regulations and ordinances that take into consideration the special needs of the agricultural operations.
- Help with financial and planning matters through workshops and other educational and counseling services.
- Support and encouragement of agricultural suppliers in Gloucester County.
- Solution based planning between local, county and state regulators to ensure adequate water resources to meet the

needs of County farmers now and in the future.

b. Flexible Land Use Regulations

The New Jersey State Development and Redevelopment Plan recognizes that preserving the state's farmers and the agricultural industry that supports them is as important as preserving the state's farmland.²⁹ Helping the agricultural industry grow and expand will set it up to resist development pressures and help the state contain sprawl. Under the plan, statewide policies are designed to provide an effective strategy to plan for farming and its future economic growth and development. The State Plan recognizes that the agricultural community supports equitable and feasible density-transfer methods such as clustering to coordinate preservation planning and regional growth management.

The *State Plan* is currently in the process of being updated and should be completed by 2025. Its goals include protecting and enhancing scenic areas, open space and areas as well as promoting economic growth.³⁰

In conjunction with the *State Plan*, the NJDA's *Smart Growth Plan*³¹ connects farmland preservation efforts with economic development strategies and marketing opportunities. Ensuring regulations and programs are flexible and supportive of the farming community will also ensure the strength of the food and agriculture industry statewide. Examples where regulatory flexibility is important are the:

- NJDEP's Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:13-et. seq.), which grants exemptions for agricultural activities, and the
- Flood Hazard Area Control Act Rules (N.J.A.C. 7:13). The latter was adopted

in 2007 and amended last in June 2019, with amendments for agriculture effective June 2016, including numerous agricultural permits.

The *Cluster Development Bill* (August 2013) amends the Municipal Land Use Law (MLUL) to provide municipalities with more effective, fair, and affordable tools to plan for livable neighborhoods and districts while preserving farmland, open space, and historic sites. Under this bill, municipalities are authorized to specify minimum and maximum lot sizes and dimensions allowing for more compact development forms and choosing options for permanent preservation of land.

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

- Setting specific buffer standards for non-farm development adjacent to working farms that help to limit trespassing and littering and also protect the residential landowner from dust and spray materials spread during farming activities, thus minimizing potential Right to Farm conflicts.
- Code or ordinance provisions requiring developers to notify purchasers of the proximate existence of active agriculture.
- Exemptions for certain farm structures from building height restrictions.
- Allowing additional dwelling units on farms in order to meet the needs of farmers for additional housing for their children or for farm managers.
- Exemptions from setback requirements when farmers seek to expand an existing nonconforming structure.
- Flexible fencing ordinances that make allowances for types of fencing on

farms that might not be desirable in residential zones, in consideration of the farmers' needs to prevent wildlife damage.

 Construction fee reduction for agricultural buildings.

Planning and zoning to maintain and enhance agricultural viability is critical to preserving both farmland and agricultural operations.

c. Agriculture Representation in Economic Development Organizations

The Department of Economic Development recognizes that the county has a diverse mixture of businesses, including agribusiness.³² The economic impact of farming contributes to the vast assortment of food options that the County produces. The County Chamber of Commerce includes agritourism operators, winemaking, and winery businesses among its members. Reaching out to more farmers and agricultural businesses to have include their input will promote and strengthen this economic sector.

5. Agricultural Support Implementation

The NJAES-RCE continues to be a source of support to local farmers, helping them adapt to new technologies, introducing new farming practices to improve efficiency, and keeping farmers up to date with market trends. With the rise of online shopping, more and more people are choosing to order products, including agricultural products, from their own homes. The NJAES-RCE can work with local farmers in expanding their presence to the web. Information regarding services tends to be dispersed throughout different organizations. Streamlining access to resources would improve the visibility of available resources and improve access to information and assistance programs.

Federal agriculture support can be found on the USDA's Grants and Loans webpage ranging from farm loans, housing assistance, rural development loan and grant assistance, beginning farmers and ranchers, livestock insurance, specialty crop block grant program, the farmers market promotion program, and the organic cost share program. In a number of these federal programs, the government will assist farmers in the design, implementation, and cost of projects.³³ New farmers (with less than ten years of farming experience) have access to webinars, lectures, and service centers to help their business. Similarly, small-to-mid-sized farmers also have access to educational resources, as well as financial assistance programs such as the Farm Storage Facility Loan (FSFL), microloans, Value Added Producer Grants, and Socially Disadvantaged Group Grants. Organic farmers can access the Organic Certification Cost Share Program (OCCSP), in which farmers may receive up to 50% of their certification costs. Sustainable Agriculture Research and Education (SARE) is a USDA competitive grants program that helps build the future economic viability of agriculture in the United States. These funds provide grants for farmers.

State agriculture support includes the 2024 Specialty Crop Block Grants, Wine Industry Project Grants, Soil and Water Conservation Grants, Risk Management and Crop Insurance Education, Junior

Breeder Loan Fund, Organic Cost Share, and Farm to School Mini-Grants. More information can be found through the NJDA and on its <u>website</u>.³⁴ Support also comes via the state, county and municipal farmland preservation programs.

The **New Jersey Farm Bureau** is a private, non-profit membership organization that represents the agricultural producers and enterprises in New Jersey at all levels of government. The NJFB advocates for farmland preservation, environmental regulations, wildlife and water issues, and legislation relating to agricultural labor and the Right to Farm. Through grants, initiatives, and partnerships, the NJFB educates the public about the agricultural industry and offers farmer training and education programs.

Literature Cited

Chapter 6

1 Gloucester County Tourism. <u>https://www.gloucestercountynj.gov/1373/Gloucester-County-Tourism</u>. Accessed October 2024.

2 New Jersey Department of Agriculture. Agriculture Land Use Planning. Planning for Agriculture Toolkit. <u>http://www.nj.gov/agriculture/divisions/anr/agriassist/smartgrowth_toolkit.html</u> Accessed July 2024.

3 New Jersey Department of Agriculture (NJDA). 2011 Economic Development Strategies. <u>http://www.nj.gov/agriculture/pdf/11EcoDevStrategies.pdf</u> Accessed July 2024.

4 Jersey Fresh. <u>https://findjerseyfresh.com/JerseyFresh</u>. Accessed October 2024.

5 Delaware Valley Regional Planning Corporation. *gc2040: People, Place, Prosperity - Community Vision for Gloucester County*. (2015) <u>https://dvrpc.org/products/15051</u> Accessed July 2024.

6 NJAES-RCE. *New Jersey Agricultural Experiment Station*. <u>https://njaes.rutgers.edu/</u> Accessed July 2024.

7 NJAES-RCE. Extension Training for Agritourism Development. <u>https://agritourism.</u> <u>rutgers.edu/training/modules.html</u> Accessed July 2024.

8 New Jersey's Heartland. <u>https://njheartland.org/</u> Accessed July 2024.

9 New Jersey's Heartland. *Farmers Markets in Gloucester County*. <u>https://njheartland.org/</u> <u>live/farmers-market-in-gloucester-county/</u> Accessed July 2024.

10 Farm Link. <u>http://www.nj.gov/agriculture/sadc/farmlink/</u> Accessed July 2024.

11 New Jersey Farmland Leasing Guidebook. <u>https://www.nj.gov/agriculture/sadc/documents/farmlink/resources/leaseguide2.pdf</u> Accessed July 2024.

12 NJDA. SADC. Project to Enhance Leasing and Linking Resources. <u>http://nj.gov/agriculture/sadc/farmlink/resources/leasingproject.html</u> Accessed July 2024.

13 NJDA. SADC. Agricultural Mediation Program. *Agricultural Mediation Program* Handbook. <u>http://nj.gov/agriculture/sadc/agmediation/</u> Accessed July 2024.

14 NJDA SADC, Next Generation Farmers, <u>https://www.nj.gov/agriculture/sadc/nextgen/</u> Accessed October 2024.

15 NOFA-NJ. Events. https://nofanj.org/events/ Accessed July 2024.

16 New Jersey Agricultural Society. *New Jersey Agricultural Leadership Development Program (NJALDP)*. <u>https://www.njagsociety.org/ldp-graduation.html</u> Accessed July 2024.

17 Grow Healthy Gloucester County. <u>https://gloucester.njaes.rutgers.edu/fchs/grow-healthy/</u> Accessed July 2024.

18 Foodshed Alliance. (2022, September 9). Sustainable Agriculture Enterprise (SAGE) Foodshed Alliance. <u>https://foodshedalliance.org/sage/</u> Accessed July 2024.

19 Visit NJ Farms. <u>https://visitnjfarms.org/</u> Accessed July 2024.

20 Visit South Jersey Tourism Council. <u>https://visitsouthjersey.com/</u> Accessed July 2024.

21 New Jersey State Horticultural Society. <u>http://www.horticulturalnews.org/advertising.</u> <u>pdf</u> Accessed July 2024.

22 CISA (Community Involved in Sustaining Agriculture). Resources for Farmers. *Tipsheets and Resources*. <u>https://www.buylocalfood.org/resources-for-farmers/tipsheets/</u> Accessed July 2024.

23 Agricultural Marketing Resource Center, <u>https://www.agmrc.org/</u> Accessed July 2024.

24 NJDA Marketing and Development. *JerseyFresh*. <u>https://www.nj.gov/agriculture/</u> <u>divisions/md/prog/jerseyfresh.html</u> Accessed July 2024.

25 Health and Human Services Gloucester County. *Farmer's Market Nutrition Information*. <u>https://www.gloucestercountynj.gov/814/Senior-Farmers-Market-Nutrition-Program</u> Accessed July 2024.

26 Personal communication with Michelle Infante-Casella, County Agricultural Agent. October 2014.

27 Personal communication with Michelle Infante-Casella , County Agricultural Agent. August 2024.

28 New Jersey Peach Promotion Council. <u>https://jerseypeaches.com/</u> Accessed July 2024.

29 Official Site of the State of New Jersey. Office of Planning Advocacy. *State Development and Redevelopment Plan* (2001). <u>https://nj.gov/state/bac/planning/state-plan/planning-areas/</u> Accessed September 2024.

30 Official Site of the State of New Jersey. Office of Planning Advocacy. Update to State Development and Redevelopment Plan (2025). <u>https://nj.gov/state/bac/planning/state-plan/development/</u> Accessed September 2024.

31 NJDA. Agricultural Smart Growth Plan for New Jersey. (2006). <u>https://www.nj.gov/agriculture/pdf/smartgrowthplan.pdf</u> Accessed September 2024.

32 Gloucester County. *Economic Development*. <u>https://www.gloucestercountynj.gov/397/</u> <u>Economic-Development</u> Accessed August 2024. 33 U.S. Department of Agriculture. *Grants and Loans*. <u>https://www.usda.gov/topics/farming/grants-and-loans</u> Accessed August 2024.

34 NJDA. Grant Information. <u>https://www.nj.gov/agriculture/grants/</u> Accessed August 2024.



Holly Acres, Elk Township

Chapter VII.

Natural Resource Conservation

When monitoring preserved farms, the County takes advantage of the opportunity to discuss the importance of natural resource conservation and the programs available to help farmers protect the land and water.

A. Natural Resource Protection Coordination

1. Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) helps conserve natural resources on private lands throughout the country through its programs and initiatives. They provide education, costsharing, and financial incentives.¹ The local NRCS office serving Gloucester and Salem Counties is located at 51 Cheney Road in Woodstown. Gloucester County farmers may contact this NRCS office for technical assistance with conservation issues (see **Table VII-1**).² NRCS personnel also will reach out directly to landowners if they know of a farmer who requires assistance or can use the guidance of their staff.

Within one year of selling their development easement, owners of preserved farms are required to submit a Conservation Plan. This plan is also required to apply for NRCS conservation programs. The NRCS helps

Table 1. NRCS Contact Information for Gloucester County			
Title	Name	Extension	
District Conservationist	Mona Peterson	3142	
Resource Conservationist	D. Bryan Stimpson	3149	
CET	Ryan Hicks	3147	
Soil Conservationist	Vacant		
Civil Engineering Technician	Ashley Hines	3150	
State Biologist, South & Central Support	Betsy McShane	3136	
Environmental Compliance Coordinator	Betsy McShane	3136	
Program Assistant	Mary Fyre	3152	
Source: NJ NRCS Directory, October 2024			

to prepare these plans for farmers. It is a record of management decisions and conservation practices planned for the farm. After soil, water, air, plant, and animal resources on the property are inventoried and evaluated, the NRCS Soil Conservationist will review alternatives with the landowner. If all five elements are included, they are referred to as Resource Management Plans. This becomes a tool for better management of the natural resources on the property and can be used to direct the landowner to available programs, such as the Farm Bill Programs (see Resource Protection Programs and Funding below), designed to help implement conservation on private lands.³

The local NRCS office administers the conservation programs, which offer financial incentives to support conservation projects, including riparian buffers and wildlife habitat. The Gloucester County Soil Conservation District (SCD) approves all Conservation Plans and program contracts.

NRCS technical guides used in each field office are localized so that they apply specifically to the geographic area for which they are prepared.⁴ Conservation practices pertinent for, and used in Gloucester County, include:

- Riparian buffers, including necessary buffer widths and appropriate plant species;
- No-till and minimum-till practices;
- Prescribed grazing and pasture rotation;
- Grassed waterways;
- Nutrient management, including manure and fertilizers; and,
- Animal waste control, including heavy-use area concrete protection pads, which keep animal waste off the ground, and animal waste storage facilities, both of which minimize manure contact with soils, groundwater, and surface water.

The phone number for the local NRCS office is **856-769-1126**, Ext. 3. The District Conservationist is Mona Peterson, who can be reached at <u>mona.peterson@nj.usda.gov.</u> Ms. Peterson and her staff (**Table VII-1**) can be contacted by Gloucester County farmers for assistance, and more information on the availability of NRCS programs in the County.

2. Gloucester County Soil Conservation District

The NJDA Division of Agricultural and Natural Resources implements the Natural Resource Conservation Program administered by the State Soil Conservation Committee (SSCC). The Division provides technical standards to sites regulated by the NJ Soil Erosion and Sediment Control Act program, and policies and procedures associated with the Stormwater Permitting program.⁵

The SSCC coordinates and supports the work of the state's 15 local soil conservation districts (SCDs).⁶ The SCD programs and services include agricultural conservation planning assistance, agricultural conservation cost-sharing programs, application of organic materials on agricultural land, agricultural water supply and management, soil erosion and sediment control, stormwater discharge authorization, and soil surveys.⁷

The Gloucester SCD works with the NRCS, providing survey assistance, engineering design, and plans. The Gloucester SCD implements four major programs:

- Soil Erosion & Sediment Control Act
- Conservation Assistance Program
- Conservation Education and
- Stormwater Management Program⁸

NJ Agricultural Experiment Station, Rutgers Cooperative Extension of Gloucester County (NJAES-RCE)

The NJAES-RCE provides both field and technical research that is focused on best management practices (BMPs) for farmers, to ensure the long-term viability of both the agricultural economy and the natural resources upon which it is based. Its Agriculture and Natural Resource Management program assists with soil testing, identification of plant pests, agricultural marketing education, pesticide safety, water resources, farm management, and other land use topics.⁹

The NJAES-RCE of Gloucester County is located in the Shady Lane Complex at 254 County House Road in Clarksboro. They may be contacted by email at <u>gloucester@njaes.rutgers.edu</u> or by phone at 856-224-8040.

NJ Department of Environmental Protection (NJDEP) Division of Parks and Forestry

In 2020, the NJDEP's Division of Parks and Forestry, offers conservation programs and cost-share opportunities. The Forest Service (NJFS) published the *NJ State Forest Action Plan*, a 5-year reassessment of the state's forest resources and a 10-year strategic plan.

Properties in Gloucester County that are farmland assessed may include extensive woodland tracts. Such tracts were added as farm products in the 1970s. The NJ Farmland Assessment program tracks the stewardship and management of privately owned productive forest lands under farmland assessment. This totaled 228,000 acres in 2020. Properties actively engaged in agriculture may be assessed at their productivity value instead of their development value. The Division of Parks and Forestry, Bureau of Forest Management (BFM), reviews farmland assessment applications that include Woodland Management Plans (WMPs).

There are two classifications of woodlands: appurtenant (or attached) and non-appurtenant (or unattached):

Non-appurtenant woodlands must be utilized by the farmer as a sustainable "product" and require WMPs to qualify.

- Non-appurtenant woodlands are woodland acreage on a farm over and above total farmed acreage (tilled and pasture). If 50 acres of a farm are tilled or pastured, and there are 125 acres of woodlands on the farm, 75 acres of woodlands would be non-appurtenant (125 woodland acres minus 50 tilled acres).¹⁰
- Appurtenant woodlands are woodland acreage on a farm less than or equal to farmed acreage. In the preceding example, 50 of the 125 woodland acres would be appurtenant. Appurtenant woodland acres do not require a WMP to qualify for farmland assessment.¹¹

In 2023, Gloucester County recorded 9,520 acres of appurtenant woodland and 14,384 acres of non-appurtenant woodland (**Table VII-2**).

USDA Forest Service Forest Stewardship Program

The USDA Forest Stewardship Program provides technical and financial management assistance for the stewardship of forest resources. This program is sponsored through the US Forest Service (USFS) and administered locally by the NJFS. Through the program, woodland owners may be eligible for reduced property taxes if they follow a state-approved forestry plan written by a consulting forester.

The Gloucester County SCD office is located at 545 Beckett Road, Suite 107 in Swedesboro. The phone number is (856) 589-5250, and its District Manager is Karol Blew, who can be reached at <u>karol-blew@gloucesterscd.org</u>. Additional staff contacts can be found on the SCD <u>website</u>. In the summer of 2017, the FSP transitioned to a new program that eliminated income requirements and enhanced the monitoring and management of enrolled acres. This program, when fully funded, offers landowners cost-share initiatives of up to 75% of the cost of a new or revised plan to allow the landowners to fully follow the guidelines in their plan.

Private Nonprofit Groups and Local Community Support

Gloucester County has the support of a variety of organizations, including the Gloucester County Board of Agriculture, New Jersey Farm Bureau, 4-H (including the annual 4-H Fair), and Future Farmers of America. Local, regional, and statewide nonprofit organizations also contribute to the permanent protection of farmland. These groups include The Land Conservancy of New Jersey, The Nature Conservancy, the NJ Audubon, the New Jersey Conservation Foundation, the South Jersey Bayshore Coalition, the South Jersey Land & Water Trust, and the South Jersey Resource Conservation & Development Council.

Some regional initiatives include:

New Jersey Conservation Foundation (NJCF) South Jersey's Tri-County Farm Belt, one of the Delaware Bay's most fertile farm belts. located in Cumberland, Gloucester and Salem Counties. NJCF has received \$10.4 million in federal farmland preservation grants to protect this area. To date, with the support of state and federal farmland preservation funding, NJCF and its regional preservation partners have protected more than 9,750 acres of farmland in the Tri-County Farm Belt, where it is currently working to preserve additional acres of agricultural land.12

Table 2. Appurtenant & Non-Appurtenant Woodland Acreage			
Municipality	Non-Appurtenant	Appurtenant	
Clayton Borough	334	65	
Deptford Township	591	116	
East Greenwich Township	447	665	
Elk Township	1,436	1,340	
Franklin Township	5,831	1,844	
Glassboro Township	100	42	
Greenwich Township	70	150	
Harrison Township	498	723	
Logan Township	291	863	
Mantua Township	520	547	
Monroe Township	2,588	536	
National Park Borough	0	0	
Newfield Borough	31	48	
Paulsboro Borough	0	15	
Pitman Borough	31	14	
South Harrison Township	885	1,042	
Swedesboro Borough	0	0	
Washington Township	277	154	
Wenonah Borough	0	0	
West Deptford Township	60	156	
Westville Borough	0	0	
Woodbury City	0	0	
Woodbury Heights Borough	0	0	
Woolwich Township	394	1,202	
Total	14,384	9,520	
Source: 2023 Farmland Assessment, Gloucester County			

- South Jersey Land & Water Trust (SJLWT) has worked on preservation projects in Gloucester County, including Franklin, Deptford, Mantua, Monroe, Harrison, West Deptford, and Woolwich Townships.¹³
- South Jersey Resource Conservation & Development Council operates weather stations to provide irrigation scheduling and flood modeling. They are also the home of Team Habitat, which coordinates habitat creation and restoration through wildlife management plans.¹⁴

 The Delaware Valley Regional Planning Commission (DVRPC) has worked directly with various municipalities to help them with farmland preservation, open space, and conservation design initiatives.¹⁵

B. Natural Resource Protection Programs

1. SADC Soil and Water Conservation Grant Program

The SADC has provided soil and water conservation grants to farms that are permanently preserved or are enrolled in the term preservation program, with priority for preserved farms. The purpose of the grants is to protect agricultural lands from soil erosion. These grants fund soil and water conservation projects approved by the Gloucester County SCD.¹⁶

Generally, up to 50% of the approved costs for a project, based on established cost tables, are paid with grant funds. The program has been popular in Gloucester County, but with the reduction in funding, farmers are not applying. A permanent source of funding must be put in place to ensure that farmers can continue to participate in these beneficial programs.

2. SADC Deer Fencing Grant Program

The SADC estimates that in some areas of the state, the deer population is more than ten times the carrying capacity of the land, and damages due to deer populations are estimated between \$5-10 million. Farmers can apply to the SADC for cost-sharing grants for the installation of high-tensile woven wire deer fencing on permanently preserved farms.¹⁷ Farmers who are successful in their applications can cover up to 50% of the cost of materials and installation. Assistance for this program is capped at a total grant amount of \$50,000. Farmers are eligible if they can demonstrate minimum gross sales of \$10,000 from agricultural or horticultural products grown or derived from farm operations the preceding year. Applicants are required to keep the land in agricultural or horticultural production for eight years following receipt of the grant.

In January of 2022, legislation S4231 was passed to create a deer fencing grant program through the NJDA.¹⁸ This grant creates a program similar to the SADC program where the NJDA will provide matching grants for:

- 1. Unpreserved farmland.
- 2. Farms for which Pinelands development credits have been sold or otherwise conveyed under the Pinelands Development Credit Bank Act, or
- 3. A farm that is located in a sending zone according to Section 13 of the Highlands Water Protection and Planning Act.

3. Federal Conservation Programs

The Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) was landmark legislation, with much of its focus on conservation funding and environmental issues. Since 2002, the legislature has drafted and instituted new Farm Bill programs in 2008, 2014, and 2018. Programs relevant to New Jersey, and Gloucester County, include:

- Conservation Reserve Enhancement Program (CREP),
- Conservation Innovation Grant Program (CIG),
- Environmental Quality Incentives Program (EQIP),

- Farm and Ranch Land Protection Program (FRPP),
- Grassland Reserve Program (GRP), and
- Wetlands Reserve Program (WRP).

These programs were continued under the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill), renewed in 2014 and 2018, with the most recent legislation being the Agricultural Improvement Act of 2018 (2018 Farm Bill). The 2018 Farm Bill will be active through FY2024. As in the past, these programs are administered by the local NRCS office and the SCD.

In 2014, the USDA Farm Service Agency (FSA) added two new programs: Price Loss Coverage (PLC) and Agricultural Risk Coverage (ARC), which are continued through the 2018 Farm Bill. These programs pay producers with eligible historical base acres when prices and/or vields of covered commodities fall below a certain amount, regardless of their current planting decisions. Since a significant acreage of field crops are grown in Gloucester County, and are also covered commodities under these programs, such a revenue support system may help specialty crops and niche markets receive their fair share of payment support

Highlights of the 2018 Farm Bill include:

- Increasing mandatory funding for conservation programs by about 2% from 2019-2023.
- Increasing Conservation Reserve Program (CRP) acreage cap from 24 million acres to 27 million acres by 2023.
- Continuing the Conservation Stewardship Program (CSP), but at a reduced funding level, and replacing an acreage cap with a funding cap.
- Increases funding for the EQIP, Agricultural Conservation Easement Program (ACEP), and direct funding for

the Regional Conservation Partnership Program (RCPP).

Conservation Reserve Program (CRP) is a land conservation program where farmers enroll on a volunteer basis to remove environmentally sensitive land from agricultural production. In exchange, participating farmers plant species that improve the environmental health of the land and receive a yearly rental payment. The contract period is between ten and fifteen years.¹⁹

Conservation Reserve Enhancement Program (CREP) is a partnership between the USDA and the state targeted to address environmental impacts related to agricultural practices. The program aims to maintain and improve water quality by reducing agricultural pollutants in streams, enhancing farm viability, and contributing to the state's open space goals. In exchange for removing environmentally sensitive lands from production and introducing conservation practices, agricultural landowners are paid an annual rental rate. Participation is voluntary, and the contract period is typically 10-15 years. The program targets 30,000 acres of agricultural lands throughout the state, requesting \$100 million in federal funds and a state match of \$23 million over the life of the program. 100% of the cost is paid to establish the conservation practices and annual rental and incentive payments to the landowner.20

Environmental Quality Incentives

Program (EQIP) provides financial and technical assistance to agricultural producers and non-industrial forest managers and landowners to implement management practices and address natural resource concerns on their lands. Participation in this conservation program is voluntary.²¹ Many of these practices are eligible for cost-sharing. Some of the program benefits include reduction of contamination from agricultural sources such as feeding operations, efficient utilization of nutrients that reduce input costs and nonpoint sources of pollution and increasing soil health to help improve drought resiliency. All private land in production is eligible, including cropland, pastureland, and nonindustrial private forests with a forest management plan.

For woodland to qualify for EQIP, they must be large enough to be managed as a production unit, typically larger than five acres, with projects offering the greatest environmental benefits receiving the funding. Participants are subject to the Adjusted Gross Income limits of the Farm Bill, are contracted on a basis of 1-10 years, and may be eligible for flat rate payments based on the average costs of their forest management practices.

EQIP has been the most popular and widely used conservation program in Gloucester County.

Conservation Incentive Contracts (CIC)

are an option under EQIP with a focus on climate-smart forestry, agriculture, and drought resilience management practices. Conservation Evaluation and Monitoring Activities (CEMA) are also offered to participants to help report the outcomes of practices. 5–10-year contracts are held with producers to manage, maintain, and address natural resource concerns and build on existing conservation efforts. EQIP-CIC practices eligible for assistance include, but are not limited

Use the <u>application</u> at the SADC's website to apply for a Farmland Stewardship cost-share grant, and other cost-sharing grants, for the installation of deer fencing. to conservation crop rotation, amending soil properties with gypsum products, irrigation water management, grazing land mechanical treatment, nutrient management, waste recycling, on-farm recharge, soil health testing, and pest management conservation systems.²²

Funded by EQIP, the aim of the **Conservation Innovation Grant** (CIG) is to stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production. Funds are awarded as competitive 50-50 matching grants to non-governmental organizations, tribes, or individuals for projects with a 1–3-year duration.²³

The Conservation Stewardship

Program (CSP) provides technical and financial assistance to manage and maintain existing conservation systems, implementing additional conservation activities on land currently in production. CSP provides two types of payments through 5-year contracts: annual payments for installing new conservation activities and maintaining existing practices; and supplemental payments for adopting a resource-conserving crop rotation. Participants earn payments for conservation performance - the higher the performance, the higher the payment. Participants can apply for renewal at the end of the five-year contract.24

The Working Lands for Wildlife (WLFW) program provides technical and financial assistance to agricultural producers to assist in the implementation of conservation practices that benefit target

Access the New Jersey State Legislature's Bill S4231 on the Deer Fencing Grant Program on their <u>website</u>. An established farmer is defined as an owner-operator or immediate family member of the owner-operator of a family farm who actively participates in the operation and management of a farming operation, is a resident of the State of New Jersey, spends a substantial portion of time in carrying out a farming operation and planted a crop or acquired livestock or aquatic organisms which were on the farm at the time of the completion of the feasibility plan application.

If the applicant is a cooperative, a corporation, a partnership, or a joint operation, it must be primarily engaged in farming, that is, the applicant entity must derive over 50 percent of its gross income from all sources from its farming operation and its principal place of business shall be in New Jersey.

Source: SADC. Farmland Stewardship Wildlife Fencing Program.⁵²

species and priority landscapes. Gloucester County is situated in one of the three national focal areas, Northern Bobwhite, Grasslands, and Savannas. Conservation acts in this biome will lead to overall wildlife benefits, economic benefits, and climate change mitigation.²⁵

The Agricultural Conservation Easement Program (ACEP) merges three former programs – the Wetlands Reserve Program (WRP), the Grassland Reserve Program (GRP), and the Farm and Ranch Land Protection Program (FRPP).²⁶ It has two components:

- Agricultural Land Easements (ALE) to prevent the loss of working agricultural lands for nonagricultural uses. NRCS may contribute up to 50% of the fair market value of the easement.
- Wetland Reserve Easements (WRE) provide habitat for fish and wildlife and improve water quality through restoration and enhancement. There are two types available in New Jersey: permanent (100% of the value and 50-75% of restoration costs) and 30-year easements (50-75% of the value and the restoration costs). Land eligible for participation in WRE includes privately held farmland or converted wetlands

that can be successfully and costeffectively restored. Applications for land where an easement will protect and enhance the habitats for migratory birds and other wildlife are prioritized.

In February 2021, the USDA released a final rule to update ACEP as directed by the 2018 Farm Bill. Landowners who enroll in ACEP retain private ownership of their land, but certain land use requirements will apply such as agreeing to cease agricultural activity on wetlands under easement or agreeing to limit non-agricultural uses on land under easement.

The Inflation Reduction Act included \$1.4 billion in additional funding for ACEP over five years and it also revised ACEP authority. This funding is expected to back easements that will reduce, capture, avoid, or sequester greenhouse gas emissions, and extend regular program funding through fiscal year 2031. On March 13, 2024, NRCS announced it will invest about \$138 million of financial assistance from the Inflation Reduction Act in 138 new climate-smart conservation easements, through which farms and ranchers are conserving wetlands, grasslands, and prime farmlands.

The Regional Conservation Partnership Program (RCPP) encourages the formation of partnerships to increase the restoration and sustainable use of soil, water, wildlife, and related natural resources on regional or watershed scales. The partnerships can be formed by agricultural producer associations, farmer cooperatives, municipal entities, and non-government organizations.²⁷ There are two funding categories: critical conservation areas (New Jersey does not fall in one of these eight areas), and state/ multistate. To apply for state funding, the project must address at least one of the national or state priorities of soil erosion, soil quality, water quality, and wildlife habitat.

The Healthy Forests Reserve Program

(HFRP) helps landowners restore, enhance, and protect forest resources on private land through easements and financial assistance. The program provides landowners with 10-year cost-sharing restoration agreements, and 30-year or permanent easements for specific conservation actions. The objectives of HFRP are to promote the recovery of endangered & threatened species, improve plant and animal biodiversity, and enhance carbon sequestration. Under HFRP landowners may avoid regulatory restrictions under the Endangered Species Act by restoring or improving habitat on their land for a specific period.²⁸

The Agricultural Management Assistance

(AMA) program targets beginning and limited-resource farmers, small farms, and producers who have had limited participation in other USDA financial assistance programs. AMA provides financial and technical assistance to agricultural producers to address water management, water quality, and erosion control by incorporating conservation into their farming operations. Producers may improve water use efficiency through the construction of efficient irrigation systems and irrigation water management practices, reduce nonpoint source pollutants through filter strips and nutrient management, and improve habitat conservation through conservation cover and windbreak establishment. Payments can be up to 75% of project costs and are limited to up to \$50,000 per participant per year.²⁹

C. Water Resources

1. Supply Characteristics

The physiographic and geologic layout of Gloucester County dictates water supply, availability, and recharge, as well as the location of agriculture. Gloucester County is in the Coastal Plain of New Jersey, which underlies more than 60% of the state. It is primarily flat to gently rolling and subject to flooding with wetlands located along its waterways.³⁰

Watersheds

Within Gloucester County, there are eight watersheds, which fall into three of the NJDEP's twenty watershed management areas:

- WMA 15 Great Egg Harbor, Tuckahoe
- WMA 17 Maurice, Salem, & Cohansey
- WMA 18 Lower Delaware Tributaries

Six of these flow into the Delaware River:

- Big Timber Creek watershed
- Woodbury Creek watershed
- Mantua Creek watershed
- Repaupo Creek watershed
- Raccoon Creek watershed
- Oldmans Creek watershed

For more information on eligibility, the application process, and types of conservation practices NRCS can help plan and implement visit the USDA NRCS NJ Environmental Quality Incentives Program <u>webpage</u>.

The remaining two, which are in the southern part of the County, encompass the headwaters of two large river systems and occupy 131.6 square miles, or 39% of the County's land area. They are:

- Great Egg Harbor watershed, which flows southeast into the Atlantic Ocean.
- Maurice River watershed, which flows south into Delaware Bay.

Portions of the Great Egg Harbor River and the Maurice River have been classified by the National Park Service as National Scenic and Recreational Rivers.³¹

Aquifers

The geology of Gloucester County resembles a "tilted layer cake," with different layers, or strata, of gravels, sands, silts, and clays. The saturated gravel and sand layers have large pore spaces, promoting permeability; these are the aquifers from which water is drawn through wells. The less porous silt and clay layers, which impede water movement, are confining beds, or layers. When confining layers overlay the more permeable layers, they protect aquifers from contamination that might seep into groundwater from the land surface. Gloucester County has four aquifers:

- Potomac-Raritan-Magothy (PRM) Aquifer.
- Englishtown Aquifer.
- Mount Laurel-Wenonah (MLW) Aquifer.
- · Kirkwood-Cohansey Aquifer.

Please refer to **Chapter I** for more information. As more development occurs, the increased impervious surfaces prevent waterfall from soaking into the ground, causing more runoff into the streams and rivers of the watershed and diminishing the capacities of the area's aquifers to recharge. The aquifers provide both residential and agricultural water supplies. It is important to balance development with the capacity of the natural resources to serve the area's needs now and in the future.

2. Agricultural Demand & Supply Limitations

Adequate water supplies are necessary for the success of agriculture operations in Gloucester County. Obtaining permits for new wells from the NJDEP and approval from municipalities is a challenging and time-consuming process. For farmers looking to diversify their existing operations from field crops to nursery crops (a growing and lucrative commodity sector), or for farmers who may be introducing crops that require irrigation, permits, and approvals could be a limiting factor.

The NJDEP Division of Water Supply's Bureau of Water Allocation requires that an Agricultural Water Usage Certification or Agricultural Water Use Registration be obtained from the County agricultural agent if a person withdraws ground and/ or surface water over 100,000 gallons per day for agricultural, aquacultural, or horticultural purposes, or if the property falls within the New Jersey Pinelands Commission.³² Farmers are also competing with a growing residential and commercial base for existing water resources. Between 2010 and 2020, 7,412 new residential housing units were approved in Gloucester County and the population increased by 5% or 14,006 people.33

Climatic changes, as well as increased development, will have impacts on the availability of water resources. Periods of drought will also pose a risk to farmers. Lower rainfall leaves less water available for groundwater and surface water sources.

The U.S. Drought Monitor is a national map created by the National Drought Mitigation Center, USDA, and NOAA. Historic records are available as well, depicting drought conditions that have occurred since 1895. The intensity of drought across the county is depicted using a five-category system, from Abnormally Dry (D0) conditions to Exceptional Drought (D4) conditions.³⁴

- D0 Abnormally Dry conditions: Crop growth is stunted, planting is delayed, fire danger is elevated, lawns brown early, and gardens begin to wilt.
- D1 Moderate Drought: Irrigation use increases, hay and grain yields are lower than normal, honey production declines, and wildfires and ground fires increase.
- D2 Severe Drought: Specialty crops are impacted in both yield and fruit size, producers begin feeding cattle, and

hay prices are high. Warnings may be issued on outdoor burns and air quality is poor.

- D3 Extreme Drought: Widespread crop loss, Christmas tree farms are stressed, dairy farmers are struggling financially, well drillers and bulk water haulers see increased business, water recreation, and hunting are modified, and wildlife disease outbreak is observed.
- D4 Exceptional Drought conditions have had minimal or no impact on New Jersey, so the Drought Impact Reporter does not have impacts to report for the D4 category.

Figure VII-1 shows droughts by level of intensity, based on data collected weekly from 2000 through August of 2024. The x-axis represents the duration of the drought event while the y-axis shows the percentage of acreage within Gloucester County affected by the drought event. D1 Conditions were recorded several times in the past two decades including in 2001-2002, in 2005, 2010, and 2012, for periods between 2015- 2017, and briefly in 2019, 2022, and 2023. D2 incidents of Severe Drought were most notably recorded

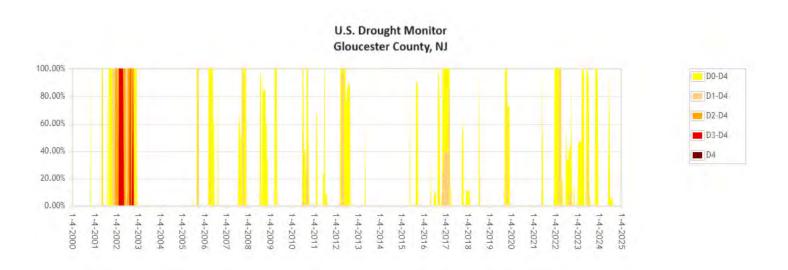


Figure 1. U.S. Drought Monitor, Gloucester County, NJ

twice in 2002, and more recently in 2016-2017. D3 Conditions of Extreme Drought occurred in 2002. As of August 2024, D0 and D1 Drought Conditions were present in Gloucester County.

Farmers in Gloucester County can view data on how drought periods are affecting popular crops and livestock commodities. Data from the USDA's National Agricultural Statistics Service (NASS) are overlayed on the Drought Monitor reports to create maps of affected farmland and summaries of affected farm operations.

3. Conservation & Allocation Strategies

An adequate water supply is important to successful agriculture operations in Gloucester County. Droughts in recent years have highlighted the precarious nature of the agricultural (and general) water supply and the need for water conservation systems and regimens.

Corn and hay rely on rain and some groundwater for water needs. As such, water conservation strategies are difficult to implement, given that water usage largely depends on the amount of rainfall during a given growing season. With the more water-intensive nursery and greenhouse operations and produce farming, it is possible to implement conservation strategies such as drip irrigation, water reuse, or watering crops in the cooler parts of the day. However, since vegetable, fruit, and nursery agriculture are minor in terms of acreage when compared to corn and hay, the positive effects of county-wide water conservation efforts are minimized.

The faculty of NJAES-RCE publishes annual crop production recommendation guides for multiple crop groups that include irrigation guidelines and recommendations. These guides include tips for maximizing irrigation efficiency, such as optimizing irrigation scheduling, selecting appropriate growing mediums, planning and installing irrigation systems that provide efficient water use, managing stormwater runoff, and collecting and recycling irrigation water.

Livestock operations require water for animals to drink as well as for washing equipment, producing value-added products, or sanitizing animal areas. Water capture and storage is a way of accumulating water slowly for use in periods of high demand or when water resources are limited. Adding floats with shut-offs and timers in watering troughs can conserve water by negating the need for constantly running water to keep troughs full. Maintaining pipes and faucets properly to prevent leaks can also contribute to water conservation.

The Office of the New Jersey State Climatologist at Rutgers University, School of Environmental and Biological Sciences, operates the NJ Weather and Climate Network of weather monitoring stations. Several stations in Gloucester County (South Harrison, Sewell, Logan, Piney Hollow) provide weather data such as air temperature, precipitation, wind speed, and gusts. Farmers can set favorite locales and view charts and tabular data.

D. Waste Management Planning

With farming, waste management includes planning for livestock and animal waste, general operational and machinery waste, crop by-products, and pollutant runoff.

Animal Waste

Waste production from horses and cows is a continuous focal point of conservation practice in the county. Farmers should have Nutrient Management Plans based on crop yield goals, soil tests of available field nutrients, and nutrients from legumes and manure application on fields.³⁵ Proper nutrient management reduces input costs and protects water quality by preventing over application of commercial fertilizers and animal manure.

Livestock production is a major producer of waste materials that requires management. Wastes from livestock can include manure, wastewater from sanitizing operations, unused pesticide mixes and pesticide containers, and residue from food processing operations. Poor management of animal and livestock waste can introduce unwanted microorganisms into natural systems and cause disease among farm animals.

Horse farms particularly have waste management concerns because of their relatively high density of animals per acre of land, and regular maintenance and collection of animal wastes, bedding materials, and wastewater. Cattle and dairy farms tend to occupy acreage at lower densities, making it possible to spread animal waste for nutrient recycling more efficiently and safer for health on fields.

The Agricultural Waste Management Field Handbook (AWMFH) provides specific guidance for planning, designing, and managing systems where agricultural wastes are involved. Topics covered in the AWMFH include incorporating manure nutrients into crop nutrient budgets and properly disposing of waste materials that cannot easily be recycled. The AWMFH can be used to create a Comprehensive Nutrient Management Plan (CNMP) to manage and maintain the resource base of producers. All activities outlined in a CNMP must comply with NRCS standards and specifications.³⁶ The National Integrated Drought Information System (NIDIS) and the National Oceanic and Atmospheric Administration (NOAA) publish data on drought conditions by state and county on their webpage, Drought.gov. Offering information regarding drought conditions, short and long-term drought indicators, acres of agriculture affected by drought, water supply stream flow conditions, 1-month precipitation outlooks, and historical drought conditions, this webpage is an asset for Gloucester County farmers.

include the creation of an Animal Waste Management (AWM) Plan. AWM can be used for animal feeding operations to estimate the production of manure and necessary animal bedding, and process water to determine the size of storage and treatment facilities. The evaluation includes existing facilities, herd size, local climate, and details about bedding, washing, and flush water. Producers can assess their existing and planned storage & treatment facilities, develop a monthly water and waste budget, assess gross nutrient balance from target vields and crop acreage, and receive a schematic drawing for treatment and storage components.³⁷ AWM Plans apply to all livestock farms, including equine operations, and require farms to follow these general requirements:

- Animals in confinement areas only have controlled access to water.
- Manure storage areas must be at least 100 feet from water and on slopes of less than 5%.
- Land application of manure must follow Best Management Practices.

Other waste management planning tools

• Livestock contagious disease must be reported to the State Veterinarian.

In addition to regulations on animal waste management, the NJDEP has implemented programs targeting Concentrated Animal Feeding Operations (CAFOs) to protect water quality from waste nutrients associated with livestock farming. The NJDEP implemented a statewide stormwater permitting program for CAFO and designated animal feeding operations (AFO), as required by the Environmental Protection Agency. Farms that qualify as concentrated animal feeding operations must apply for a permit if they discharge pollutants into a state waterway.

Recycling

The Gloucester County Improvement Authority (GCIA) has limited recycling opportunities specifically related to agriculture. It does accept agricultural plastics at its landfill, but not as a recycling operation. There are currently no plans to implement an agricultural plastics recycling program in the County.

Due to its proximity, many Gloucester County farmers make use of the Cumberland County Improvement Authority's agricultural plastics recycling facility at the Cumberland County Solid Waste Complex in Deerfield. This facility is open to all New Jersey farmers and accepts collections year-round; a tipping fee of \$20/ton applies. The facility is by appointment only.³⁸

The NJDA <u>website</u> lists several commercial recyclers who accept nursery/greenhouse film (year-round), pesticide containers (seasonal), agricultural plastics – mulch film, drip irrigation tape – and/or plastic nursery pots, plug trays, and flats. Agricultural Recycling Services, Inc., in Atlantic County, will accept almost any non-container agricultural plastic including mulch film, drip tape, nursery/ greenhouse film, peat moss bags, silo covers, hay bale covers, pots, and trays. Using a commercial recycler can reduce farmers' landfill costs and, in the case of some products such as nursery pots and flats, generate some revenue.³⁹

The County has held a tire amnesty program each year since 2001 and the GCIA's Office of Recycling will work with farmers one-on-one to facilitate the process. Farmers traditionally use tires to hold down their plastic tarps, but due to the need for mosquito control, the NJDEP determined that the tires pose a threat. The GCIA has worked specifically with the farmers concerning stockpiled tires, but not all farms have depleted their stockpiles. The GCIA sponsored another tire amnesty month in March of 2024. This program will run continuously pending annual funding.⁴⁰

For household special waste, the GCIA/ Office of Recycling sponsors four collection days for residents (commercial businesses prohibited), one of the largest programs in New Jersey. The collected materials are recycled and reused (e.g., motor oil, gas cylinders) or disposed of in an environmentally sound manner (e.g., solvents, fertilizers, weed killers, pesticides). In addition, the landfill is open one Saturday a month from March through November.⁴¹

On-farm recycling is an important consideration too, and can include composting, recycling leaves on the property, using the culled product from vegetable harvesting and other food waste to feed the soils or animals, and collecting animal waste in temporary waste containers (to prevent it from polluting runoff into water bodies) and using it as fertilizer.

E. Energy Conservation Planning

The state's Clean Energy Act of 2018 instilled these changes in its Renewable Portfolio:

- Standard: Establishes one of the most ambitious in the country by requiring 35% of the energy sold in the state to come from qualifying energy sources by 2025 and 50% by 2030.
- Solar: Accelerates the solar renewable portfolio standards to 5.1% by 2021 and establishes a Community Solar Energy Pilot Program.
- Offshore Wind: Codifies the Governor's goal of 3,500 megawatts (MW) of offshore wind by 2030 and reinstates an expired program to provide tax credits for offshore wind manufacturing activities.
- Energy Efficiency: Requires each utility to implement energy efficiency measures to reduce electricity usage by 2% and natural gas usage by 0.75%.
- Energy Storage: Codifies the governor's goal of achieving 600 MW of energy storage by 2021 and 2,000 MW by 2030

In 2019, Governor Phil Murphy signed the Updated Global Warming Response Act seeking to reduce greenhouse emissions 80% by 2050. Green energy policy is also echoed in Governor Murphy's *Energy Master Plan*, in which the state seeks to transition to 100% clean energy by 2050. The Rural Energy for America Program (REAP) funds grants and loan guarantees to agricultural producers for assistance in purchasing renewable energy systems. Renewable energy systems include generation from biomass, geothermal, hydropower, hydrogen, wind, and solar.

The NRCS has the authority to use EQIP to implement Agricultural Energy Management Plans (AgEMP) to address energy conservation concerns. As a part of the EQIP On-Farm Energy Initiative, these plans are designed to evaluate energy use and efficiency within farming operations. These energy audits can qualify a farmer for financial assistance to implement process recommendations.

The EQIP natural resource conservation program pays for some energy production programs, such as the replacement of older, dirty polluting working diesel engines, with newer, more efficient, cleaner-burning diesel engines that will meet EPA Tier requirements for the program year. The NJ Board of Public Utilities offers rebates for solar electric, wind, and sustainable biomass systems if funding is available.

Solar Energy

Solar energy can be harnessed via the installation of solar panels. This harnessed or stored energy can then be used to create electricity and provide heat. If excess electricity is generated, it can be sold back to the electric grid for a profit.

The overall use of solar panels has greatly increased in New Jersey.⁴² New Jersey's Clean Energy Program offers registration in the Solar Renewable Energy Certificate (SREC) Registration Program (SRP), which allows owners of registered, installed systems to enter energy generated into an SREC tracking system; these SRECs can be sold to generate revenue during the first 15 years of the solar operation. In the last year, the program has been receiving between 500 and 1,500 SRPs per month.⁴³ Solar energy is an extremely fast-growing sector in the alternative energy market.

Wind Energy

The power of a strong wind can be captured by turbines or windmills, turning such power into electricity. Expanding and evolving technology makes this option more attractive to farmers to cut energy costs, but adequate wind speeds are requisite to make this a successful alternative. New Jersey farmers might take advantage of a distributed or "small" wind system, which uses 100 kilowatts or smaller turbines to power a home, farm, or small business directly.

The NJDEP Division of Land Use Regulation supports wind turbine projects within developed areas of the State to limit impacts on the natural environment.44 The SADC does permit wind energy projects according to NJSA 4:1C-32.4, but they are required to review and approve applications proposed on preserved farmland whether the project is proposed on preserved land or any exception area. Respective CADBs will also have a say in the project review and approval to determine if the use is suitable for the preserved farmland. New Jersey's Clean Energy Program provides a model small wind ordinance for municipal adoption. New Jersey's Clean Energy Program incentives for wind energy installations have been on hold since 2011.45

Incentives and assistance for small wind systems include the Renewal Energy Incentive Program (REIP) and the Anemometer Loan Program, administered by Rutgers and four other state universities, including Rowan University.⁴⁶ The program is funded by the US Department of Energy Wind Powering America Program and funds provided by the NJ Board of Public Utilities Office of Clean Energy Program. By measuring wind power at the target location, the anemometers help determine the

See the NJAES-RCE crop production recommendation guides on their <u>website</u>.

economic feasibility of wind turbine installation. Target markets include municipalities, farms, residential, and small commercial customers. Both Rutgers and Rowan University have waiting lists for anemometer loans.

Biopower

According to the U.S. Department of Energy's Biomass Program, after hydropower, biopower provides a larger share of the world's electricity than any other renewable energy resource. Biopower can be used in combined heat and power (CHP) systems to generate both heat and electricity and it can be sourced from any organic matter such as wood, plants, agricultural waste, and other materials.⁴⁷ Agricultural producers can serve as a source for biomass fuels and, potentially, an end user. Starting in 2017, biopower projects are incentivized through the Combined Heat and Power Program (CHP). Program participants are eligible to receive financial incentives for CHP installations to further enhance energy efficiency in their buildings through on-site power generation and using distributed generation to provide reliability solutions for New Jersey while supporting the state's Energy Master Plan.

Ethanol

Ethanol is a renewable fuel made by distilling starch and sugar in a variety of plants. It can then be blended into gasoline as an oxygenate, reducing air pollution. Unlike the gasoline additive MTBE, ethanol will not contaminate groundwater. Corn, used to produce ethanol, is an important field crop in

The Agricultural Waste Management Field Handbook can be found <u>here</u>. Gloucester County, as it had the most bushels produced in the county in 2022. As uses for corn depart from being feed products for cattle and dairy, corn production can carry on as a way to meet demands for ethanol production.

Biodiesel

Petroleum diesel is an emitter of sulfur emissions, a major air pollutant. Biodiesel, made from the oils of soybeans, is an alternative to petroleum diesel. This organic fuel can be blended and used in diesel engines without modification. The result is a significant reduction of the harmful fumes produced by pure petroleum diesel.

Biogas

Agricultural waste and manure are among the variety of waste that could be used to create energy through anaerobic digestion, with the added benefits of reducing landfills and producing a nutrient-rich fertilizer that could be used by farmers. Fats, oils and greases, and food waste produce the most biogas. New Jersey ranks 30th nationwide in biogas production. Out of 59 operational systems, down from 62 in 2015, 22 are landfill systems, 32 are wastewater systems, and five are food waste systems.⁴⁸ The American Biogas Council has identified 144 potential new projects statewide. unfortunately, they see little potential for agriculture-based biogas systems; the vast majority of potential projects deal with wastewater and food waste.

Switchgrass Pellets

Switchgrass is a tall, warm-season perennial grass used for summer hay and pasture, soil conservation, and wildlife habitat. It has also gained recent attention as a biomass energy crop either for direct combustion in stoves or power plants or for cellulosic conversion to ethanol. Switchgrass is adaptable to harsher conditions where other grasses may suffer. The NJAES-RCE has developed a fact sheet that further explains Switchback production and use within New Jersey.⁴⁹

Renewable Energy Grant Programs

New Jersey's Clean Energy Program:

Administered by the Board of Public Utilities, this program provides financial incentives to install clean energy systems, including fuel cells, photovoltaics (solar electricity), small wind and sustainable biomass equipment. Financial incentives are in the form of rebates, grants, and loans. Additional information is at www. njcep.com.⁵⁰

USDA Rural Energy for American

Program (REAP): Authorized under the 2014 Farm Bill, the REAP Renewable Energy System and Energy Improvement Guaranteed Loan and Grant Program provides financial assistance to agricultural producers and rural small businesses to purchase, install, and construct renewable energy systems; make energy efficiency improvements to non-residential buildings and facilities; use renewable technologies that reduce energy consumption; and participate in energy audits and renewable energy development assistance.⁵¹

F. Outreach and Incentives

The Gloucester CADB, the NJAES-RCE of Gloucester County, and regional agencies such as the NRCS, SCD, and FSA local service centers stand ready to educate and assist farmers regarding natural resource conservation and agricultural productivity. The CADB supports and encourages the implementation of programs to aid in natural resource conservation in the County.

Literature Cited

Chapter 7

1 USDA. Natural Resources Conservation Service. <u>https://www.nrcs.usda.gov/.</u> Accessed July 2024.

2 Natural Resource Conservation Services, *New Jersey NRCS Directory*. <u>https://www.nrcs.usda.gov/sites/default/files/2023-07/Employee%20Directory%20July%202023.pdf</u> Accessed July 2024.

3 Personal communication with Mona Peterson, United States Department of Agriculture, Natural Resources Conservation Service, November 7, 2007 and September 18, 2014.

4 USDA. Natural Resources Conservation Service. *Field Office Technical Guide*. <u>https://efotg.sc.egov.usda.gov/#/</u> Accessed July 2024.

5 New Jersey Department of Agriculture. *Agricultural and Natural Resources*. <u>https://www.nj.gov/agriculture/divisions/anr/</u>. Accessed July 2024.

6 New Jersey Association of Conservation Districts, Natural Resources Conservation Service, NJDA, State Soil Conservation Committee. (March 2024). New Jersey Conservation Partnership Congressional Report. <u>https://web.njacd.org/pdf/NJ-Conservation-</u> <u>Partnership_Congressional-Report_2024-03.pdf</u>. Accessed July 2024.

7 New Jersey Department of Agriculture. *Agricultural and Natural Resources*. <u>https://</u> www.nj.gov/agriculture/divisions/anr/ Accessed July 2024.

8 Gloucester Soil Conservation District. *About The District*. <u>https://gloucesterscd.org/</u> <u>profile.htm</u> Accessed July 2024.

9 Rutgers New Jersey Agricultural Experiment Station, Cooperative Extension of Gloucester County. Agriculture and Natural Resources. <u>https://gloucester.njaes.rutgers.</u> <u>edu/ag/</u>. Accessed July 2024.

10 New Jersey Department of Environmental Protection. Division of Parks & Forestry *Farmland Assessment Program*. <u>http://www.nj.gov/dep/parksandforests/forest/njfs_farm_assess.html</u> Accessed July 2024.

11 New Jersey Department of Agriculture, State Agriculture Development Committee. New Jersey Farmland Assessment. Gloucester County Summaries for 2023.

12 New Jersey Conservation Foundation. *Tri-County Farm Belt*. <u>https://www.njconservation.org/project/tri-county-farm-belt/</u>. Accessed August 2024.

13 South Jersey Land & Water Trust. *Preserved Properties*. <u>http://www.sjlandwater.org/.</u> Accessed August 2024.

14 SJ Resource Conservation & Development Council, Inc. <u>http://www.sjrcd.org/</u>. Accessed August 2024.

15 Delaware Valley Regional Planning Commission. <u>https://www.dvrpc.org/.</u> Accessed August 2024.

16 New Jersey Department of Agriculture, *Soil and Water Conservation Grants*. <u>http://</u><u>www.state.nj.us/agriculture/grants/soil.html</u> Accessed August 2024.

17 NJDA. NEW JERSEY DEPARTMENT OF AGRICULTURE ANNOUNCES ENHANCED WILDLIFE FENCING GRANTS. <u>https://www.nj.gov/agriculture/news/press/2024/</u> <u>press240216.html</u> Accessed August 2024.

18 NJDA Agricultural Assistance. *Wildlife Fencing*. <u>https://www.nj.gov/agriculture/divisions/</u> <u>anr/agriassist/deerfencing.html</u> Accessed August 2024.

19 USDA. Conservation Reserve Program. <u>https://www.fsa.usda.gov/programs-and-</u> <u>services/conservation-programs/conservation-reserve-program/index</u> Accessed August 2024.

20 USDA. Conservation Reserve Enhancement Program. <u>https://www.fsa.usda.gov/</u> <u>programs-and-services/conservation-programs/conservation-reserve-enhancement/index</u> Accessed August 2024.

21 USDA. Environmental Quality Incentives Program (EQUIP). <u>https://www.nrcs.usda.gov/programs-initiatives/eqip-environmental-quality-incentives</u> Accessed August 2024.

22 USDA. EQIP Conservation Incentive Contracts. <u>https://www.nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program/eqip-conservation-incentive-contracts</u> Accessed August 2024.

23 USDA. Conservation Innovation Grants. <u>https://www.nrcs.usda.gov/programs-initiatives/</u> <u>cig-conservation-innovation-grants</u> Accessed August 2024.

24 USDA. *Conservation Stewardship Program*. <u>https://www.nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program</u> Accessed August 2024.

25 Working Lands for Wildlife, *How We Work*. <u>https://www.wlfw.org/</u> Accessed August 2024.

26 USDA NRCS. Agricultural Conservation Easement Program. <u>https://www.nrcs.usda.gov/</u> <u>programs-initiatives/acep-agricultural-conservation-easement-program</u> Accessed August 2024.

27 USDA NRCS. *Regional Conservation Partnership Program*. <u>https://www.nrcs.usda.gov/programs-initiatives/rcpp-regional-conservation-partnership-program</u> Accessed August 2024.

28 USDA NRCS. *Healthy Forests Reserve Program*. <u>https://www.nrcs.usda.gov/programs-initiatives/hfrp-healthy-forests-reserve-program</u> Accessed August 2024.

29 USDA NRCS. *Agricultural Management Assistance*. <u>https://www.nrcs.usda.gov/</u> <u>programs-initiatives/ama-agricultural-management-assistance</u> Accessed August 2024.

30 NJDEP Bureau of GIS. Land Use/Land Cover of New Jersey 2020. map. Retrieved from <u>https://gisdata-njdep.opendata.arcgis.com/datasets/njdep::land-use-land-cover-of-new-jersey-2020/about</u> Accessed August 2024.

31 DVRPC, A Teacher's Guide to the Watersheds of Gloucester County. <u>https://njwrri.</u> <u>rutgers.edu/pdfs/04038-gloucester.pdf</u> Accessed August 2024.

32 NJDEP, Agricultural, Aquacultural, and Horticultural Water Use Certifications & Registrations. <u>https://www.nj.gov/dep/watersupply/a_ag.html</u> Accessed August 2024.

33 United States Census Bureau. *Gloucester County, New Jersey*. <u>https://data.census.gov/profile/Gloucester_County, New_Jersey?g=050XX00US34015</u> Accessed August 2024.

34 U.S. Drought Monitor. *New Jersey*. <u>https://droughtmonitor.unl.edu/CurrentMap/</u> <u>StateDroughtMonitor.aspx?NJ</u> Accessed August 2024.

35 FARM, Nutrient Management Fact Sheet, <u>https://nationaldairyfarm.com/wp-content/uploads/2023/01/New-Jersey-2.18.22.pdf</u> Accessed August 2024.

36 USDA, Agricultural Waste Management Field Handbook, (2013). <u>https://efotg.sc.egov.usda.gov/references/public/IA/AWMFH_Amendment_IA-3_July_2013_Complete.pdf</u> Accessed August 2024.

37 SADC, Animal Waste Management. <u>https://www.nj.gov/agriculture/divisions/anr/agriassist/animalwaste.html</u> Accessed September 2024.

38 NJDA, New Jersey Nursery and Greenhouse Film Collection Sites (Year-Round) <u>https://</u><u>www.nj.gov/agriculture/divisions/anr/nrc/filmsites.html</u> Accessed September 2024.

39 NJDA, *New Jersey Agricultural Recycling Programs*, <u>https://www.nj.gov/agriculture/divisions/anr/nrc/recycling.html</u> Accessed September 2024.

40 GCIA, Where Can I Recycle? <u>https://www.gcianj.com/county-recycling/where-can-i-recycle/</u> Accessed September 2024.

41 GCIA, Household Special Waste, <u>https://www.gcianj.com/county-recycling/household-special-waste/</u> Accessed September 2024.

42 New Jersey Department of Agriculture. *Agriculture and Green Energy*. <u>https://www.nj.gov/agriculture/news/hottopics/topics060222.html</u> Accessed September 2024.

43 New Jersey's Clean Energy Program. *SREC Registration Program*. <u>http://www.njcleanenergy.com/renewable-energy/programs/solar-renewable-energy/certificates-srec/new-jersey-solar-renewable-energy</u> Accessed September 2024.

44 NJDEP. Wind Turbines. <u>https://dep.nj.gov/wlm/lrp/common-projects/wind-turbines/</u> Accessed September 2024. 45 New Jersey's Clean Energy Program. Renewable Energy Incentive Program. *Wind*. <u>https://njcleanenergy.com/renewable-energy/technologies/wind/wind</u> Accessed September 2024.

46 New Jersey's Clean Energy Program, Renewable Energy Incentive Program. Anemometer Loan Program. <u>https://www.njcleanenergy.com/renewable-energy/</u> <u>technologies/wind/small-wind-systems/anemometer-loan-program</u> Accessed September 2024.

47 U.S. Department of Energy. *Biopower Program*. <u>https://wwwl.eere.energy.gov/bioenergy/pdfs/biopower_factsheet.pdf</u> Accessed September 2024.

48 American Biogas Council. *New Jersey*. <u>https://americanbiogascouncil.org/resources/</u> <u>state-profiles/new-jersey/</u> Accessed September 2024.

49 OK State, *Switchback Production and Use in New Jersey*. <u>http://switchgrass.okstate.</u> <u>edu/other-information-sources/switchgrassproductionnewjersey.pdf</u> Accessed September 2024.

50 New Jersey's Clean Energy Program. <u>https://www.njcleanenergy.com/</u> Accessed September 2024.

51 USDA. Rural Development. Business and Cooperative Assistance. *Renewable Energy System & Energy Efficiency Improvement Guaranteed Loan and Grants*. <u>https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-renewable-energy-systems-energy-efficiency-improvement-guaranteed-loans</u> Accessed September 2024.

52 SADC Farmland Stewardship Wildlife Fencing Program Application for Cost-Share Grant Funding for the Installation of Wildlife Fencing on Permanently Preserved Farmland. <u>https://nj.gov/agriculture/sadc/documents/farmpreserve/postpres/</u> wildlifefencingapplication.pdf Accessed October 2024.



Duffields Farm, Washington Twp.

Chapter VIII.

Agricultural Industry Sustainability, Retention, & Promotion

A. Existing Agricultural Industry Support

1. Right to Farm

To ensure farmers can continue accepted agricultural operations, the State Legislature enacted the Right to Farm Act in 1983 and amended it in 1998. The Act provides "protection of commercial farm operations from nuisance action, where recognized methods and techniques of agricultural production are applied, while, at the same time, acknowledging the need to provide a proper balance among the varied and conflicting interests of all lawful activities in New Jersey." (4:1C-2) The 1983 Agriculture Retention and Development Act created the SADC, and authorized counties to create CADBs to establish agriculture retention and development programs. At present, there are eighteen CADBs. Both the SADC and CADB implement the Right to Farm Act.¹

The SADC works to maximize protections for commercial farmers under the Right to Farm Act by developing Agricultural Management Practices (AMPs), tracking right-to-farm (RTF) cases, offering a conflict resolution process, and reviewing rules proposed by other state agencies to assess the impact they may have on agriculture. To qualify for Right to Farm protection, a farm must:

- Meet the definition of a "commercial farm" in the Right to Farm Act.
- Be operated in conformance with federal and state law.
- Comply with AMPs recommended by the SADC, or site-specific AMPs developed by the Gloucester County Agriculture Development Board (CADB) at the request of a commercial farmer.
- Not be a direct threat to public health and safety.
- Be in an area where agriculture is permitted under municipal zoning ordinances.³⁸

As of 2024, the SADC had 12 AMPs in place, the latest being an AMP for On-Farm Direct Marketing Facilities, Activities, and Events, adopted on April 7, 2014. AMPs clarify standards for RTF protection.²

When a RTF issue surfaces, the CADB first encourages the parties to use the State's Agricultural Mediation Program through which the SADC will provide mediation or conflict resolution at no cost to the participants.³ If the CADB determination does not resolve the issue, either party in the dispute may take the matter for a subsequent appeal first to the SADC and then to the NJ Superior Court, Appellate Division.⁴

If a complaint is filed with the CADB and it concerns a type of issue the CADB has not heard before, the CADB may send it to the SADC for a determination as to whether the farm falls within the parameters established by the Act for RTF protection.

Once either the SADC or the CADB has determined that the complaint falls within the RTF parameters, and any additional fact-finding and technical review takes place, the issue is given a public, quasijudicial hearing at the county level. After all the information has been considered, the CADB will determine whether the RTF Act protects the agricultural activity or whether changes to the operation will be required.⁵

The CADB began hearing Right to Farm cases with the implementation of the Right to Farm Act and has seen the number of cases increase over the years, as development has encroached on agricultural areas.

Municipalities can and should limit the number of RTF complaints and encourage farming as an industry by:

- Adopting comprehensive Right to Farm ordinances as outlined by the SADC;
- Making agriculture a permitted use in all appropriate zones;
- Requiring buffers between new non-agricultural development and adjacent existing farmlands; and
- Requiring notification to homeowners purchasing a home in a new subdivision where active agriculture occurs on adjacent property.

The SADC lists 16 conflict resolution determinations for Gloucester County, all of which have been resolved by the Gloucester CADB, one of which went through the SADC or higher court systems (NJ Supreme Court or NJ Superior Court-Appellate Division).³⁷ Right to Farm ordinances (RTFO) are encouraged for municipalities that wish to enter the Farmland Preservation Program unless preserving land through the SADC direct acquisition program or a non-profit acquisition program and therefore not utilizing Planning Incentive Grant funding.

All municipalities within Gloucester County with commercial farms are encouraged to adopt an RTFO and to update their existing ordinances to be consistent with the SADC model ordinance. If a municipality has an RTFO on file with the CADB, that ordinance is referenced during any RTF hearings. If the municipality does not have such an ordinance, the CADB references the State's language. The CADB contacts municipalities periodically regarding RTFOs. Currently, ten of the 24 municipalities in Gloucester County have established a RTFO.⁶

The SADC Model Ordinance is on the state's website, found under Right to Farm Resources, Resources for Supporting a Positive Agricultural Business Environment, found <u>here</u>. The sections of the state model ordinance are listed in **Appendix F**, along with a brief analysis of how the Gloucester County municipal RTFOs align with the model ordinance.

2. Farmland Assessment

The Farmland Assessment program is a tax incentive that reduces property taxes on active commercially farmed land. Land in active agricultural or horticultural use can be assessed on its productivity and soil capability values rather than its market value. This program offers financial incentives to encourage farmers to keep land in agricultural production. This tax incentive is made possible by the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq. Its provisions were updated by legislation that was signed into law in 2013, becoming effective in tax year 2015.

The Farmland Assessment program does not apply to farm structures, such as barns and storage facilities. It has been proposed that additional tax incentives are necessary that encourage farmers to maintain their buildings in good working order as part of active farm operations, and that do not financially penalize them for renovating, or replacing, old or unsafe structures.

In determining the area of eligible land for farmland assessment. all the land under barns, sheds, seasonal farm markets that sell predominantly agricultural products, silos, cribs, greenhouses and like structures, lakes, dams, ponds, streams, irrigation ditches and like facilities are included, provided that their use is related to agriculture or horticulture. Appurtenant woodland acreage that is equal to or less than the acreage in cropland and pastureland is also counted. Preserved farmland must still meet the criteria and filing prerequisites of the Farmland Assessment Act to receive preferential reduced farmland taxes.

Ineligible land area is land under the farmhouse and additional land used in connection with the farmhouse, including but not limited to, land used for lawns, flower gardens, home outdoor entertainment spaces (such as residential pool areas and patios), recreation, and for like purposes. This land will not be counted towards the five-acre minimum requirement for Farmland Assessment eligibility. All farm buildings and structures used for agricultural and horticultural purposes are taxable as real property, even though the land underneath qualifies them for Farmland Assessment. Basic eligibility requirements for farmland assessment include:

- Applicants must own the land.
- The property owner must apply annually for Farmland Assessment on or before August 1 of the year immediately preceding the tax year, and effective as of tax year 2015, must submit proof of sales or clear evidence of anticipated gross sales along with the FA-1 application form.
- Land must be devoted to agricultural and/or horticultural uses for at least two years before the tax year the applicant is applying for.
- Land must consist of at least 5 contiguous acres being farmed and/or under a woodland management plan. Land under or adjoining a farmhouse is not counted towards the minimum 5 acres.
- Effective as of tax year 2015, gross sales of products from the land must average at least \$1,000 per year for the first five acres, plus an average of \$5.00 per acre for each acre over five. In the case of woodland or wetland, the income requirement is \$500 for the first five acres and \$0.50 per acre for any acreage over the five. Depending on the agricultural or horticultural products being produced, the farmer can also offer clear evidence of anticipated yearly gross sales, payments, or fees within a reasonable period.
- The property owner must represent that the land will continue in agricultural or horticultural use to the end of the tax year.

There are additional requirements for the boarding, training, or rehabilitation of livestock and woodlands under a woodland management plan.³⁹

Gloucester County is 215,072 acres, of this, 57,213 acres, or 27% of the County, were farm assessed in 2023. Farmland assessed acres have dropped from 76,603 acres in 2000 to 57,213 acres in 2023, a 25% decrease. (**Chapter I**). The only increase was woodland/wetlands between 2000 and 2023. This is most likely due to cropland left abandoned over an extended period of time which would undergo ecological succession into forested land.

B. Additional Strategies to Sustain, Retain, and Promote Agriculture

1. Permit Streamlining

Municipalities play a key role in the preservation of farming as an industry. Municipal agricultural zoning ordinances protect farm activities and farmland from non-farm uses, prevent conflict between agricultural and other land uses and protect open land uses to foster growth more selectively. The viability of farming is impacted by government regulation, development pressures, and the economics of the marketplace. While land preservation is vital for maintaining a sufficient land base that is suitable for farming, sustaining that base requires support on many fronts. Municipal and zoning support is one, but the flexibility of government regulation can also offer support to farmers and farmland.⁷

Municipalities have created problems for farmers over zoning issues, particularly with down zoning, thereby devaluing the land in the eyes of the bank or other financial institutions and making it harder for farmers to use their land as collateral in obtaining loans. Other issues are signage, building codes, health issues, and disputes with homeowners on property lines, fences, spraying, and noise. The municipality can help by having farmfriendly ordinances in place. It is important for municipalities to better understand farming practices and the regulations regarding preserved farms. The SADC has recently passed a regulation to allow special events on farms. This may cause additional issues with neighbors. If zoning officials educate themselves on these new regulations, it could help stop complaints and lessen farmer-neighbor conflicts.⁸

2. Agriculture Vehicle Movement

As Gloucester County's rural landscape becomes developed for residential subdivisions and commercial uses, the conflicting lifestyles of farmers and suburban residents clash. On rural local and county roads, conflicts between large, slow-moving farm equipment and faster-moving personal vehicles can be dangerous.

Since many farm vehicles travel over local municipal roads, municipalities should continue to support local agricultural businesses' right to do so. The SADC model Right to Farm ordinance recognizes the operation and transportation of large, slow-moving farm equipment over roads as a specific right.

Six of the 10 municipalities (Elk, Franklin, Harrison, Mantua, South Harrison, and Woolwich) with RTFOs specifically include farmer's rights to utilize municipal roads. The four other towns (East Greenwich, Logan, Monroe, and Newfield) should consider updating their ordinances to specifically protect the movement of farm equipment and farm vehicles on their roads. In addition, where feasible, Gloucester County and local road departments can consider creating "farm

Flexibility in Government Regulation

Positive and supportive public policy: This includes legal protection (right to farm), priority in decisions on taxation (farmland assessment), regulation exemptions, and financial incentives (planning incentive grants).

Flexibility: State agencies should consider the NJDA Agricultural Smart Growth Plan when making decisions regarding existing and proposed infrastructure, developing, and amending regulations and programs, and protecting environmental and historical resources. These agencies should coordinate with NJDA to ensure that regulations and programs are attuned to the needs of farmers.

Agriculture-Friendly Zoning: This refers to a comprehensive land use practice that coordinates zoning and land use policy in a proactive way which encourages agribusiness, while at the same time reducing the incidence of farmer-homeowner nuisance issues.

travel lanes" by widening shoulders on key roads used by farmers to transport farm equipment.

For the most part, Gloucester County municipalities with an agricultural base want to keep their farmers in business. South Harrison, Elk, and Woolwich Townships are examples of municipalities that tend to be farm-friendly with issues that come before them. Many towns have been proactive on their farmers behalf, encouraging the County to post farmfriendly signs such as "Caution Farm Equipment" on some County roads.⁹

In January 2017, the NJ Motor Vehicle Commission (MVC) updated its agriculture-related regulations to reflect current industry practices with input from the Division of Highway Traffic Safety, the NJDA, and the NJ Farm Bureau. The update changed the following:

- Allows vans and sports utility vehicles to purchase "farm truck" license plates.
- Increases the hours a registered farm vehicle may be operated on State roadways to three hours before sunrise to three hours after sunset provided that the vehicle is equipped with proper safety lighting.
- Requires registration for vehicles with a 35-mph threshold speed capacity (which was increased from the previous 20-mph capacity).
- Requires that all self-propelled sprayers be registered with the MVC and that they be issued "farm use" license plates.
- Requires that any motor vehicle, not for hire and used exclusively for farming purposes or farming equipment drawn by a motor vehicle must have a slowmoving vehicle emblem affixed to the rear when operated on roadways.
- Requires motor vehicles that are traveling in the same direction as a slow-moving vehicle to reduce their speed to that of the slow-moving vehicle before passing, unless in an area where there are two or more lanes of traffic flowing in the same direction. (NJSA 39:3-24.4)¹⁰

Farmers that secure "farmer" or "farm use" plates for their vehicles and equipment can be exempt from typical motor vehicle requirements and relaxed interstate travel regulations may apply.¹¹

3. Agricultural Labor Housing, Training

An adequate labor supply is integral to farming, especially in labor-intensive sectors such as produce farming, equine,

and agritourism operations. At the local level, interest in farming as an occupation has slowed, creating a need for industry support and hired farm workers. As the average age of farmers in Gloucester County rises, and their children seek jobs outside of the industry, gaps in labor need to be filled. Farm owners can lease their land to farmers, but there are not enough farmers to lease all of the land available. Managing fragmented farm properties and transporting equipment to various locations is another limiting factor for farmers leasing land.

Attracting new farmers and farm workers to the field is only half of the battle. There needs to be education, training, and support from local and state governments to sustain the agricultural workforce in a changing economy. Rising production costs, wages, labor availability, property taxes, and on-farm housing are some of the factors affecting the agricultural workforce in Gloucester County.

On-farm housing is an added benefit, beyond wages, that can be attractive to agricultural laborers and seasonal farm workers as it relieves employees, especially those who are seasonal, from finding affordable housing and transportation to their place of work. At least five municipalities with RTFOs allow for the housing and employment of farm laborers: Franklin, Logan, Mantua, Monroe, and Woolwich Townships.

Residential opportunities on permanently preserved farmland are limited because the development rights on the farm have been purchased during preservation. Even so, there are special situations where a new residential structure may be warranted given the farm size and the nature of the operation. The CADB and the SADC do permit housing on preserved farmland provided they meet the criteria for residential dwelling site opportunities (RDSO), agricultural labor housing, or housing located in exception areas.

While farm worker housing availability and permanency remain an ongoing discussion, other labor issues include worker education and training, modernization and streamlining of the immigration process, and wages.

The U.S. Census of Agriculture figures for 1992 through 2022 show that farm labor costs in Gloucester County have hovered around 30% of total farm production expenses as seen in **Figure VIII-1** (note, not all farms require hired labor). In those 30 years, the number of farms requiring hired labor as a percentage of all farms has risen slightly, from 25% to 26%, while the cost has increased 98%, to \$28.4 million. Overall production expenses rose 107%, from \$43.1 million in 1992 to \$100.3 million in 2022.¹² January 1, 2024, to \$15.13/hour, an increase of a dollar from January 2023. However, agricultural workers are guided by a separate minimum wage timetable and were given until 2027 to reach the \$15/hour minimum wage. Employees who work on a farm for an hourly or piece-rate wage saw their wages increase by 80 cents to \$12.81/hour in January of 2024. Also, seasonal workers saw their wages increase to \$13.73/hour at the start of 2024.¹³

Some farmers attract day laborers who commute from nearby Philadelphia, Camden, Salem, and Vineland. Farmers who use labor year-round may recruit their labor. Many Gloucester County farmers utilize the H2-A program for migrant worker hires. The hourly rate in 2024 is \$17.20 per hour including the farmer covering transportation and housing costs for these workers. Labor is the highest input cost for fruit, vegetable, nursery, and

New Jersey raised the minimum wage on

Regulations for Motor Vehicles for Farmers

- *Farmer Plates*: Farmers may be granted a license plate marked "farmer" to indicate motor trucks engaged in carrying or transportation of farm products and farm supplies.
- Farm Use, Tractor Plates, and Tractor Registration Exemptions can be issued for farm trucks and farm tractors. Motor vehicles that are used exclusively as farm tractors, traction equipment, farm machinery, or farm implements that cannot be operated at a speed over 20mph do not have to be registered.
- Farmer and Farm Use Regulations limitations on operations between farms, hours of travel, distance of travel, speed limitations, vehicle dimension, and other regulations apply to farm vehicles.
- Before securing a Farmer or Farm Use plate from the local Motor Vehicle Office, a *"Farmer's Certificate"* from the Rutgers Cooperative Extension is needed.
- Commercial Driver's License (CDL) if a farmer is traveling intrastate within 150 miles of their farm and not hauling for hire, federal regulations and NJ statute exempt farmers from CDLs.
- Student Agriculture License a Class G Agricultural License allows individuals between 16 and 17 years of age to operate vehicles registered for farm use.
- *Diesel Emissions* diesel-powered motor vehicles registered with "farmer" or "farm use" plates are exempt from the periodic diesel emission inspection.

greenhouse farmers.14

The NJ Board of Agriculture (BOA) issued an opinion on agriculture and the minimum wage following the 2022 State Agricultural Convention. This addressed the growing need for hired farm labor and the wages that workers are paid. The concern is that labor-intensive operations are commonly family-owned. and hired labor is needed to complete tasks that family and aging farmers can not complete on their own. Many produce farmers pay a "piece-rate" where workers are paid based on the number of fruits or vegetables they pick, so during peak harvest, efficient workers can make more than minimum wage, but during other seasonal fluctuations, there may not be enough crops to pick to maintain that wage rate. They stated that all workers wages, regardless of how many crops are picked, must be equal to at least the minimum per-hour wage.

The BOA created a list of steps to bolster the industry's economic viability in response to the passage and signage of the new minimum wage in the state:

- Expand Property Tax Exemption for Single-Purpose Agricultural Structures: Extend the types of buildings under the current definition of "Exempt Structures" to lower a farm's tax burden.
- Farmworker Job Retention Incentives: Annual incentives to farmers based on the difference between the 2013 constitutionally mandated minimum wage levels and the newly scheduled increases for workers.
- Labor Tax Credits: Help offset increased unemployment insurance payments, state disability insurance payments, and workers compensation insurance costs, resulting from minimum wage increases, as these payments and costs are wage-based and automatically increase as the minimum wage increases.

At the same Agricultural Convention, the BOA addressed labor-intensive agricultural industries, including those operations that require daily care of plants and animals, and harvesting of fruits and vegetables. The resolution states that to ensure the future of its agriculture, New Jersey must not only preserve its farmland but

- Tax Credits for Farmworker Housing and Transportation: Credits 100% to help offset the cost of 90% provisions that benefit farmworkers beyond their 80% base wages. 70% 60% Accelerated Depreciation 50% Allowances: Adopt federal 40% tax allowances for New 30% Jersey business tax returns to allow for more rapid 20%
- depreciation of capital expenses, especially for equipment that will improve efficiency.

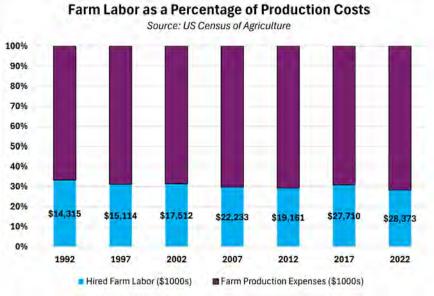


Figure 1. Farm Labor Cost Percentage of Production Costs address the needs of its farm workforce and "ensure the availability of adequate, legal farm labor" on both the state and federal levels. The resolution calls for the establishment of an earned adjustment of status program and reforms to the current practices for obtaining temporary agricultural worker visas.

The BOA would like to see reforms that establish a clear path to legal status and provisions for an adequate seasonal and year-round workforce through guest worker programs. Labor supply and training are key for sustaining and growing the industry in New Jersey, and the BOA encourages programs that support worker training, health and safety, and address housing issues.

Through its Division of Agriculture and Natural Resources, Natural Resource Conservation Program, the NJDA offers technical, financial, and regulatory assistance, and provides educational outreach to landowners throughout the state.¹⁵

The NJ Department of Labor (DOL) is a useful resource for employment and training services targeted at farm workers.¹⁶ Agriculture labor education and training are funded through the Workforce Development Programs. These programs can help assist in upgrading the skills and productivity of the agricultural workforce.

The NJDA offices in Flemington provide employment and training services to farmworkers including career development, job searching skills, and job referrals.¹⁷ The department also offers a Training Grant for up to \$4,000 of vocational training to eligible applicants, tuition assistance for the unemployed seeking courses at state colleges, and has programs such as Learning Link which offers classes for upgrading basic skills and to help obtain a GED, and SkillUp New Jersey which is a free online training program offering more than 5,000 skillset courses at <u>NJ.MetrixLearning.com</u>

New and Beginning Producers

The 2022 Agricultural Census recorded 50 young producers on 41 farms in Gloucester County, making it the 11th-ranked county in the state in terms of young producers. Hunterdon County is number one in the state, with 245 young producers on 178 different farms, while Hudson County is last in the state with 2 young producers on two farms.

Gloucester County is 9th in the state for most farms with new and beginning producers where, as reported in the 2022 Agricultural Census, the County had 302 new and beginning producers on 175 farms. Hunterdon County is first again with 1,073 new and beginning producers on 631 farms. These statistics put Gloucester County in the middle of the state rankings for attracting new and younger producers to farm within their boundaries. These numbers may increase, if county, state, and federal regulations can maintain the flexibility needed to encourage new and young farmers to join the industry and support their endeavors as they navigate the ever-changing agricultural field.

4. Wildlife Management Strategies

Management of nuisance and cropdamaging wildlife is critical to the short and long-term sustainability of the agriculture industry. Crop damage from wildlife and insects leads to economic loss for the farmer and/or landowner. A range of insects, deer, bears, turkeys, Canada Geese, and groundhogs are major contributors to the ever-increasing problem. So is residential/industrial development, which narrows the habitat for the nuisance animals and their predators, increasing the densities of the unwanted animals and pushing the predators to seek other territories.

Deer fencing may be effective for protecting produce since produce is grown on relatively small plots of land. However, it is not cost-effective to erect deer fencing on large tracts of land. Farmers can apply for depredation permits (issued by the NJDEP Protection Fish and Wildlife program) that allow them to hunt out of season. As farms become smaller and developments are built adjacent to farms, areas can no longer be hunted, even by the farmers who own the land, because they would be too close to a neighboring dwelling. County farmers continue to work with the NJDEP and NJDA, to implement wildlife control strategies on privately and publicly owned land.

Insects also cause crop loss. The pesticides used to control them may cause other kinds of damage, possible health concerns for the applicator and end user of the product, and pollution of the water supply. Some of the most critical and destructive threats to forests and forest resources include the avpsv moth, emerald ash borer, and spotted lanternfly. The gypsy moth is the most destructive forest insect pest to infest New Jersey's forests. Repeated defoliation by the gypsy moth can severely weaken trees and shrubs, leaving them more susceptible to disease, and ultimately cause death to large sections of forests, orchards, and landscape plants. The NJDA Division of Plant Industry programs oversees programs to protect forests from infestations.18

Gloucester County has not been affected by the gypsy moth per the 2024 NJDA Division of Plant Industry Aerial Defoliation Survey.¹⁹ The NJDA promotes an integrated pest management approach, however aerial spray treatments in residential and recreational areas using the selective, non-chemical insecticide, *Bacillus thuringiensis*, is recommended where natural controls are unable to keep the pest population in check.

The Emerald Ash Borer (EAB) was discovered in New Jersey in 2014 in Somerset County and has since killed tens of millions of ash trees throughout the US and Canada. As of 2022, the EAB had been found in all 21 counties in New Jersey. The destructive pest has been present in Gloucester County since 2019 (Figure VIII-2). Tree mortality due to the EAB poses serious safety threats to farm and residential infrastructure including fencing, access roads, electrical utilities, farm buildings and farmhouses, hedgerows, and woodlot management units. Managing the standing timber to prevent damage from falling limbs and trees can be a dangerous and expensive task for farmers who may need to seek out logging or forester companies to remove affected trees. At this time, there are no conservation or stewardship funding programs that aid farmers in managing EAB impacts.

The Spotted Lanternfly (SLF) was first discovered in the US in Berks County. Pennsylvania in 2014, and has since spread to numerous neighboring states, including New Jersey. The insects in their various life stages feed on the sap of many different fruit, ornamental, and woody trees including grapevines, maples, black walnut, and other plants. Currently, there is no commercially available biological control option for SLF, but the NJDA is researching potential parasitoids or pathogens that can be released as a long-term control solution. Based on studies in 2018 and 2019, paraffinic and/ or mineral oils such as JMS Stylet oil, Damoil, and Lesco Horticultural oil were the most effective products against insect egg masses, and research trials are still ongoing to evaluate the best application

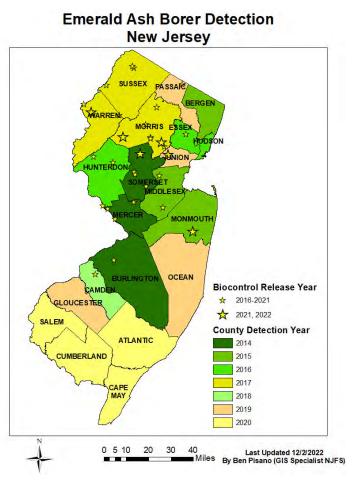


Figure 2. EAB Detection NJ

method and active ingredients for systemic insecticides.

Awareness of local pests, current research on management techniques, and appropriate timing for pest treatments can help farmers target the right pests efficiently. The Network for Environmental and Weather Applications (NEWA) is a web-based weather and pest reporting and forecasting system for insect and disease pests of fruits and vegetables. As part of a farm-integrated pest management (IPM) plan, NEWA can help save users money on spray costs and prevent crop losses by keeping farmers up to date on pest and weather conditions in their area and aid in decision-making to enhance pest control tactics with reduced costs and environmental burden. Pest

forecasts include but are not limited to apple diseases and insects, apple leaf wetness events, grape diseases and downy mildew, potato blight, tomato blight, sweet corn Stewart's wilt, alfalfa weevil, and turfgrass diseases.

5. Agricultural Education and Promotion

To sustain a diverse and stable food and agricultural industry, education and progressive, ongoing training for farmers will promote a more efficient and productive business environment. This includes farmer risk management education, labor education including worker safety, agricultural leadership training, and secondary school, and college agricultural education. Programs include:

- Rutgers Cooperative Extension (RCE): During the growing season, NJAES-RCE of Gloucester County can provide one-on-one. on-site consultations with farmers to assist with the control of insect infestations and plant diseases for fruits, vegetables, greenhouse nurseries, ornamentals, Christmas trees, and field crops. Similar farm animal consultation can be provided on a yearround basis. Also, during the growing season, NJAES-RCE of Gloucester County coordinates with other RCE offices in southern New Jersey to conduct on-site farm meetings regarding a range of agricultural issues including vegetable growing, safe operation of farm equipment, and programs to certify and recertify farmers for pesticide application licenses.
- Seeds to Success: Gloucester County's Youth Farmstand Project. It combines year-round, in-school business training and life skills education with paid summer work experience with

youth in at-risk communities. In years past, Seeds to Success has operated farmstands in Glassboro, Paulsboro, and Woodbury. However, with cuts to funding, only Glassboro had a farmstand in 2024.²⁰

- Annie's Project is a farm risk management education program for women provided by Rutgers University, and Cornell Small Farms Project offering online courses for farmers. Rutgers University, NOFA-NJ, and NRCS provide twilight meetings, field days, farm-based education programs, and other training courses.
- NJDA lists programs, courses, and events that are useful for beginning farmers on its <u>website</u>.
- NOFA-NJ offers educational programs for farmers of all ages and skill sets, including a Beginning Farmer Program. Other educational programming includes organic gardening, permaculture design certification, business courses, technical assistance, and farm-to-table workshops.
- New Jersey Farm Bureau hosts
 educational meetings and provides
 educational information for farmers
 on its website about legislative issues,
 farmland preservation, and labor
 resources.²¹

Due to the aging farmer population in Gloucester County (average of 52.5 years in 1992, as compared to 58.2 years in 2022), the next generation of the County's farmers needs to become interested in, and exposed to the business of agriculture, and be prepared to enter the industry. Educational programs in agriculture can assist those interested in pursuing such careers. Opportunities include:

 Gloucester County Institute of Technology (GCIT): GCIT is part of the NJ Council of County Vocational-Technical Schools. GCIT does not currently offer programming for agriculture for either their high school students or adult students.²² The closest program is in Woodstown, Salem County, where they offer agricultural sciences for high school students.

- Rowan College: At the college level, there are two that offer agriculturalrelated degrees located in Gloucester County. The first is Rowan College of South Jersey in Sewell. Here, students can receive an associate's degree in agriculture in two years and then transfer out to complete a bachelor's degree at a university.²³
- Rowan University in Glassboro, students
 can receive a Food Systems Planning
 Undergraduate Certificate from the
 Department of Geography, Planning,
 and Sustainability. The CUGS requires 12
 credit hours and is open to all students.
 Overall, the program takes four classes
 to complete.²⁴
- Rutgers University offers degree
 programs and courses in Agriculture
 and Food Systems, Animal Science,
 Plant Biology, Entomology,
 Agroecology, Horticulture, Sustainable
 Food Systems, and Public Garden
 Management. There is a 5-Year Teacher
 Education program for Agricultural
 Science Education Teachers (to teach
 grades K-12) and certificate programs
 in Horticultural Therapy, Medicinal and
 Economic Botany, Plant Biosecurity,
 and Turfgrass Science.²⁵

A list of 4-year colleges located in the northeast that offer agricultural programs is found on the NJDA <u>website</u>.²⁶

 NJ Future Farmers of America (FFA): The goals of the program are to prepare students for successful careers; and ensure that all students have access to progressive educational delivery systems. In New Jersey, there are more than 2,600 members of the FFA in chapters throughout the state. There is currently no FFA chapter in Gloucester County.²⁷ Having organizations apply to become a part of the FFA would benefit those looking to expand farming within the county.

The Gloucester County agricultural community can look to expand agriculture education to more schools, including elementary schools, which currently do not offer classes or programs within the county.²⁸

- 4-H: The Gloucester County NJAES-RCE helps promote the 4-H program. 4-H is an informal, practical educational program for youth that assists young people interested in farming and farm animals through different research projects, programs, field trips, and livestock projects.²⁹
- NJ Agricultural Society's (NJAS) Agricultural Leadership Program is a two-year professional development opportunity specifically designed for individuals interested in farming and agribusiness, hosted, and designed in collaboration with Rutgers University. The NJAS's Learning Through Gardening program promotes growing school gardens to increase understanding of agriculture, which can be implemented at preschools and elementary schools.³⁰

Promoting Agriculture

Over the last 50 years, New Jersey has transformed from a largely rural and agricultural landscape to a more urban and suburban landscape. However, farming remains strong and viable in many portions of the state, including Gloucester County. If the County's remaining agricultural areas are to survive and prosper, then the non-farming public needs to be aware of and financially supportive of the continuing economic, cultural, scenic, and agricultural contributions made by Gloucester County's farming community. Public education and outreach can increase the recognition of the farm industry's importance to the non-farming residents.

Marketing, advertising, and agritourism initiatives by individual farmers all provide visibility for the agricultural community and are positive forms of public outreach. This outreach can be supported and built on by county, state, and municipal-level organizations that promote the farming community as a whole. Expansion of agriculture and agritourism-related signage at the municipal and county levels is one way to increase visibility. Another is to promote an agricultural presence at fairs, festivals, and other community events by having agricultural organizations set up informational tables or cooperative farmstands. These initiatives would complement and expand on what is already happening, such as the annual Gloucester County 4-H Fair.

Local, county, and state governments can advertise the contributions of the farming community via public outreach at local schools as well. Some farms in Gloucester County offer on-farm tours to school groups, bringing youth to the farms, but more farmers could be encouraged to do this, or a broader, organized program or schedule of school tours might be implemented.

Statewide programs, such as Jersey Fresh, act as an advertising, promotional, and quality grading resource.³¹ The Jersey Fresh Program was initially launched in 1984 to help inform customers about the availability of fruits and vegetables grown in New Jersey. Now, the label is nationally known and produce under the label is recognized as meeting quality standards and grown locally here in New Jersey. The NJDA Division of Marketing and Development has expanded upon this successful brand by promoting other similar labeling including Jersey Grown for locally grown plants, trees, shrubs, and flowers, Jersey Raised for livestock, Jersey Seafood, and Jersey Equine.

In January 2022, Bill NJ S4128 was enacted to restrict the labeling of food products as "locally grown," "locally harvested," "locally sourced" to only those fruit and vegetable products that are grown and harvested within the State. This will ensure that only fruit and vegetable products grown and harvested in New Jersey will be advertised as a "local" product and will reduce out-ofstate competition to the sales of Jersey Fresh labeled products.³²

The USDA has an array of loans and grants, known as the Rural Development Program, to assist residents in rural areas of the country to support essential public facilities and services. Grants and loans are available in three key areas:

- Business-Cooperative,
- Housing and Community Facilities (including farm labor housing), and
- Utilities (including Broadband).

To qualify for some of the program's loans and grants, municipalities must have less than 10,000 residents, other program thresholds have increased.

The U.S. Taxpayer Relief Act of 1997, administered by the U.S. Department of Treasury's Internal Revenue Service, is meant to smooth out economic disparities that farmers experience from year to year due to the cyclical nature of agriculture. Known as Farm Income Averaging, qualified farmers can average all or part of their current year farm income over the previous three years. Substantial tax dollars can be saved by income averaging.³³

The New Jersey Legislature has considered bills that would provide income averaging similar to the federal program. In the 2018-2019 Regular Session, Bill NJ A236 was introduced and has since been referred to the Assembly Agriculture and Natural Resource Committee.³⁴ The NJDA, SADC, Gloucester County Commissioners, and Gloucester CADB can work with, and encourage, the New Jersey Legislature to continue to introduce bills that would help Gloucester County farmers remain economically viable.

The USDA FSA has both Direct and Guaranteed Farm Ownership loans available for farmers. Direct Farm Ownership Loans are available up to \$600,000, and guaranteed loans can go up to \$1,776,000. Down Payment loan funds may be used to partially finance the purchase of a family farm. Loan applicants must contribute a minimum down payment of 5% of the purchase price of the farm and the Agency will finance 45% to a maximum loan amount of \$300,015.³⁵

FSA loans can be used for most agriculture necessities such as purchasing land, livestock, equipment, feed, seed, and supplies, and for the construction of buildings, or to make farm improvements.

All USDA FSA loans and information on those loans can be found <u>here</u>.³⁶

The Rutgers Cooperative Extension of Gloucester County may provide:

- Assistance with obtaining water certification and registration permits from the New Jersey Department of Environmental Protection, for groundwater and/or surface water allocations.
- Soil testing for fields and pastures.
- Assistance with obtaining farmer certificates for N.J. Division of Motor Vehicle registrations.
- Assistance with applications for "Outstanding Young Farmer" (OYF) nominations. OYF is a state award given annually by the NJDA which "recognizes the outstanding achievements of a young person engaged in farming in New Jersey."⁴⁰
- Assistance with grant applications to the NJDA for various types of economic assistance. Examples include **Jersey Fresh** grants to advertise.
- Distribution of **Jersey Fresh** and **Jersey Grown** promotional material such as bumper stickers, banners, and t-shirts.
- Assistance to connect owners of farmland with tenant farmers, so that land may stay in farmland assessment.
- Assisting new farmers with various regulatory requirements, and acquaintance with various farmer organizations.
- Holding Forestry Stewardship Programs.
- Development of specialized literature, such as a Peach Buyers Guide for buyers and distributors, a factsheet series and a Web page for agritourism.
- Procuring a USDA Specialty Crops Block Grant to conduct Direct Marketing Seminars for farmers.
- Providing outreach through the NJAES-RCE of Gloucester County Website, and at the annual 4-H Fair.
- Providing agricultural fact sheets and bulletins and links to NJAES-RCE publications in other counties through the NJAES-RCE of Gloucester County website.
- Publication of the *Gloucester County Agricultural Updates*, an email newsletter that is available to anyone who provides their email address. The newsletter covers news and issues for Gloucester County farmers.

Literature Cited

Chapter 8

1 New Jersey Department of Agriculture. SADC. *Right to Farm*, <u>https://www.nj.gov/agriculture/sadc/rtfprogram/</u> Accessed September 2024.

2 New Jersey Department of Agriculture, SADC, Right to Farm, *Agricultural Management Practices*. <u>https://www.nj.gov/agriculture/sadc/rtfprogram/amps/</u> Accessed September 2024.

3 New Jersey Department of Agriculture, SADC, *Agricultural Mediation*, <u>https://www.nj.gov/agriculture/sadc/agmediation/</u> Accessed September 2024.

4 New Jersey Department of Agriculture, SADC, Right to Farm. *Conflict Resolution*. <u>https://www.nj.gov/agriculture/sadc/rtfprogram/conflictres/</u> Accessed September 2024.

5 New Jersey Department of Agriculture, SADC, Right to Farm, *Formal Conflict Resolution Process*. <u>https://www.nj.gov/agriculture/sadc/rtfprogram/conflictres/formal/</u> Accessed September 2024.

6 New Jersey Department of Agriculture, SADC, *Local Right-to-Farm Ordinances*. <u>https://www.nj.gov/agriculture/sadc/rtfprogram/resources/localordinances.html#gloucester</u> Accessed September 2024.

7 New Jersey Department of Agriculture, *Agricultural Smart Growth Plan*. (2006) <u>http://</u> <u>www.state.nj.us/agriculture/pdf/smartgrowthplan.pdf</u> Accessed September 2024.

8 Personal communication with Eric Agren, Mary Cummings, Gloucester County CADB. October, 2024.

9 Personal communication with Eric Agren, Mary Cummings, Gloucester County CADB. October, 2024.

10 New Jersey Motor Vehicle Commission, *Slow Moving Vehicles*, (2017). <u>https://www.nj.gov/mvc/vehicletopics/slowvehicles.htm</u> Accessed September 2024.

11 New Jersey Department of Agriculture, *Motor Vehicle Laws and Regulations Impacting Farmers*, <u>https://www.nj.gov/agriculture/divisions/md/prog/farmermotorvehicles.html</u> Accessed September 2024.

12 United States Department of Agriculture, 1992, 1997, 2002, 2007, 2012, 2017, 2022 Ag Census. <u>http://www.agcensus.usda.gov/Publications/</u> Accessed September 2024.

13 Official Site of the State of New Jersey, Department of Labor & Workforce Development. New Jersey's Minimum Wage to Exceed Governor Murphy's \$15/Hour Goal on January 1. (2023) <u>https://www.nj.gov/labor/lwdhome/press/2023/20231227_minimumwage.shtml</u> Accessed September 2024. 14 Personal communication with Michelle Infante-Casella, Gloucester County NJAES-RCE. April, 2024.

15 NJDA, Agricultural and Natural Resources. <u>https://www.nj.gov/agriculture/divisions/anr/</u> Accessed September 2024.

16 Official Site of the State of New Jersey, NJDOL, *Farm Workers*. <u>https://www.nj.gov/labor/myworkrights/worker-protections/farm_workers/</u> Accessed September 2024.

17 NJDA, Food, Agriculture & Natural Resources Education, <u>https://www.nj.gov/agriculture/ag_ed/</u> Accessed September 2024.

18 NJDA Division of Plant Industry: Contacts. Department of Agriculture. (n.d.). <u>https://www.nj.gov/agriculture/divisions/pi/about/contacts.html</u> Accessed September 2024.

19 NJDA Division of Plant Industry. (2024). *New Jersey LDD Aerial Defoliation Survey*. <u>https://www.nj.gov/agriculture/divisions/pi/pdf/2024%20LDD%20Aerial%20Defoliation.pdf</u> Accessed September 2024.

20 Rutgers NJAES Cooperative Extension of Gloucester County. Seeds to Success: Gloucester County's Youth Farmstand Project. <u>https://gloucester.njaes.rutgers.edu/fchs/</u> <u>seeds-to-success/</u> Accessed September 2024.

21 New Jersey Farm Bureau. <u>http://njfb.org/</u> Accessed September 2024.

22 New Jersey Council of County Vocational-Technical Schools, *Gloucester County Institute of Technology*. <u>https://careertechnj.org/school/gloucester-county-institute-of-technology/#district-locations</u> Accessed September.

23 Rowan College South Jersey, *Agriculture, A.S.* (Cumberland). <u>https://www.rcsj.edu/</u> <u>Degrees-site/Pages/Agriculture-AS.aspx</u> Accessed September 2024.

24 Rowan University, *Food Systems Planning Undergraduate Certificate*, <u>https://earth.</u> <u>rowan.edu/departments/geography/academics/community-env-planning/food-systems.</u> <u>html</u> Accessed September 2024.

25 Rutgers, Academics, https://www.rutgers.edu/academics Accessed September 2024.

26 SADC FFA. (rep.). 4-Year Colleges in the Northeast Offering Agriculture-related studies. <u>https://www.nj.gov/agriculture/ag_ed/ffa/scholarships/4yrAgColleges.pdf.</u> Accessed September 2024.

27 New Jersey FFA Association, 2024-2025 New Jersey Program Affiliation Handbook. https://www.nj.gov/agriculture/ag_ed/bulletin/24-25NewJerseyFFAAffiliationHandbook.pdf Accessed September 2024.

28 National Agriculture in the Classroom, <u>https://agclassroom.org//</u> Accessed September 2024.

29 Rutgers NJAES Cooperative Extension of Gloucester County, *4-H Youth Development*. <u>https://gloucester.njaes.rutgers.edu/4h/</u> Accessed September 2024.

30 Rutgers New Jersey Agricultural Experiment Station, *Learning Through the Garden*. https://njaes.rutgers.edu/fs1211/#:~:text=Studies%20show%20that%20the%20education%20 acquired%20in%20the,flexibility%2C%20open-mindedness%2C%20informed%20 skepticism%2C%20creativity%2C%20and%20critical%20thinking. Accessed September 2024.

31 NJDA, Jersey Fresh, <u>https://www.nj.gov/agriculture/divisions/md/prog/jerseyfresh.html</u> Accessed September 2024.

32 NJ-S4128, Bill Track 50 (2022). bill. <u>https://www.billtrack50.com/billdetail/1397307</u>. Accessed September 2024.

33 Lutz. Understanding Farm Income Averaging. <u>https://www.lutz.us/blog/understanding-farm-income-averaging</u> Accessed September 2024.

34 LegiScan. New Jersey Assembly Bill 236. (2018). <u>https://legiscan.com/NJ/text/A236/</u> id/1683841 Accessed September 2024.

35 USDA Farm Service Agency. *Farm Ownership Loans*. <u>https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/farm-ownership-loans/index</u> Accessed September 2024.

36 USDA Farm Service Agency, *Farm Loan Programs*. <u>https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/index</u> Accessed September 2024.

37 New Jersey Department of Agriculture, SADC. New Jersey Farmland Preservation Program. *Site-Specific AMP Determinations*. <u>https://www.nj.gov/agriculture/sadc/</u> <u>rtfprogram/formdet/ssamp/</u> Accessed September 2024.

38 New Jersey Department of Agriculture, SADC, *Right to Farm Eligibility Criteria*. <u>https://www.nj.gov/agriculture/sadc/rtfprogram/eligibility/</u> Accessed September 2024.

39 New Jersey Department of Agriculture, Farmland Assessment. *Farmland Assessment Overview*. July 2015. <u>http://www.nj.gov/agriculture/divisions/anr/pdf/farmlandassessmentoverview.pdf</u> Accessed September 2024.

40 NJDA, Outstanding Young Farmer's Award, New Jersey's Annual Competition. <u>http://</u>www.nj.gov/agriculture/about/sba/cover.html</u> Accessed September 2024.

Appendix

A. Public Meeting Materials

Referenced in Executive Summary

B. Agricultural Soils in Gloucester County

Referenced in Chapter I, Section B

C. Preserved Farms of Gloucester County

Referenced in Chapter IV, Section B

D. SADC Minimum Eligibility Criteria

Referenced in Chapter V, Section C

E. Target Farms

Referenced in Chapter V, Section C

F. Gloucester County Right to Farm Ordinance (RTFO) Analysis

Referenced in Chapter VIII, Section A

APPENDIX A Public Meeting Materials

1. Public Meeting #1: March 14, 2024 CADB

Meeting Announcement, Agenda, Presentation, Minutes

2. Public Meeting #2: January 14, 2025 CADB

Meeting Announcement, Agenda, Presentation, Minutes

CADB Resolution Approving Plan Update

3. Planning Board: January 16, 2025

Resolution Adopting Plan Update

4. County Commissioners: February 5, 2025

Resolution Approving Plan Update

1. Public Meeting #1: March 14, 2024 CADB

Municipal Announcement (03/14/2024)

From: Schreiter, Elaine <<u>eschreiter@co.gloucester.nj.us</u>>
Sent: Wednesday, February 21, 2024 1:02 PM
To: Agren, Eric <<u>eagren@co.gloucester.nj.us</u>>
Subject: Public Meeting Notice

Dear Municipal Clerk,

Attached please find a notice of a public meeting to be held March 14, 2024, regarding the 2024 Farmland Preservation Plan Update for Gloucester County. Please post this notice for the public to view. Municipal administrators are invited to attend, so please pass the meeting information on to the appropriate persons. If you have any questions, please contact the Office of Land Preservation at 856-224-8045. Thank you.

Elaine Schreiter Office of Land Preservation 254 County House Road Clarksboro, NJ 08020 P: 856-224-8045



Public Announcement (03/14/2024)

PUBLIC ANNOUNCEMENT

Gloucester County Agriculture Development Board

Please be advised that the meeting of the Gloucester County Agriculture Development Board (GCADB) scheduled for Thursday March 21, 2024 **has been rescheduled** to a meeting date of **March 14, 2024 at 6:30 p.m.** The meeting will be held at the Office of Land Preservation **254 County House Road, Clarksboro, NJ 08020** (Shady Lane Complex). This public meeting will be conducted in person. Please be advised that a public hearing has been scheduled on the following matter:

New Business

a. Discussion and possible action on a Resolution granting approval for Special Occasion Event (SOE's) on a preserved farm known as Exley Farms, LLC in the Township of Franklin, Block 2702, Lot 13.

Public Hearing

a. Presentation and Public Meeting on the Update to Gloucester County's Comprehensive Farmland Preservation Plan.

The meeting will be held on **Thursday March 14, 2024 at 6:30 p.m.** at The Gloucester County Office of Land Preservation and GCADB, Shady Lane Complex, 254 County House Road, Clarksboro, NJ 08020.

Action may or may not be taken. Questions may be directed to Eric Agren, Gloucester County Office of Land Preservation at (856) 224-8045 or by email <u>eagren@co.gloucester.nj.us</u> or Eric M. Campo County Counsel at (856) 856-384-6943 or by email <u>ecampo@co.gloucester.nj.us</u>.

Public Notice (03/14/2024)

NJ,Advance Media ATTN:Legal Adventising Dept. 161 Bidgeton Pike Building E Mulikea Hill, NJ 08062



South Jersey Times

AD#:0010832158

GLOUCESTER COUNTY LAND PRESERVATION 254 COUNTY HOUSE RD CLARKSBORO, NJ 00020

Sales Rep: NJ LegalRepNJ Account Number:1168915 AD#: 0010832158

Remit Paymont to: NJ Advanco Media Dept 77571 P.O. Box 77000. Detrolt, MI 48277-0571 POR QUESTIONS CONCERNING THIS AFFIDAVIT, PLEASE CALL 800-354-4169 OR EMAIL sjilegslads@njadvahcemadja.com

Paga 1 of 3 Cosla P.O. Number Date Position Description 02/29/2024 Public Meetings NJ PUBLIC NOTICE PUBLIC PUBLIC ANNOUNCEMENT-CADB Meeting ANNOUNCEMENT Gloucester County 3-14-2024 Åd Size 2 x 51, L Basic Ad Charge - 02/23/2024 \$40,22 Total \$40.22

l die seitemein die darie und gardig under the penetike z of iam thei bits bitler invertee i Sierikans have been tendereid as stated jarefu, thei pit bode hier been given of re-	celved by any person or persons within the knowledge of the claiment in
connection with the above states, that the amount hat in stated in justy one and or Units: 2/27/2024	For ION: 13-423607
skinskiró: Chrite Tighe	Official Position; AR Manager
CERTIFICATION BY RECEIVING AGENOY	CERTIFICATION BY APPROVAL OFFICIAL
L breing knowledge of the texts, sectly and dedise that the goods have been received at the sections seedult if and are in completions with the specifications contracting seedult in a section of the section of the sec- section of the section of the section of the section of the section of the section definition of the section of the section of the section of the section definition of the section of the section of the section of the section of the section definition of the section o	Eleventy and sectore that the bit or inverse is correct, and that sufficient hands are markeds to a starty the claim. The Payment is but the charge able to: Appropriation Accounts () and Accounts Chargest: P.O.S.
(\$s:alwr)	

THIS FORM APPROVED FOR USE BY LOCAL GOVERNMENTS BY THE LOCAL FINANCE BOARD

Public Notice (03/14/2024)



South Jersey Times

Totel

LEGAL AFFIDAVIT

\$40.22

State of New Jersey.) ss County of Gloucester)

Jeanette Kryzymalski being duly sworn, deposes that he/she is principal clerk of NJ Advance Media; that South Jersey Times is a public newspaper, with general circulation in Camben, Cumberland, Gloucester, and Salem Countles, and this notice'ls an accurate and true copy of this notice as printed in said newspaper, was printed and published in the regular edition and issue of said newspaper on the following date(s); South Jersey Times 02/23/2024

Pd k of the

Swom to and subscribed before me this 27th day of February 2024

Notary Public

PUBLIC NOTICE

PUBLIC ANNOUNCEMENT

Gloucester County Agriculture Development Board

Please he advised that the meeting of the Gloucester County Agriculture De-velopment Board (GCADB) scheduled for Thursday March 21, 2024 has been re-scheduled to a meeting date of March 14, 2024 at 6:30 p.m. The meeting will be held at the Office of Land Preservation 254 County House Road, Clarksboro, NJ 08020 (Shady Lane Complex). This public meeting will be conducted in person. Please be advised that a public fiearing has been scheduled on the following matter:

New Business

a Discussion and possible action on a Resolution granting approval for Special Occasion Event (SOE's) on a preserved farm known as Exley Farms, LLC In. the Township of Franklin, Block 2702, Lot 13.

Public Hearing a, Presentation and Public Meating on the Update to Gloucester County's Comprehensive Farmland Preservation Plan,

The meeting will be held on Thursday March 14, 2024 at 6:30 p.m. at The Gloucester County Office of Land Preser-vation and GCADB, Shady Lane Complex, 254 County House Boad, Clarkshoro, NL LORETTA A. EORAN NOTARY PUBLIC OF NEW JERSEY Commission # 50006438 My Commission Explices 4/6/2026

AD#: 0010832158

Gloucester County Comprehensive Farmland Preservation Plan

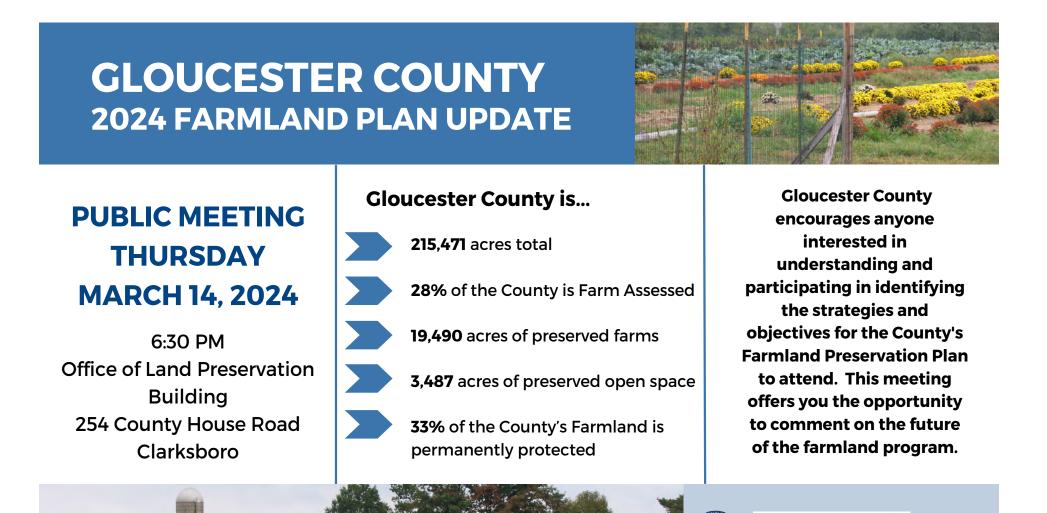
Public Notice (03/14/2024)

08020,

Action may or may not be taken. Questions may be directed to Eric Agren, Gloucester County Office of Land Preservation at (856) 224-8045 or by small eagr en@co.gloucester.nj.us or Eric M. Campo, County Counsel, at (856) 856-384-6943 or by small ecampo@co.gloucester.nj.us.

> Costi \$40,22 (0010832158) 1t 2/23/24

Public Meeting Announcement for website and email (03/14/2024)





Public Meeting 1 Agenda (03/14/2024)

AGENDA

GLOUCESTER COUNTY AGRICULTURE DEVELOPMENT BOARD

Thursday, March 14, 2024 6:30 P.M. Shady Lane Complex 254 County house Road Clarksboro, NJ, 08020

- 1. Call to Order
- 2. Compliance with the Open Public Meeting Act (Public Notice in S.J. Times on February 23, 2024) and posted on GCADB Website.
- 3. Roll Call
- 4. Administer Oath of Office for a new member Commissioner Matt Weng/Campo
- 5. Approval of minutes for the December 14, 2023 meeting.
- 6. Correspondence Cindy Roberts, SADC, & CADB Staff
 - a. SADC-New Appraisal Formula: Based Value Law (P.L. 2023, c. 235). See Summary Fact sheet Bill- A4729 and 4729-R2.
 - b. Soil Protection Standard.
- 7. Director's Report
- 8. Old Business
- 9. New Business
 - a. Discussion and possible action on a Resolution granting approval for Special Occasion Event (SOE's) application on a preserved farm known as Block 2702, Lot 13, Township of Franklin.
- 10. Public Hearing
 - a. Presentation and Public Meeting on the Update to Gloucester County's Comprehensive Farmland Preservation Plan.
- 11. Public Portion
- 12. Adjourn





Welcome and Introductions

County Agriculture Development Board West Jay Kandle III, Chair Russell Marino, Vice Chair

Robert Curtis Joel Wereck Wally Eachus Charles Romick Mike Visalli Eric Agren, Office of Land Preamation Eric M. Campo, Jourd Solicitor and Socretary Michelle Infante-Casella, Autors Cooperative Estemais Robert McErlane, *Clourscenarion Datrice* Robert McErlane, *Clourscenarion Datrice* Robert McErlane, *Clourscenarion Datrice* Matthew Weng, Laine, *Claury Commissioners*

2



Gloucester CADB Business Meeting Call Graft Administre Cath of Office Administre Cath of Cath of Cath of Cath Cath of Cath of Cath of Cath of Cath of Cath Cath of Cath of Cath of Cath of Cath of Cath of Cath Cath of Cath Cath of C

lic Portion



Farm Plan Update Overview

Mission of the CADB:

The Gloucester CADB is dedicated to the preservation of the Country's productive farmlands, farms, and farmers. To that end, the CADB is committed to preservating additional farmland and providing the economic infrastructure and support of the farmling community in Gloucester County.

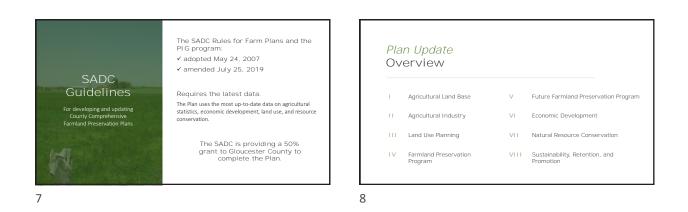
Gloucester County: 60% of land is covered by soils of agricultural importance. 28% of the County is assessed as farmland. 33% of the County's farmland is permanently protected.

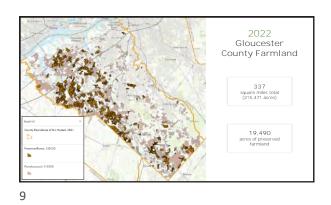
3







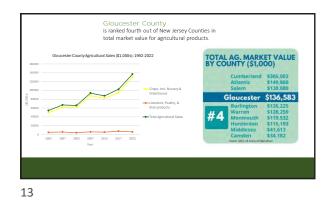






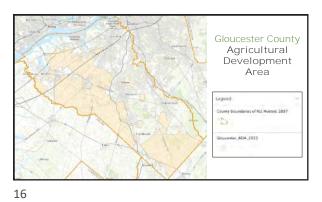


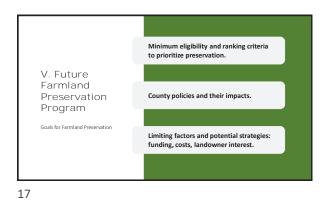


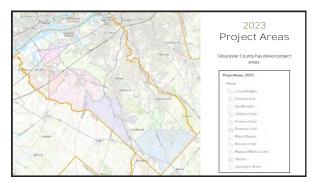


Regulations	Techniques	Buffering
Master Plan and County development regulations.	Transfer of Development Rights (TDR), mandatory clustering, non-contiguous clustering, and lot size averaging.	Buffer requirements between agriculture and other land uses.











19



20



21









Public Meeting 1 Minutes (03/14/2024)

Gloucester County Agriculture Development Board

Chairp	erson: West (Jay) Kandle, III	Secretary: Eric M. Campo			
Minutes of the March 14, 2024 6:30pm					
Members Present:	Jay Kandle, Robert Curtis, Wally Eachus, Chuck Romick, Russell Marino, Joel Viereck				
Staff Present:	Eric M. Campo, Secretary, GCADB/Director, Gloucester County Office of Land Preservation, Eric Agren, Office of Land Preservations, Mary Cummings, Office of Land Preservation				
Others Present:	It: Michelle Infante-Casella non-voting member, Robin Hague, GC Office of Taxation, Commissioner Matthew Weng, Emily McGrath, Aide to Commissioner Weng, Matthew Sailey, Stephanie Exley, and Bill Exley				

Secretary Campo called the meeting to order at 6:35pm. After noting compliance with the Open Public Meetings Act Secretary Campo conducted the roll call.

Commissioner Weng swore in new board member Joel Viereck.

Chairperson Kandle asked for a motion to approve the minutes of the December 14, 2023. Mr. Eachus made a motion to approve the minutes. Mr. Marino seconded the motion. The motion passed.

Correspondence: SADC provided information on the New Appraisal Formula and the Soil Protection Standards.

Director's Report 3-14-2024

Black out.

LEGAL ISSUES

Black out.

Old Business:

Black out.

Public Meeting 1 Minutes (03/14/2024)

New Business:

Resolution granting approval for the Special Occasion Event Application. Motion was made by Mr. Curtis and seconded by Mr. Eachus. Roll call vote was taken. Motion passed unanimously.

Public Hearing: A motion was made by Mr. Eachus and seconded by Mr. Curtis to open the public hearing for a presentation and discussion on the Update to Gloucester County's Comprehensive Farmland Preservation Plan. Motion passed

Ms. Barbara Heskins Davis from the Land Conservancy of New Jersey spoke about the plan update. Ms. Heskins Davis presented an overview of the Farmland Plan Updates. There are eight chapters in the plan. The plan must include all eight chapters. The CADB needs to look over the policies concerning the plan to see if any changes need to be made. The CADB is required to approve the plan by resolution. This resolution needs to be in the plan. The planning board is required to adopt the plan and the County Commissioners need to accept the plan as part of the official meeting minutes. Ms. Hague from the GC Office of Taxation questioned if the plan would include the preservation of more wooded parcels. According to the current rules for farmland preservation, the parcel must meet the state requirement of 50% tillable land.

A motion was made by Mr. Eachus and seconded by Mr. Viereck to close the public hearing. The motion passed.

Public Portion:

A motion was made by Mr. Curtis to open the public portion of the meeting. Mr. Marino seconded the motion. The motion passed.

Seeing no members of the public interested in speaking, Mr. Curtis made a motion to close the public portion. Mr. Viereck seconded the motion. The motion passed.

Adjourn: A motion was made by Mr. Curtis to end the meeting. Mr. Viereck seconded the motion. The motion passed. The meeting was adjourned at 7:35pm.

2. Public Meeting #2: January 14, 2025 CADB

Municipal Announcement (01/14/2025)

From: Schreiter, Elaine <eschreiter@co.gloucester.nj.us> Sent: Friday, December 20, 2024 10:30 AM To: Agren, Eric <eagren@co.gloucester.nj.us> Subject: Public Meeting Notice for Distribution

Dear Municipal Clerk,

Attached please find a notice of a public hearing to be held January 14, 2025, regarding the 2024 Farmland Preservation Plan Update for Gloucester County. Please post this notice for the public to view. Municipal administrators are invited to attend, so please pass the meeting information on to the appropriate persons. If you have any questions, please contact the Office of Land Preservation at 856-224-8045. Thank you, and have a very Happy Holiday!

Elaine Schreiter Office of Land Preservation 254 County House Road Clarksboro, NJ 08020 P: 856-224-8045



Public Announcement (01/14/2025)

PUBLIC NOTICE

PUBLIC ANNOUNCEMENT

Gloucester County Agriculture Development Board

Please be advised that the meeting of the Gloucester County Agriculture Development Board (GCADB) will be held on Tuesday January 14, 2025 at 6:30 p.m. The meeting will be held at the Office of Land Preservation 254 County House Road, Clarksboro, NJ 08020 (Shady Lane Complex). This public meeting will be conducted in person. Please be advised that a public hearing has been scheduled on the following matter:

Public Hearing

a. Presentation and Public Meeting on the Update to Gloucester County's Comprehensive

Farmland Preservation Plan for final approval by the GCADB.

The meeting will be held on Tuesday January 14, 2025 at 6:30 p.m. at The Gloucester County Office of Land Preservation and GCADB, Shady Lane Complex, 254 County House Road, Clarksboro, NJ 08020.

Action may or may not be taken. Questions may be directed to Eric Agren, Gloucester County Office of Land Preservation at (856) 224-8045 or by email eagr en@co.gloucester.nj.us or Eric M. Campo, County Counsel, at (856) 856-384-6943 or by email ecampo@co.gloucester.nj.us.

> Cost; \$35,49 12/27/24 1t (10949646)

Public Notice (01/14/2025)

PUBLIC NOTICE

2025 MEETING SCHEDULE OF THE GLOUCESTER COUNTY AGRICULTURE DE-VELOPMENT BOARD

All meetings are held at 6:30 PM, at the Gloucester County Office of Land Preservation, (Shady Lane Complex), 254 County House Road, Clarksboro, NJ 08020.

January 14, 2025- (Public Hearing Farmland Plan Update) February 20, 2025 March 20, 2025 April 17, 2025 June 19, 2025 July 17, 2025 August 21, 2025 September 18, 2025 October 16, 2025 November 20, 2025 December 18, 2025 (reorganization meeting)

* Due to extenuating circumstances some meetings may be cancelled and/or starting times may be changed.

Questions may be directed to Eric Agren, Gloucester County Office of Land Preservation at (856) 224-8045 or Eric M. Campo, Esq., County Counsel at (856) 384–6943.

> Cost: \$30.76 (0010948292) 1t 12/23/24

Public Meeting 2 Flyer (01/14/2025)

GLOUCESTER COUNTY 2024 FARMLAND PLAN



COUNTY AGRICULTURE DEVELOPMENT BOARD MEETING TUESDAY, JANUARY 14, 2025 6:30 PM

The meeting will be held at the Office of Land Preservation **254 County House Road, Clarksboro, NJ 08020** (Shady Lane Complex)

Public Hearing

Attend a presentation and public meeting on the draft Gloucester County Comprehensive Farmland Preservation Plan Update

The 2024 Farmland Preservation Plan Update is available on the County's <u>website</u>

Gloucester County:

- 21,041 acres of farmland are preserved
- 36% of this farmland is preserved
- 350 farms are preserved
- \$179 million has been spent to preserve farms in Gloucester
- \$86 million by the state (48%) and
- \$87 million by the county (49%)



Gloucester County Comprehensive Farmland Preservation Plan

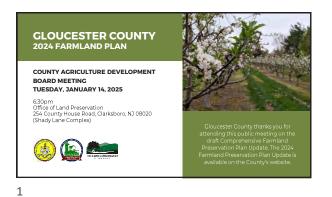
Public Meeting 2 Agenda (01/14/2025)

AGENDA

GLOUCESTER COUNTY AGRICULTURE DEVELOPMENT BOARD

Tuesday, January 14, 2025 6:30 P.M. Shady Lane Complex Sullivan Meeting Room 254 County house Road Clarksboro, NJ, 08020

- 1. Call to Order
- 2. Compliance with the Open Public Meeting Act
- See attached Public Notice in S.J. Times on (12-23-2024 annual notice), and 12-27-2024 and posted on GCADB Website. The public notice was also sent to all Municipal Clerks in Gloucester County on December 20, 2024 for public posting for the plan update, (N.J.A.C. 2:76) in order to provide an opportunity for the public to comment on the same.
- 3. Roll Call
- 4. Approval of minutes for the December 19, 2024 meeting.
- 5. Correspondence Heather Siessel, SADC
- 6. Public Hearing
 - a. Presentation (Barbara Davis, The Land Conservancy of New Jersey) and Public Meeting on the Update to Gloucester County's Comprehensive Farmland Preservation Plan. Board members comments and SADC comments.
 - b. Open for Public Portion for the plan update for any members of the public who Want to speak on the matter.
 - c. Close Public Portion- Plan Update.
 - d. Discussion and possible action on a Resolution granting approval for the 2024 Update to Gloucester County's Comprehensive Farmland Preservation Plan.
- 7. Director's Report
- 8. Old Business
- 9. New Business
- 10. Public Portion
- 11: Adjourn



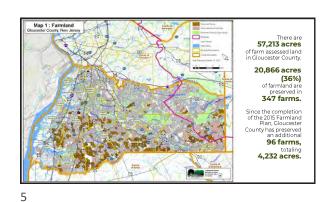


2

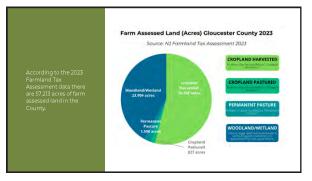


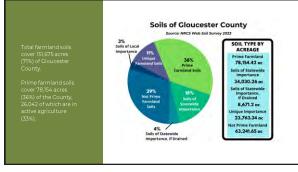




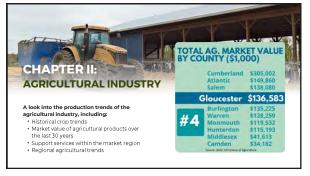




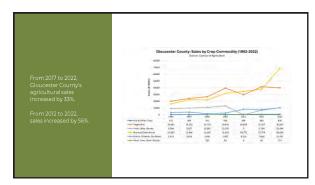




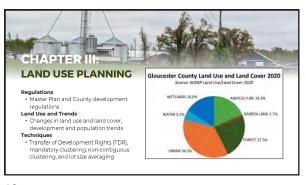




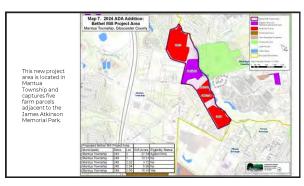
8

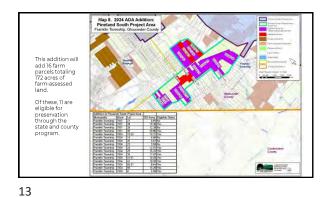


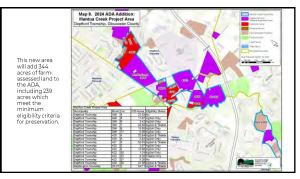
9







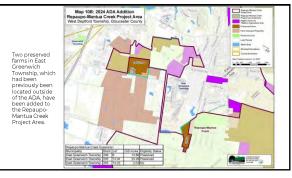




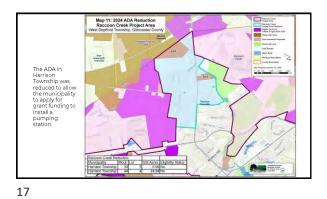
14

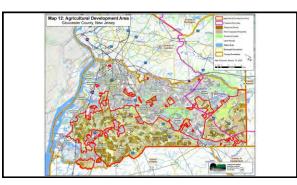


15

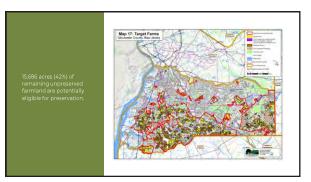


16









20



21















Public Meeting 2 Minutes (01/14/2025)

Gloucester County Agriculture Development Board

Chairpe	erson: West (Jay) Kandle, III	Secretary: Eric M. Campo		
Minutes of the January 14, 2025 6:33pm				
Members Present:	Jay Kandle, Robert Curtis, Chuck Romick, Joel Viereck, Wally Eachus, Russell Marino, Michelle Casella (non-voting member)			
Staff Present:	Eric M. Campo, Secretary, GCADB/Director, Eric Agren and Mary Cummings, Office of Land Preservation			
Others Present:		arco, Commissioner Matt Weng, Emily n Duffield, Harrison Twp. Solicitor, Tom a Davis, NJ Land Conservancy.		

Chairperson Kandle asked for a motion to approve the minutes of the December 19, 2024. Mr. Viereck made a motion to approve the minutes. Mr. Eachus seconded the motion. The motion passed.

Correspondence: Heather Siessel provided an update on the SPS. There will be a special meeting on January 16, 2025 to approve the Soil Protection regulations.

A motion was made by Mr. Curtis to open the Public Hearing on the Update to Gloucester County's Comprehensive Farmland Preservation Plan. Mr. Viereck seconded it. Motion passed.

Barbara Davis from the NJ Land Conservancy presented the updated plan. Discussion took place on the removal of a farm in Harrison Township from the ADA. Mr. Allen, SADC Asst. Planner had a concern about removing a farm with good agricultural soils being decommissioned for redevelopment. He felt it was a misuse of the redevelopment law. Mr. Campo explained the board's decision to remove. He stated the removal was consistent with the needs of the board and municipality. Mr. Romick questioned how critical the site was to the township. Mr. Campo asked Brian Duffield, Harrison Twp. Solicitor to respond. Mr. Duffield explained the importance to the 24-acre site. He stated the site met the criteria under the redevelopment law. Thirty-one single-family homes in the sewer service area along with a pumping station. That station would be turned over to the township. Mr. Viereck questioned whether the farm owner wanted the property to stay in the ADA and if they had an interest in farmland preservation. The farm owner has requested the property be removed from the ADA. His desire is to sell for the redevelopment. Seeing no more comments the Public Hearing was closed.

A motion was made to by Mr. Eachus to open the public portion of the meeting. Mr. Viereck seconded it. Seeing not public seeking comment. A motion was made by Mr.Curtis to close the public portion. Mr. Eachus seconded it. Motion passed

A motion to approve the resolution granting approval for the Update Farmland Preservation Plan was made by Mr. Curtis and Mr. Viereck seconded it. After a roll call vote, the plan was unanimously approved.

Director's Report 1-14-2025

Public Meeting 2 Minutes (01/14/2025)

- The Office of Land Preservation continues to work on a number of farmland preservation applications throughout the County, including properties in East Greenwich, Franklin, Harrison, Logan, and Woolwich. These properties are at various stages of the preservation process-application, surveying, appraisal, etc.
- Under the **"Public Hearing"** portion of the agenda, we request the following item for the board's consideration:
 - a. Discussion and possible action on a Resolution granting approval for the 2024 Update to Gloucester County's Comprehensive Farmland Preservation Plan.
- Our Office wants to thank Barbara Davis and her Staff at The Land Conservancy of New Jersey (TLCONJ), the County Planning Department, Rutgers Cooperative Extension, the County Assessor Office, the SADC Planning Division, GCADB, and County Counsel for doing an excellent job in developing the 2024 Farmland Preservation Plan Update during the course of last year.
- Once the Plan Update is approved by SADC sometime in March or April, the SADC will provide a cost share funding in the amount of **\$30,000.00** to towards the Plan Update to Gloucester County.
- On January 9, 2025, settlement was made on Heritage Farm, 43 acres in size in the Township of East Greenwich.
- Our office received the cost share funding from the SADC for the above farm in the total amount of **\$1,380,999**. To date we have received **\$4,477,649.00** in cost share funding from SADC.
- Our current funding grant from SADC is 2.9 million and we are eligible for another 2 million in competitive funds.
- The County's preserved land total now stands at 21,084 acres of preserved farmland and 3,486.5 acres of preserved open space, for a total of 24,570.5 preserved acres.
- Our farm inspector, Steve Tuttle, continues to do our farm inspections. Elaine has been assisting him on the required paperwork. We have mailed letters to the property owners asking them to schedule appointments for the inspections. The notification by letter for the annual inspections has been well received by the farmers. We have 310 annual farmland inspections for the fiscal year July 1st, 2024 to June 30, 2025.

LEGAL ISSUES

In addition to the other items previously indicated, County Counsel Eric Campo oversaw all legal matters concerning Land Preservation activities, in addition to managing all legal matters pertaining to the CADB.

• The Patane preserved farm vs. Rose Malkowski, is an ongoing matter in Superior Court in Woodbury. Malkowski is the landowner adjacent to the preserved farm who claims her property is landlocked by the preserved farm.

Old Business- The Patane Farm right of way issue is still in litigation.

New Business- none

Chairperson Kandle thanked the Commissioners for attending the meeting and showing their support to the board. He then requested a motion to adjourn the meeting. Mr. Curtis made the motion and Mr. Eachus seconded it. Motion passed.

CADB Resolution Approving Plan Update (01/14/2025)

STATE OF NEW JERSEY RESOLUTION OF THE GLOUCESTER COUNTY AGRICULTURE DEVELOPMENT BOARD GRANTING APPROVAL OF THE 2024 COMPREHENSIVE FARMLAND PRESERVATION PLAN UPDATE

WHEREAS, the Gloucester County Agriculture Development Board (CADB) is responsible for the promotion of the present and future of Gloucester County agriculture by preserving agricultural land and by promoting public education and agricultural viability; and

WHEREAS, planning for farmland preservation at the County level can have significant positive impacts on the County's economy, environment and its citizens; and

WHEREAS, in 2008 Gloucester County completed its first Comprehensive Farmland Preservation Plan. At that time, the County had preserved 10,559 acres; and

WHEREAS, 20,866 acres of farmland on 347 farms have been preserved in Gloucester County. Since the completion of the 2015 Farmland Plan, the County has preserved an additional 4,232 acres of farmland on 96 farms; and

WHEREAS, the CADB has determined that an update to the policies governing farmland preservation detailed in the 2015 Gloucester County Farmland Preservation Plan is necessary for Gloucester County to be eligible for continued funding through the State Agriculture Development Committee's (SADC) County Planning Incentive Grant (PIG) Program; and

WHEREAS, as part of this update, the County Agriculture Development Board undertook a detailed analysis of the ADA. Since the 2015 plan, the Board has added two new project areas (Bethel Mill and Mantua Creek) and revised its remaining project areas to include land where farmers have expressed interest in preserving their farms and are part of a productive agricultural area in their municipality. The County's project areas, as of 2024, are listed below:

- Bethel Mill (new project area, 2024);
- Chapel Heights;
- Delaware River;
- New Brooklyn;
- Mantua Creek (new project area, 2024);
- Oldmans Creek;
- Pinelands North (expanded in 2017);
- Pinelands South (expanded in 2023 and in 2024);
- Pitman Downer;
- Raccoon Creek (reduced in 2024);
- Repaupo-Mantua Creek (expanded in 2024);
- Still Run (expanded in 2023); and
- Washington North.

WHEREAS, extensive research has been undertaken in identifying the appropriate goals and policies that should govern the planning and implementation of future farmland preservation projects as well as to adhere to the guidelines provided by the SADC for such a plan; and

WHEREAS, said goals, policies and guidelines have been incorporated in the County Comprehensive Farmland Preservation Plan Update; and

NOW, THEREFORE, BE IT RESOLVED that the Gloucester County Agriculture Development Board does hereby approve the Gloucester County Comprehensive Farmland Preservation Plan Update and approves the submittal of the Plan Update to the SADC for eligibility under the County Planning Incentive Grant rules; and

BE IT FURTHER RESOLVED that the CADB recommends the Gloucester County Comprehensive Farmland Preservation Plan Update to the Gloucester County Planning Board for formal adoption as an element of the County Growth Management Plan.

ADOPTED at the meeting of the Gloucester County Agriculture Development Board held on Tuesday, January 14, 2025, in Shady Lane Complex, Clarksboro, New Jersey.

CADB Resolution Approving Plan Update (01/14/2025)

Attest: Eric M. Campo, Secretary

Gloucester County Agriculture Development Board

West J. Kandle, III, Chairman

3. Planning Board: January 16, 2025

Planning Board Resolution Adopting Plan Update (01/16/2025)

RESOLUTION AUTHORIZING AN UPDATE TO THE GLOUCESTER COUNTY 2024 COMPREHENSIVE FARMLAND PRESERVATION PLAN

WHEREAS, the Gloucester County Agriculture Development Board (hereinafter the "CADB") was previously established by the Board of County Commissioners of the County of Gloucester (hereinafter the "County") under and pursuant to the Agriculture Retention and Development Act, <u>N.J.S.A.</u> 4:1C-11, et seq., (hereinafter the "Act"), and the regulations promulgated thereunder at <u>N.J.A.C.</u> 2:76-5 et seq., (hereinafter the "Regulations"); and

WHEREAS, beginning in 2007, the State Agriculture Development Committee (SADC) required that each county in the State of New Jersey adopt a Comprehensive Farmland Preservation Plan for participation in the County Planning Incentive Grant Program and <u>N.J.A.C.</u> 2:76-17 set forth the minimum required components of the Plan; and

WHEREAS, the Gloucester County Office of Land Preservation and the CADB, in cooperation with The Land Conservancy of New Jersey, undertook the task to develop the Gloucester County Comprehensive Farmland Preservation Plan ("the Plan"), with said Plan receiving final approval by the SADC on May 29, 2008; and

WHEREAS, as required by the SADC, the Plan was updated in 2016, with said updated Plan receiving final approval by the SADC on February 25 2016; and

WHEREAS, since its adoption, the County has utilized the Plan as one of the primary components in targeting its farmland preservation efforts, and the County Office of Land Preservation, in cooperation with The Land Conservancy of New Jersey, recently completed the task of updating the Gloucester County Comprehensive Farmland Preservation Plan; and

WHEREAS, as part of the update to the Plan, the Office of Land Preservation also updated the County's Agriculture Development Area to more accurately reflect the areas to be targeted for farmland preservation initiatives based on a parcel-by-parcel evaluation, and to better reflect future County and municipal planning goals in the updated Plan; and

WHEREAS, the SADC has requested that the Gloucester County Planning Board be provided with the opportunity to review the updated Plan, and provide documentation that it continues to effectively meet the County's farmland preservation goals.

NOW, THEREFORE, BE IT RESOLVED by the Gloucester County Planning Board that it grants its approval of the 2024 update to the Gloucester County Comprehensive Farmland Preservation Plan.

ADOPTED at the reorganization meeting of the Gloucester County Planning Board of the County of Gloucester and State of New Jersey on this 16th day of January 2025.

GLOUCESTER COUNTY PLANNING BOARD

PRINT NAME: Robert MCET/ance

ATTEST:

PRINT NAME! SECRETARY

Scott BUNUS, 250. A MOWEY M UNU STATE OF NEW JEASEY PLANNING BOARD SOLICITOR

4. County Commissioners: February 5, 2025

Resolution Approving Plan Update

RESOLUTION APPROVING THE UPDATE TO THE GLOUCESTER COUNTY COMPREHENSIVE FARMLAND PRESERVATION PLAN

WHEREAS, the Gloucester County Agriculture Development Board (hereinafter the "CADB") was previously established by the Board of County Commissioners of the County of Gloucester (hereinafter the "County") under and pursuant to the Agriculture Retention and Development Act, N.J.S.A. 4:1C-11, et seq., (hereinafter the "Act"), and the regulations promulgated thereunder at N.J.A.C. 2:76-5 et seq., (hereinafter the "Regulations"); and

WHEREAS, beginning in 2007, the State Agriculture Development Committee (SADC) required that each county in the State of New Jersey adopt a Comprehensive Farmland Preservation Plan for participation in the County Planning Incentive Grant Program and <u>N.J.A.C.</u> 2:76-17 set forth the minimum required components of the Plan; and

WHEREAS, the Gloucester County Office of Land Preservation and the CADB, in cooperation with The Land Conservancy of New Jersey, undertook the task to develop the Gloucester County Comprehensive Farmland Preservation Plan ("the Plan"), with said Plan receiving final approval by the SADC on May 29, 2008; and

WHEREAS, as required by the SADC, the Plan was updated in 2016, with said updated Plan receiving final approval by the SADC on February 25 2016; and

WHEREAS, since its adoption, the County has utilized the Plan as one of the primary components in targeting its farmland preservation efforts, and the County Office of Land Preservation, in cooperation with The Land Conservancy of New Jersey, recently completed the task of updating the Gloucester County Comprehensive Farmland Preservation Plan; and

WHEREAS, as part of the update to the Plan, the Office of Land Preservation also updated the County's Agriculture Development Area to more accurately reflect the areas to be targeted for farmland preservation initiatives based on a parcel-by-parcel evaluation, and to better reflect future County and municipal planning goals in the updated Plan.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of the County of Gloucester that it grants its approval of the 2024 update to the Gloucester County Comprehensive Farmland Preservation Plan.

ADOPTED at the regular meeting of the Board of County Commissioners of the County of Gloucester held on Wednesday, February 5, 2025, at Woodbury, New Jersey.



COUNTY OF GLOUCESTER

FRANK J. DIMARCO, DIRECTOR

ATTEST:

LAURIE J. BURNS, CLERK OF THE BOARD

APPENDIX B Agricultural Soils in Gloucester County

	Table 1. GLOUCESTER COUNTY SOILS (NRCS SOIL CLASSIFICATIONS)	
Code	Name	Acres
AhpB	Alloway loam, 2 to 5 percent slopes	0.0087
AupB	Aura loam, 2 to 5 percent slopes	44
AucaB	Aura loamy sand, 0 to 5 percent slopes, Northern Coastal Plain	2,609
AugA	Aura sandy loam, 0 to 2 percent slopes, Northern Tidewater Area	249
AugdB	Aura sandy loam, 2 to 5 percent slopes, Northern Coastal Plain	1
AugB	Aura sandy loam, 2 to 5 percent slopes, Northern Tidewater Area	18,274
AvsB	Aura-Sassafras loamy sands, 0 to 5 percent slopes	1,168
AvtB	Aura-Sassafras sandy loams, 2 to 5 percent slopes	4,745
BumA	Buddtown-Deptford complex, 0 to 2 percent slopes	1,758
BumA	Buddtown-Deptford fine sandy loams, 0 to 2 percent slopes	4
CogB	Collington loamy sand, 0 to 5 percent slopes	187
CokA	Collington sandy loam, 0 to 2 percent slopes	188
CokB	Collington sandy loam, 2 to 5 percent slopes	487
CosB	Colts Neck sandy loam, 2 to 5 percent slopes	930
DoeA	Downer sandy loam, 0 to 2 percent slopes, Northern Coastal Plain	6,176
DoeAO	Downer sandy loam, 0 to 2 percent slopes, Northern Tidewater Area	0.03
DoeB	Downer sandy loam, 2 to 5 percent slopes, Northern Coastal Plain	1,274
FrfB	Freehold loamy sand, 0 to 5 percent slopes	8,353
FrkA	Freehold sandy loam, 0 to 2 percent slopes	2,298
FrkB	Freehold sandy loam, 2 to 5 percent slopes	3,218
KeoA	Keyport loam, 0 to 2 percent slopes	374
KemB	Keyport sandy loam, 2 to 5 percent slopes	1,642
МаоВ	Marlton sandy loam, 2 to 5 percent slopes	2,121
SacA	Sassafras sandy loam, 0 to 2 percent slopes, Northern Coastal Plain	4,268
SacB	Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain	2,772
WeeB	Westphalia fine sandy loam, 2 to 5 percent slopes	4,557
WedB	Westphalia loamy fine sand, 2 to 5 percent slopes	7
WoeA	Woodstown sandy loam, 0 to 2 percent slopes, Northern Coastal Plain	369

	Table 1. GLOUCESTER COUNTY SOILS (NRCS SOIL CLASSIFICATIONS)	
Code	Name	Acres
WoeB	Woodstown sandy loam, 2 to 5 percent slopes, Northern Coastal Plain	362
WokA	Woodstown-Glassboro complex, 0 to 2 percent slopes	9,717
	Prime Farmland	78,154
EveB	Evesboro sand, 0 to 5 percent slopes	860
FrkD	Freehold sandy loam, 10 to 15 percent slopes	802
FrkD2	Freehold sandy loam, 10 to 15 percent slopes, eroded	146
UddcB	Udorthents, dredged coarse materials, 0 to 8 percent slopes	3,542
UddfB	Udorthents, dredged fine materials, 0 to 8 percent slopes	1,264
WeeD	Westphalia fine sandy loam, 10 to 15 percent slopes	441
	Farmland of Local Importance	7,056
AhpC	Alloway loam, 5 to 10 percent slopes	0.003
AugC	Aura sandy loam, 5 to 10 percent slopes	75
AvsC	Aura-Sassafras loamy sands, 5 to 10 percent slopes	613
AvtC	Aura-Sassafras sandy loams, 5 to 10 percent slopes	762
AvtC2	Aura-Sassafras sandy loams, 5 to 10 percent slopes, eroded	390
CogC	Collington loamy sand, 5 to 10 percent slopes	39
CokC	Collington sandy loam, 5 to 10 percent slopes	147
CosC	Colts Neck sandy loam, 5 to 10 percent slopes	532
DocB	Downer loamy sand, 0 to 5 percent slopes, Northern Coastal Plain	12,885
DocC	Downer loamy sand, 5 to 10 percent slopes, Northern Coastal Plain	82
FrfC	Freehold loamy sand, 5 to 10 percent slopes	2,176
FrkC	Freehold sandy loam, 5 to 10 percent slopes	983
HbmB	Hammonton loamy sand, 0 to 5 percent slopes	4,559
KeoC	Keyport loam, 5 to 10 percent slopes	1
KemC2	Keyport sandy loam, 5 to 10 percent slopes, eroded	168
LenA	Lenni loam, 0 to 2 percent slopes	2,205
МаоС	Marlton sandy loam, 5 to 10 percent slopes	395
MaoC2	Marlton sandy loam, 5 to 10 percent slopes, eroded	477
MasC	Marlton silt loam, 5 to 10 percent slopes	0.1
SabB	Sassafras loamy sand, 0 to 5 percent slopes	3,308
SabC	Sassafras loamy sand, 5 to 10 percent slopes	1,642
SacD	Sassafras sandy loam, 10 to 15 percent slopes	52
SacC	Sassafras sandy loam, 5 to 10 percent slopes, Northern Coastal Plain	985
ThfB	Tinton sand, 0 to 5 percent slopes	454

	Table 1. GLOUCESTER COUNTY SOILS (NRCS SOIL CLASSIFICATIONS)	
Code	Name	Acres
WeeC	Westphalia fine sandy loam, 5 to 10 percent slopes	1,100
WedC	Westphalia loamy fine sand, 5 to 10 percent slopes	0.4
	Farmland of Statewide Importance	34,030
FapA	Fallsington loams, 0 to 2 percent slopes, Northern Coastal Plain	1,715
FamA	Fallsington sandy loams, 0 to 2 percent slopes, northern coastal plain	5,938
JdrA	Jade Run fine sandy loam, 0 to 2 percent slopes, Northern Coastal Plain	965
KreA	Kresson fine sandy loam, 0 to 2 percent slopes	50
MumA	Mullica sandy loam, 0 to 2 percent slopes	1
ОТКА	Othello and Fallsington soils, 0 to 2 percent slopes	1
WebA	Weeksville fine sandy loam, 0 to 2 percent slopes	0.2
	Farmland of Statewide Importance, if drained	8,671
AtsAO	Atsion sand, 0 to 2 percent slopes, Northern Tidewater Area	566
AtsAr	Atsion sand, 0 to 2 percent slopes, rarely flooded	4,405
AttxAr	Atsion-Berryland sands, 0 to 2 percent slopes, rarely flooded	0.01
BEXAS	Berryland and Mullica soils, 0 to 2 percent slopes, occasionally flooded	2,168
BerAr	Berryland sand, 0 to 2 percent slopes, rarely flooded	35
MakAa	Manahawkin muck, 0 to 2 percent slopes, frequently flooded, Northern Coastal Plain	9,738
MakAd	Manahawkin muck, 0 to 2 percent slopes, frequently flooded, Northern Tidewater Area	1,505
MamnAv	Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded	2,445
MamnAv	Mannington-Nanticoke complex, 0 to 1 percent slopes, very frequently flooded, tidal	29
MamuAv	Mannington-Nanticoke-Udorthents complex, 0 to 1 percent slopes, very frequently flooded	2,858
MamuAv	Mannington-Nanticoke-Udorthents complex, 0 to 2 percent slopes, very frequently flooded	15
	Farmland of Unique Importance	23,763
AvuB	Aura-Urban land complex, 0 to 5 percent slopes	5,807
AvuC	Aura-Urban land complex, 5 to 10 percent slopes	346
BuuB	Buddtown-Urban land complex, 0 to 5 percent slopes	408
ChsAt	Chicone silt loam, 0 to 1 percent slopes, frequently flooded	156
CoeAs	Colemantown loam, 0 to 2 percent slopes, occasionally flooded	226
СорВ	Collington-Urban land complex, 0 to 5 percent slopes	741

	Table 1. GLOUCESTER COUNTY SOILS (NRCS SOIL CLASSIFICATIONS)	
Code	Name	Acres
DouB	Downer-Urban land complex, 0 to 5 percent slopes	2,213
EveB	Evesboro sand, 0 to 5 percent slopes	0.7
EveE	Evesboro sand, 10 to 30 percent slopes	0.1
EveE	Evesboro sand, 15 to 25 percent slopes	2
EveC	Evesboro sand, 5 to 10 percent slopes	972
EvuB	Evesboro-Urban land complex, 0 to 5 percent slopes	218
FauB	Fallsington-Urban land complex, 0 to 5 percent slopes	1,065
FmhAt	Fluvaquents, loamy, 0 to 3 percent slopes, frequently flooded	5,561
FrkE	Freehold sandy loam, 15 to 25 percent slopes	1,863
FrkF	Freehold sandy loam, 25 to 40 percent slopes	666
FrrB	Freehold-Urban land complex, 0 to 5 percent slopes	5,732
FrrC	Freehold-Urban land complex, 5 to 10 percent slopes	48
HbrB	Hammonton-Urban land complex, 0 to 5 percent slopes	467
JduA	Jade Run-Mullica-Urban land complex, 0 to 2 percent slopes	69
KeuB	Keyport-Urban land complex, 0 to 5 percent slopes	121
LakB	Lakehurst sand, 0 to 5 percent slopes	491
LasB	Lakewood sand, 0 to 5 percent slopes	982
LatvB	Lakewood-Quakerbridge complex, 0 to 5 percent slopes	1,402
MaoD	Marlton sandy loam, 10 to 15 percent slopes	34
MaoD2	Marlton sandy loam, 10 to 15 percent slopes, eroded	397
MauB	Marlton-Urban land complex, 0 to 5 percent slopes	504
PEEAR	Pedricktown, Askecksy, and Mullica soils, 0 to 2 percent slopes, rarely flooded	60
PHG	Pits, sand and gravel	1,569
PssA	Psamments, 0 to 3 percent slopes	0.7
SabD	Sassafras loamy sand, 10 to 15 percent slopes	973
SabF	Sassafras loamy sand, 15 to 40 percent slopes	338
SapB	Sassafras-Urban land complex, 0 to 5 percent slopes	1,359
UddfB	Udorthents, dredged fine material, 0 to 8 percent slopes	0.2
UddB	Udorthents, dredged materials, 0 to 8 percent slopes	1,824
UddrB	Udorthents, dredged materials-Urban land complex, 0 to 8 percent slopes	505
UdrB	Udorthents, refuse substratum, 0 to 8 percent slopes	244
UdsB	Udorthents, sandy substratum, 0 to 8 percent slopes	0.002

	Table 1. GLOUCESTER COUNTY SOILS (NRCS SOIL CLASSIFICATIONS)							
Code	Name	Acres						
UdauB	Udorthents-Urban land complex, 0 to 8 percent slopes	361						
UR	Urban Land	4,345						
USAURB	Urban land-Aura complex, 0 to 5 percent slopes	1,410						
US- DOWB	Urban land-Downer complex, 0 to 5 percent slopes	1,765						
USFREB	Urban land-Freehold complex, 0 to 5 percent slopes	1,846						
USSASB	Urban land-Sassafras complex, 0 to 5 percent slopes	649						
USWESB	Urban land-Westphalia complex, 0 to 5 percent slopes	493						
WATER	Water	9,649						
WeeD	Westphalia fine sandy loam, 10 to 15 percent slopes	6						
WeeD2	Westphalia fine sandy loam, 10 to 15 percent slopes, eroded	79						
WeeF	Westphalia fine sandy loam, 15 to 40 percent slopes	555						
WefB	Westphalia-Buddtown-Urban land complex, 0 to 5 percent slopes	1						
WehB	Westphalia-Urban land complex, 0 to 5 percent slopes	2,041						
WehC	Westphalia-Urban land complex, 5 to 10 percent slopes	498						
WooB	Woodstown-Urban land complex, 0 to 5 percent slopes	2,181						
	Not Prime Farmland	63,242						
Total 2								
Source: Nat	ural Resources Conservation Service Soil Data (2023)							

APPENDIX C Preserved Farms in Gloucester County

Municipality	Block	Lot	Year Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed	Contributed by Federal
Clayton Boro	210011		010000							· · uniciput coot	<i></i>	. outrui
(also in Elk)	502	5, 6, 9.01	2007	Cty EP	45.37	\$558,051.00	\$12,300.00	\$334,830.60	\$223,220.40			
Clayton Boro	1902	8, 9, 10		Cty PIG	43.43	\$503,440.00	\$11,591.99	\$289,396.80	\$214,043.20			
Clayton Boro		-,-,				+,	+,	,,	+			
(also in Franklin)	1103	3	2003	Cty IEP	27	\$185,962.32	\$6,887.49	\$0.00	\$185,962.32			
Clayton Boro	1001	1		Cty EP	8.19	\$49,140.00	\$6,000.00	\$31,941.00	\$17,199.00			
Clayton Borough Total	Farms: 5				123.99	\$1,296,593.32	\$10,457.24	\$656,168.40	\$640,424.92	\$0.00	\$0.00	\$0.00
Deptford Township	14 15 16	28 3, 4 1 1, 2 4 1										
Deptford Township Tota	24 27	1, 2 2 1	2016	Cty IEP	36 36	\$743,606.00 \$743,606.00	\$ 20,655.72 \$20,655.72	\$0.00 \$0.00	\$743,606.00 \$743,606.00	\$0.00	\$0.00	\$0.00
Deptiona rownship roa					30	\$743,000.00	\$20,033.72	φ0.00	\$743,000.00	φ 0.0 0	\$0.00	φ 0. 00
East Greenwich Twp.	1203	3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24, 3.26, ROW	2010	Cty PIG	32.04	\$458,172.00	\$14,300.00	\$159,141.84	\$299,030.16			
East Greenwich Twp.	1102	1, 2.01, 2.05, 3, 3.02, 5, 7		Cty PIG	111.8	\$438,172.00	\$28,000.00	\$139,141.84	\$1,252,160.00			
East Greenwich Twp.	1107	6	2020	Cty PIG	20.116	\$237,368.80	\$11,800.00	\$141,854.88	\$95,513.92			
East Greenwich Twp.	1304	2		Cty PIG	32.361	\$606,768.75	\$18,750.00	\$363,948.75	\$242,820.00			
East Greenwich Twp.	101	10		Cty IEP	11	\$96,102.00		\$0.00	\$96,102.00			
East Greenwich Twp.	206	6	2016	Cty IEP	13	\$139,154.00		\$0.00	\$139,154.00			
East Greenwich Twp.	102	7		Cty PIG	16.98	\$152,820.00	\$9,000.00	\$71,788.35	\$81,031.65			
East Greenwich Twp.	205	13, 13.04	2008	Cty IEP	35	\$119,070.00		\$0.00	\$119,070.00			
East Greenwich Twp.	1206	1		Cty IEP	10	\$244,608.00		\$0.00	\$244,608.00			
East Greenwich Twp.	103.07	12	2021	Cty PIG	37.045	\$411,199.50	\$11,100.00	\$246,053.70	\$165,145.80			
East Greenwich Twp. (also in Greenwich)	103	1	2024	Cty EP	23.215	\$927,734.70	\$40,900.00	\$ 510,377.53	\$417,357.17			

Municipality	Block	Lot	Year Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed by Pinelands	Contributed by Federal
	102	19										
East Greenwich Twp.	1004	30										
	1202	8, 9, 10										
(also in Mantua)	1203	1,6										
	1304	9	2006	Cty EP	220.44	\$2,181,494.08	\$9,896.09	\$1,281,492.28	\$900,001.80			
East Greenwich Twp.	101	2	2024	Cty IEP	75	\$876,740.00		\$0.00	\$876,740.00			
East Greenwich Twp.												
(also in Mantua)	1303	13	2007	Cty EP	2.37	\$27,492.00	\$11,600.00	\$13,509.00	\$13,983.00			
East Greenwich Twp.	102	8		Cty IEP	24	\$359,100.00	<i></i>	\$0.00	\$359,100.00			
•			2000	0.9.12.		\$000,200,000		<i>Q</i> 0100	\$000,100.000			
East Greenwich Twp.	1205	1										
(also in Harrison Twp)			2013	Cty PIG	61	\$1,342,000.00	\$22,000.00	\$261,900.28	\$1,080,099.72			
East Greenwich Twp.	205	5		Cty IEP	12	\$20,275.00	,,	\$0.00	\$20,275.00			
East Greenwich Twp.	1207	10		Cty IEP	64	\$1,218,850.00		\$0.00	\$1,218,850.00			
East Greenwich Twp.	1005	2.02		Cty EP	21.95	\$127,310.00	\$5,800.00	\$62,777.00	\$64,533.00			
East Greenwich Twp.	103.07	16		Cty IEP	70	\$1,105,447.00	\$0,000.00	\$0.00	\$1,105,447.00			
East Greenwich Twp.	205	4		Cty EP	17.04	\$93,720.00	\$5,500.00	\$62,196.00	\$31,524.00			
East Greenwich Twp.	107	3		Cty IEP	30	\$143,131.00	ψ3,300.00	\$0.00	\$143,131.00			
Last Oreenwich Twp.	1005	9,12	2002		50	φ143,131.00		ψ0.00	ψ145,151.00			
East Greenwich Twp.			1000		100.0000	ACTT 740 07	\$0.004.04	# 450 000 00	\$404 7 40 07			
	1006	1, 1.01		Cty EP	196.8638	\$577,718.37	\$2,934.61	\$456,000.00	\$121,718.37			
East Greenwich Twp.	1207	6		Cty IEP	70	\$1,315,684.00		\$0.00	\$1,315,684.00			
East Greenwich Twp.	1204	2,5	2012	Cty IEP	23	\$195,032.00		\$0.00	\$195,032.00			
East Greenwich Twp.	1005	1	2023	Cty IEP	8	\$85,972.00		\$0.00	\$85,972.00			
East Greenwich Twp.	1103	2.01	2010	Cty PIG	14.85	\$211,700.00	\$14,255.89	\$113,100.00	\$98,600.00			
East Greenwich Twp.	102	3	2007	Cty EP	60.062	\$973,004.40	\$16,200.00	\$582,772.32	\$390,232.08			
East Greenwich Twp.	1000	0.00										
(also in Mantua)	1306	2.09	2015	Cty PIG	1.418	\$15,243.50	\$10,750.00	\$9,134.61	\$6,108.89			
East Greenwich Twp.	1401	7	2003	Cty IEP	45	\$223,680.00		\$0.00	\$223,680.00			
East Greenwich Twp.	1207	12, 12.01, 12.02	2007	Cty IEP	81	\$1,844,632.00		\$0.00	\$1,844,632.00			
East Greenwich Twp.	401	6	2004	Cty EP	18.45	\$98,000.00	\$5,311.65	\$60,516.00	\$37,484.00			
East Greenwich Twp.	1005											
(also in Harrison and	1205	4										
, Mantua)	1208	2	2010	Cty EP	55.284	\$1,055,919.44	\$19,100.00	\$633,551.66	\$422,367.77			
East Greenwich Twp.	1304	7,8		Cnty PIG	60.424	\$737,172.80	<i><i><i>q</i>₁₀,100,000</i></i>	\$433,029.00	\$304,143.80			
East Greenwich Twp.	102	17		Cnty PIG	20.996	\$1,217,768.00		\$722,262.40	\$495,505.60			
	102	16	2020	0.10110	20.000	ψ1,217,700.00		ψ, <u>22</u> ,202. 1 0	φ-00,000.00	1		
East Greenwich Twp.	102	2	2025	Cnty PIG	43.161	\$2,352,274.50		\$1,380,999.38	\$971,275.12			
East Greenwich Townsh		rms: 36		, -	1638.87	\$24,922,757.84		\$9,444,644.98	\$15,478,112.85	\$0.00	\$0.00	\$0.00
	54	18										
Elk Twp.	176	7	2007	Cty IEP	19	\$98,000.00		\$0.00	\$98,000.00			
Elk Twp.	55	1		Muni PIG	19.12	\$133,840.00	\$7,000.00	\$81,532.00	\$26,154.00	\$26,154.00		

Municipality	Block	Lot	Year Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed	Contributed by Federal
Elk Twp.			Oloscu	Trogram	Acies	10101 0031	oustre Acie	otate oost	obuilty obst	r tunicipat 005t	byr metanas	reactat
(also in Clayton)	172	9.01	2007	Cty EP	2	\$24,600.00	\$12,300.00	\$14,760.00	\$9,840.00			
Elk Twp.	41	1, 28	2011	Cty IEP	14	\$28,680.00		\$0.00	\$28,680.00			
Elk Twp.	11	14	2010	Cty PIG	25.683	\$244,118.00	\$9,505.04	\$146,470.80	\$97,647.20			
Elk Twp.	5	2, 3, 4	2000	Cty EP	48.41	\$161,779.38	\$3,341.56	\$116,396.11	\$45,383.27			
Elk Twp.	29	3, 4	2023	Cty PIG	15.285	\$187,241.25	\$12,250.00	\$112,344.75	\$74,896.50			
Elk Twp.	46	7.01	2018	Muni PIG	31	\$250,630.00		\$135,842.11	\$0.00	\$114,787.89		
Elk Twp.	42	3, 4, 5	2021	Cty IEP	52	\$312,606.00		\$0.00	\$312,606.00			
Elk Twp.	43	5, 7, 8, 9	1999	SADC Fee	197.165	\$400,963.00	\$2,033.64	\$400,963.00	\$0.00	\$0.00		
Elk Twp.	19 39	4 1, 13	2004	Cty EP	212.09	\$1,081,659.00	\$5,100.00	\$530,225.00	\$551,434.00			
Elk Twp.	42	7.10, 9, 18		SADC EP	56.409	\$338,454.00	\$6,000.00	\$338,454.00	\$0.00			
Elk Twp.	54	8		Muni PIG	55.61	\$389,270.00	\$7,000.00	\$244,684.00	\$72,293.00	\$72,293.00		
Elk Twp.	41	8	2008	Cty IEP	18	\$50,874.00		\$0.00	\$50,874.00			
Elk Twp.	175	1		Muni PIG	29.38	\$205,660.00	\$7,000.00	\$129,272.00	\$38,194.00	\$38,194.00		
Elk Twp.	54	15, 16	-	Cty EP	55.15	\$612,165.00	\$11,100.00	\$337,518.00	\$274,647.00			
Elk Twp.	175	7		Cty PIG	19.753	\$182,715.25	\$9,250.00	\$109,629.15	\$73,086.10			
Elk Twp.	43	4		SADC EP	145.542	\$1,237,107.00	\$8,500.00	\$1,237,107.00	\$0.00			
Elk Twp.	45	22		Cty PIG	26.929	\$148,109.50	\$5,500.00	\$98,290.85	\$49,818.65			
Elk Twp.	35	2		Cty EP	19.822	\$455,906.00	\$23,000.00	\$273,543.60	\$182,362.40			
	45	12				. ,	. ,		. ,			
Elk Twp.	47	1										
(also in Franklin)	48	2										
	49	1	2006	Cty EP	93.02	\$297,761.19	\$3,200.96	\$215,812.35	\$81,948.84			
Elk Twp.	54	3	2004	Cty EP	43.554	\$108,875.00	\$2,499.77	\$79,285.45	\$29,589.55			
Elk Twp.	33	1.01	2003	Cty EP	91.117	\$337,132.90	\$3,700.00	\$211,391.44	\$125,741.46			
Elk Twp.	54	4	1999	Cty EP	45.66	\$114,150.00	\$2,500.00	\$84,471.00	\$29,679.00			
Elk Twp.	43	2, 2.01	2019	SADC EP	93.959	\$610,441.00	\$6,496.89	\$610,441.00	\$0.00			
Elk Twp.	42	11	2002	Cty EP	24.467	\$80,741.10	\$3,300.00	\$58,231.46	\$22,509.64			
Elk Twp.	37	1	2004	Cty EP	34.13	\$184,302.00	\$5,400.00	\$121,161.50	\$63,140.50			
Elk Twp.	36	18, 20	2001	Cty EP	89.78	\$341,164.00	\$3,800.00	\$219,494.14	\$121,669.86			
Elk Twp.	40	18	2008	Cty IEP	82	\$373,626.00		\$0.00	\$373,626.00			
Elk Twp.	27	4	2005	Cty EP	43.994	\$159,939.31	\$3,635.48	\$102,478.66	\$57,460.65			
Elk Twp. (also in South Harrison)	5	11	1998	Cty EP	99.056	\$192,168.64	\$1,940.00	\$144,423.65	\$47,744.99			
Elk Twp. (also in Franklin)	51	5	2019	Cty PIG	28.86	\$242,117.17	\$8,389.55	\$146,694.52	\$95,422.65			
Elk Twp.	55	3	2002	Cty EP	52.77	\$158,310.00	\$3,000.00	\$95,485.44	\$62,824.56			
Elk Twp.	56	2	2003	Cty EP	37.34	\$130,114.00	\$3,484.57	\$84,388.40	\$45,725.60			
Elk Twp.	55	3.02	2008	Cty IEP	6	\$127,809.00		\$0.00	\$127,809.00			
Elk Twp.	6 10	28.01 10	2005	Cty EP	248.204	\$992,816.00	\$4,000.00	\$502,005.60	\$490,810.40			

Municipality	Disale		Year	Duration		Total Operat	0	Shada Quad	0	Municipal Ocat	Contributed	Contributed by
Municipality	Block 25	Lot 5	Closed	Program Cty EP	Acres 47.83	Total Cost \$179,362.50	Cost Per Acre \$3,750.00	State Cost \$105,312.09	County Cost \$74,050.41	Municipal Cost	by Pinelands	Federal
Elk Twp. Elk Twp.	25	5	2001	CIYEP	47.83	\$179,362.50	\$3,750.00	\$105,312.09	\$74,050.41			
(also in Franklin)			2000	SADC Fee	724.588	\$1,908,427.12	\$2,633.81	\$1,158,427.12	\$750,000.00			
			2000	SADOTEE	724.000	φ1,300,427.12	ψ2,000.01	φ1,130,427.12	φ/30,000.00			
	25	7										
	33	12.11, 12.12										
Elk Twp.	34	1, 1.07, 1.08,										
	35	1.09										
	37	2,2.09										
			2000									
Elk Twp.	37	12.01	2001	Cty EP	45.85	\$128,156.40	\$2,795.12	\$81,613.00	\$46,543.40			
Elk Twp.	40	1, 22	2013	SADC EP	160.437	\$673,822.80	\$4,199.92	\$673,822.80	\$0.00			
ElleTwo	36	2, 15, 17										
Elk Twp.	37	19	1999	Cty EP	156.9	\$486,390.00	\$3,100.00	\$354,594.00	\$131,796.00			
Elk Twp.	36	12	2006	Cty EP	17.29	\$141,778.00	\$8,200.00	\$55,673.80	\$86,104.20			
Elk Twp.	54	22	2002	Cty EP	130.62	\$365,736.00	\$2,800.00	\$230,217.75	\$135,518.25			
Elk Twp.	43	1	2002	SADC Fee	184.92	\$585,000.00	\$3,163.53	\$585,000.00	\$0.00	\$0.00		
Elk Twp.	31	14	2014	Cty IEP	44	\$275,131.00		\$0.00	\$275,131.00			
Elk Twp.	28	10	2015	Muni PIG	37.72	\$245,180.00	\$6,500.00	\$156,538.00	\$44,321.00	\$44,321.00		
Elk Township Total Fa	rms: 47	•			3726.42	\$15,984,828.51		\$10,383,995.54	\$5,305,083.08	\$295,749.89	\$0.00	\$0.00
Franklin Twp.	5802	21	2020	Muni PIG	85.971	\$520,124.55	\$6,050.00	\$337,436.18	\$91,344.19	\$91,344.19		
Franklin Twp.	1201	9, 16		Cty EP	49.405	\$108,691.00	\$2,200.00	\$81,024.20	\$27,666.80			
Franklin Twp.	6002	67, 73	2013	Muni PIG	50.382	\$244,352.70	\$4,850.00	\$166,764.42	\$38,794.14	\$38,794.14		
	1101	46	2010		001002	\$2 T 1,00217 0	\$ 1,000100	\$100,701112	<i>\$66,76</i> H21	<i>400,70</i> H21		
Franklin Twp.	5701	16	2000	Muni PIG	40.098	\$521,047.35	\$12,994.35	\$312,628.41	\$104,209.47	\$104,209.47		
Franklin Two	6805	4.01, 6										
Franklin Twp.	6805	4.01, 6	2023	Muni PIG	51.206	\$394,286.20	\$7,700.00	\$243,228.50	\$75,528.85	\$75,528.85		
Franklin Twp. (also in Monroe)	6401	1	2016	Cty IEP	7	\$30,571.80	\$4,367.40	\$0.00	\$30,571.80			
Franklin Twp.			2010		7	ψ30,371.00	φ4,307.40	φ0.00	ψ30,371.00			
(also in Monroe)	6401	4	2010	Cty IEP	20	\$106,193.71	\$5,309.69	\$0.00	\$106,193.71			
			2010		20	\$100,193.71	\$3,309.09	\$0.00	\$100,193.71			
	1001	36.06, 36.07,										
Franklin Twp.	1001	36.08										
	_		2002	Cty EP	107.04	\$246,192.00	\$2,300.00	\$183,038.40	\$63,153.60			
		57, 58, 59, 60,										
		61, 63, 116,										
Franklin Twp.	1101	117, 118, 119,										
		120, 125, 126,										
		129, 136, 137										
			2002	Cty IEP	131	\$817,737.00		\$0.00	\$817,737.00			
									,			
		7, 11, 12, 13,										
Franklin Twp.	5701	25, 41, 42, 43,										
		44, 51	0000	Muni DIO	07.040	¢05404500	¢0.707.00	¢010.000.01	¢000.000.00	¢000,000,00		
			2009	Muni PIG	97.849	\$854,945.00	\$8,737.39	\$318,332.24	\$268,306.38	\$268,306.38		

4

			Year								Contributed	Contributed by
Municipality	Block	Lot	Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	by Pinelands	Federal
Franklin Twp.	6602	9	2009	Cty IEP	85	\$194,810.00		\$0.00	\$194,810.00			
Franklin Twp.	2702	13		0. 155		*****		t 0.00				
Freedulin True	2703	20		Cty IEP	23	\$275,088.00	#0.177.00	\$0.00	\$275,088.00			
Franklin Twp.	5702	82 3		Cty EP	65.19	\$141,918.63	\$2,177.00	\$97,785.00	\$44,133.63	# 40,000 F0		
Franklin Twp.	6805	-		Muni PIG	30.724	\$255,009.20	\$8,300.00	\$155,156.20	\$49,926.50	\$49,926.50		
Franklin Twp. Franklin Twp.	802	20	2017	Cty PIG	16.641	\$58,243.50	\$3,500.00	\$41,602.50	\$16,641.00			
(also in Clayton)	2302	31	2003	Cty IEP	50	\$344,374.68	\$6,887.49	\$0.00	\$344,374.68			
						<i></i>	+-,		+,			
Franklin Twp.	1901	11, 12	2019	Cty PIG	64.087	\$647,278.70	\$10,100.00	\$347,292.54	\$299,986.16			
Franklin Twp.	7101	70, 71, 72, 73, 79, 80, 81, 82	2003	SADC EP, Pinelands	98.058	\$250,885.12	\$2,558.54	\$130,885.12	\$120,000.00			
Franklin Twp.	6401	10	2007	Cty EP	28.501	\$96,903.40	\$3,400.00	\$69,542.44	\$27,360.96			
Franklin Twp.	1101	44	2010	Muni PIG	12	\$70,716.00		\$0.00	\$56,572.80	\$14,143.20		
Franklin Twp.	5801 6702	58 55, 58	2004	Pinelands Development Credit	163							
Franklin Twp.	1101	40	2016	Cty IEP	60	\$220,627.00		\$0.00	\$220,627.00			
Franklin Twp.	2701	19	2011	Muni PIG	42.817	\$299,719.00	\$7,000.00	\$152,186.51	\$73,766.25	\$73,766.25		
Franklin Twp.	7101	45	2019	SADC EP	122.415	\$391,728.00	\$3,200.00	\$391,728.00	\$0.00			
Franklin Twp.	5602	41, 41.02	2011	Muni PIG	49.398	\$345,786.00	\$7,000.00	\$171,989.26	\$86,898.37	\$86,898.37		
Franklin Twp.	5702	84	2023	Muni PIG	22.01	\$122,155.50	\$5,550.00	\$80,798.55	\$20,678.48	\$20,678.48		
Franklin Twp.	6502	15	2007	Cty IEP	19	\$81,720.00		\$0.00	\$81,720.00			
Franklin Twp.	5504	7.01	2007	Cty EP	18.9	\$88,830.00	\$4,700.00	\$62,748.00	\$26,082.00			
Franklin Twp. (also in Elk)	2701 2702 2703 2705 2706	21, 22, 23 22, 23, 24 1, 2, 3, 4, 6 1 1	2006	Ctv EP	141.14	\$451,775.60	\$3,200.96	\$327,439,43	\$124.336.18			
Franklin Twp.	7102	11, 12	2014	Muni PIG	9.582	\$71,865.00	\$7,500.00	\$44,556.30	\$13,654.35	\$13,654.35		
Franklin Twp.	7102	18		Muni PIG	7.283	\$65,547.00	\$9,000.00	\$39,328.20	\$13,109.40	\$13,109.40		
Franklin Twp.	7002	8		Muni PIG	27.941	\$142,499.10	\$5,100.00	\$96,396.45	\$23,051.33	\$23,051.33		
Franklin Twp.	7102	14		Muni PIG	26.2	\$196,500.00	\$7,500.00	\$121,830.00	\$37,335.00	\$37,335.00		
Franklin Twp.	5802	1		Muni PIG	18.04	\$124,476.00	\$6,900.00	\$78,474.00	\$23,001.00	\$23,001.00		
Franklin Twp.	6601	20		Muni PIG	38.315	\$103,412.19	\$2,699.00	\$76,220.03	\$13,596.08	\$13,596.08		
Franklin Twp.	1101	40.01, 41	2004	Cty EP	25.109	\$57,750.00	\$2,299.97	\$42,936.39	\$14,813.61			
Franklin Twp. (also in Elk)	2501	2	2019	Cty PIG	63.49	\$532,657.77	\$8,389.55	\$322,727.94	\$209,929.83			
Franklin Twp.	5602	19		Cty IEP	68	\$369,063.00		\$0.00	\$369,063.00			
Franklin Twp.	5702	17,81		Muni PIG	54.503	\$354,269.50	\$6,500.00	\$226,104.45	\$64,082.53	\$64,082.53		
Franklin Twp.	3802	11, 12, 16		Cty IEP	34.503	\$336,375.00	φ0,000.00	\$228,104.45	\$336,375.00	ψ04,002.33		
Franklin Twp.	5702	83		Muni PIG	20.548	\$96,575.60	\$4,700.00	\$66,164.56	\$15,205.52	\$15,205.52		

			Year								Contributed	Contributed by
Municipality	Block	Lot	Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	by Pinelands	Federal
Franklin Twp.	3202	36		Cty EP	85.97	\$227,820.50	\$2,650.00	\$149,957.47	\$77,863.03	#45 575 00		
Franklin Twp.	5701	14		Muni PIG	9	\$77,868.00		\$0.00	\$62,293.00	\$15,575.00		
Franklin Twp.	1101	45		Muni PIG	11	\$97,741.00		\$0.00	\$48,870.50	\$19,548.20		
Franklin Twp.	2801	45, 49	2015	Muni PIG	41.686	\$216,767.20	\$5,200.00	\$145,901.00	\$35,433.10	\$35,433.10		
Franklin Twp.	2801 3101	46 4, 6	2009	Cty EP	23.57	\$188,560.00	\$8,000.00	\$115,493.00	\$73,067.00			
Franklin Twp.	2801	48	2016	Cty IEP	6	\$38,770.00	,	\$0.00	\$38,770.00			
Franklin Twp.	1201	24	2023	Cty PIG	18	\$122,388.00	\$7,000.00	\$76,930.00	\$45,454.34			
Franklin Twp.	6002	43		Cty IEP	12	\$57,150.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$0.00	\$57,150.00			
Franklin Twp.	7101	69	2003	SADC EP, Pinelands	30	\$79,330.00		\$49,730.00	\$0.00	\$0.00	\$30,000.00	
Franklin Twp.	6601 6503	5, 21, 22 33, part of 33.02	1996	Cty EP	155.938	\$183,613.20	\$1,177.48	\$143,830.34	\$39,782.86			
Franklin Twp.	7101	53, 63, 83	2013	SADC EP	244.503	\$633,632.15	\$2,591.51	\$633,632.15	\$0.00			
Franklin Twp.	5602	40	2004	Cty EP	19.816	\$52,040.00	\$2,626.16	\$29,724.00	\$22,316.00			
Franklin Twp.	2801 3101	44 9	2006	Cty EP	29.18	\$157,572.00	\$5,400.00	\$105,048.00	\$52,524.00			
Franklin Twp.	1101	47.01	2009	Muni PIG	10	\$34,251.00		\$0.00	\$17,125.50	\$6,850.20		
Franklin Twp.	6401	5, 72	2015	Pinelands Development Credit	120							
Franklin Twp. (also in Elk)	2307 2601 2602 2703	44 48 5, 6 19, 21, 22, 44		SADC Fee	154	\$405,606.74	\$2,633.81	\$405,606.74	\$0.00			
Franklin Twp.	6401	44	2013	Muni PIG	25.18	\$125,900.00	\$5,000.00	\$85,612.00	\$20,144.00	\$20,144.00		
Franklin Twp.	5702	87	2003	Cty EP	13.36	\$24,080.00	\$1,802.40	\$18,169.60	\$5,910.40			
Franklin Twp.	5701	15	2009	Muni PIG	30.829	\$277,461.00	\$9,000.00	\$158,769.35	\$59,345.83	\$59,345.83		
Franklin Twp.	2701	17.01, 18		Muni PIG	56.701	\$374,226.60	\$6,600.00	\$187,113.30	\$93,556.65	\$93,556.65		
Franklin Twp.	2702	25	2011	Muni PIG	63.741	\$382,446.00	\$6,000.00	\$191,223.00	\$95,611.50	\$95,611.50		
Franklin Twp.	2601	5	2005	Cty EP	40.76	\$154,888.00	\$3,800.00	\$109,236.80	\$45,651.20			
Franklin Twp.	2703	23, 24	2021	Cty IEP	17	\$132,743.00		\$0.00	\$132,743.00			
Franklin Twp.	2703	39	2009	Muni PIG	28.036	\$350,450.00	\$12,500.00	\$210,270.00	\$70,090.00	\$70,090.00		
Franklin Township Tot	al Farms: 65				3,387.11	\$15,028,004.19		\$7,602,590.97	\$5,913,426.47	\$1,442,785.49	\$30,000.00	\$0.00
Glassboro Boro	197	11	2005	Cty EP	2	\$7,270.96	\$3,635.48	\$4,658.76	\$2,612.20			
Glassboro Boro	408.28	8	2005	Cty EP	23.35	\$254,515.00	\$10,900.00	\$146,757.60	\$107,757.40			
Glassboro Boro	408.28	8.02	2005	Cty EP	6.51	\$61,194.00	\$9,400.00	\$34,347.60	\$26,846.40			
Glassboro Boro	196.01	15	2014	Cty IEP	44	\$275,131.00		\$0.00	\$275,131.00			
Glassboro Boro	408.28	8.01		Cty EP	13.13	\$152,308.00	\$11,600.00	\$79,970.40	\$72,337.60			
Glassboro Borough To	tal Farms: 5				88.99	\$750,418.96		\$265,734.36	\$484,684.60	\$0.00	\$0.00	\$0.00

Municipality	Block	Lot	Year Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed by Pinelands	Contributed by Federal
Greenwich Twp.												
(also in E.Greenwich)	260	2, 2.01	2024	Cty EP	34.433	\$1,408,309.70	\$40,900.00	\$774,757.73	\$633,551.97			
Greenwich Twp.	252	2	2013	Cty PIG	124.66	\$1,533,318.00	\$12,300.00	\$846,832.86	\$686,485.14			
Greenwich Twp.	262	3	2013	Cty PIG	32.252	\$419,276.00	\$13,000.00	\$214,078.80	\$205,197.20			
Greenwich Twp.	261	3	2024	Cty EP	57.25	\$2,347,250.00		\$1,378,485.60	\$968,764.40			
Greenwich Township To	tal Farms:	4			248.595	\$5,708,153.70		\$3,214,154.99	\$2,493,998.71	\$0.00	\$0.00	\$0.00
Harrison Twp.	54	11.01, 12	1995	Cty EP	163.8	\$326,400.00	\$1,992.67	\$244,800.00	\$81,600.00			
Harrison Twp.	46	1										
(also in Woolwich)	51	3	2010	Cty PIG	63.114	\$1,154,986.20	\$18,300.00	\$659,097.62	\$495,888.58			
Harrison Twp.	5	6, 17.01	2018	Cty PIG	22.08	\$287,040.00	\$13,000.00	\$165,600.00	\$121,440.00			
	51	8										
Harrison Twp.	53	3	2004	Cty IEP	79	\$748,182.00		\$0.00	\$748,182.00			
	18	1				,			1 1, 1			
Harrison Twp.	33	6	2009	Cty IEP	168	\$3,391,254.00		\$0.00	\$3,391,254.00			
Harrison Twp.	33	15		Cty IEP	56	\$1,440,366.00		\$0.00	\$1,440,366.00			
Harrison Twp.	33	5.01		Cty IEP	6	\$65,977.00		\$0.00	\$65,977.00			
Harrison Twp.	50	4	+	Cty IEP	23	\$312,480.00		\$0.00	\$312,480.00			
Harrison Twp. (also in Mantua)	28	2		Cty PIG	11.66	\$128,290.11	\$11,000.00	\$76,926.82	\$51,363.28			
Harrison Twp. (also in Elk, Mantua and South Harrison)	36	4		Cty EP	41.90	\$140,001.39	\$3,341.56	\$100,727.40	\$39,273.99			
Harrison Twp. (also in South Harrison)	56	6	2010	Cty EP	56.33	\$1,098,523.64	\$19,500.00	\$659,114.18	\$439,409.45			
Harrison Twp.	56	5	2019	Cty IEP	96	\$1,319,763.00		\$0.00	\$1,319,763.00			
Harrison Twp.	54	11	2002	Cty IEP	30	\$107,532.00		\$0.00	\$107,532.00			
Harrison Twp. (also in South Harrison)	54	7, 7.01	2004	Cty IEP	9	\$76,455.45	\$8,495.05	\$0.00	\$76,455.45			
Harrison Twp.	51 53	1 2	2001	Cty EP	154.11	\$792,916.60	\$5,145.13	\$490,796.03	\$792,916.60			
Harrison Twp.	10	1	+	Cty IEP	134.11	\$183,668.00	ψ0,140.10	\$0.00	\$183,668.00			
Harrison Twp.	36	16.02		Cty PIG	26.499	\$593,577.60	\$22,400.00	\$356,146.56	\$237,431.04			
Harrison Twp.	33.01	3		Cty PIG	41.026	\$512,825.00	\$12,500.00	\$307,695.00	\$205,130.00			
Harrison Twp.	20	1		Cty PIG	33.448	\$819,476.00	\$24,500.00	\$491,685.60	\$327,790.40			
Harrison Twp.	34	29, 30, 33		Cty IEP	53.448	\$98.276.00	ψ24,000.00	\$491,083.00	\$98,276.00			
Harrison Twp.	34	29, 30, 33		Cty EP	30.951	\$588,069.00	\$19,000.00	\$250,703.10	\$337,365.90			
	34 34	37		,			φ19,000.00					
Harrison Twp.	-			Cty IEP	11	\$204,668.00		\$0.00	\$204,668.00			
Harrison Twp.	14	6		Cty IEP	11	\$103,645.00		\$0.00	\$103,645.00			
Harrison Twp.	33	7	+	Cty IEP	16	\$260,320.00		\$0.00	\$260,320.00			
Harrison Twp.	57	7	2004	Cty EP	108	\$481,500.00	\$4,500.00	\$223,759.20	\$257,740.80			

Municipality	Block	Lot	Year Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed by Pinelands	Contributed by Federal
Harrison Twp. (also in E.Greenwich)	45.28	2,3	2013	Cty PIG	16.115	\$354,530.00	\$22,000.00	\$69,188.90	\$285,341.10			
Harrison Twp.	5	4, 17	2004	Cty EP	74.911	\$412,010.50	\$5,500.00	\$222,930.82	\$189,079.68			
Harrison Twp.	57	27	2006	Cty EP	14.41	\$115,280.00	\$8,000.00	\$68,502.00	\$46,778.00			
Harrison Twp.	33	2.03	2017	Cty IEP	26	\$452,295.00		\$0.00	\$452,295.00			
Harrison Twp. (also in South Harrison)	54	6, 8, 9.01	2000	Cty EP	23.08	\$85,396.00	\$3,700.00	\$60,469.60	\$24,926.40			
Harrison Twp.	10	8	2007	Cty IEP	63	\$1,017,110.00		\$0.00	\$1,017,110.00			
Harrison Twp.	49	6	2014	Cty PIG	90	\$1,899,000.00	\$21,100.00	\$1,139,400.00	\$759,600.00			
Harrison Twp. (also in E.Greenwich and Mantua)	44 45	1 10	2010	Cty EP	39.488	\$754,228.17	\$19,100.00	\$452,536.90	\$301,691.27			
Harrison Twp.	9	1,4.01	2010	Cty PIG	37.748	\$545,867.00	\$14,460.82	\$327,015.60	\$218,851.40			
Harrison Twp.	5	5	2007	Cty EP	28.1	\$295,050.00	\$10,500.00	\$177,030.00	\$118,020.00			
Harrison Twp. (also in South Harrison)	55	7	2001	Cty EP	13.71	\$50,727.00	\$3,700.00	\$33,468.85	\$17,258.15			
Harrison Township Total	Farms: 36				1702.4847	\$21,217,685.65		\$6,577,594.20	\$15,130,887.48	0.00%	0.00%	0.00%
Logan Twp.	702	12, 12.04	2018	Cty PIG	46	\$437,000.00	\$9,500.00	\$240,540.00	\$196,460.00			
Logan Twp.	703	11	2015	Cty PIG	37.076	\$385,590.40	\$10,400.00	\$231,354.24	\$154,236.16			
Logan Twp.	801 901	60 13	2006	Cty EP	87.427	\$515,819.30	\$5,900.00	\$321,963.95	\$193,855.35			
Logan Twp.	801	32	2013	Cty IEP	38	\$353,280.00		\$0.00	\$353,280.00			
Logan Twp.	8.01 1004	1, 1.04 11, 12	2010	Cty PIG	164.781	\$2,142,153.00	\$13,000.00	\$1,187,581.20	\$954,571.80			
Logan Twp.	1004	10	2007	Cty IEP	56	\$1,108,879.00		\$0.00	\$1,108,879.00			
Logan Twp.	703	1	2018	Cty PIG	43.3	\$530,425.00	\$12,250.00	\$283,996.80	\$246,428.20			
Logan Twp.	604	6	2022	Cty IEP	29	\$204,520.00		\$0.00	\$204,520.00			
Logan Twp.	605	5	2022	Cty IEP	50	\$304,917.00		\$0.00	\$304,917.00			
Logan Twp.	605	8, 9, 11	2008	Cty IEP	128	\$1,501,250.00		\$0.00	\$1,501,250.00			
Logan Twp.	1003	3	2018	Cty IEP	25	\$215,565.00		\$0.00	\$215,565.00			
Logan Twp.	1004	4, 4.03	2018	Cty PIG	29.476	\$274,126.80	\$9,300.00	\$164,476.08	\$109,650.72			
Logan Twp.	703	2		Cty PIG	95.8	\$862,200.00	\$9,000.00	\$469,420.00	\$392,780.00			
Logan Twp.	1004	9	2020	Cty PIG	35.738	\$278,756.40	\$7,800.00	\$168,201.60	\$110,554.80			
Logan Twp.	801	36	2018	Cty PIG	46.431	\$487,525.50	\$10,500.00	\$291,167.10	\$196,358.40			
Logan Twp.	1003	8	2008	SADC EP	122.57	\$2,022,405.00	\$16,500.00	\$2,022,405.00	\$0.00			
Logan Twp.	702	7	2018	Cty PIG	42.618	\$383,562.00	\$9,000.00	\$222,870.42	\$160,691.58			
	1004	5		Cty PIG	56.39	\$603,458.00	\$10,701.51	\$334,962.00	\$268,496.00			

Municipality	Block	Lot	Year Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed	Contributed by Federal
Logan Twp.	703	4		Cty PIG	43.47	\$434,700.00	\$10,000.00	\$260,820.00	\$173,880.00	Municipal Cost	by Pilletallus	reueral
Logan Twp.	801	33	2010	Cty IEP	43.47	\$659,917.00	φ10,000.00	\$0.00	\$659,917.00			
Logan Twp.	1004	4.02		Cty IEP	18	\$162,180.00		\$0.00	\$162,180.00			
Logan Twp.	801	56,58		Cty IEP	62	\$615,390.00		\$0.00	\$615,390.00			
Logan Township Total F		00,00		019121	1316.077	\$14,483,619.40		\$6,199,758.39	\$8,283,861.01	\$0.00	\$0.00	\$0.00
Mantua Twp.	2	6, 10	2011	Cty IEP	61	\$1,026,755.00		\$0.00	\$1,026,755.00			
Mantua Twp. (also in Harrison)	265	11		Cty PIG	43.74	\$481,087.89	\$11,000.00	\$288,475.58	\$192,612.32			
Mantua Twp. (also in Elk, Harrison, and South Harrison)	263.01 264	6.01, 7.03 1	1999	Cty EP	86.59	\$289,336.20	\$3,341.56	\$208,169.97	\$81,166.24			
Mantua Twp.	276	19.02, 22	2007	Cty EP	96.148	\$1,980,648.80	\$20,600.00	\$1,188,389.28	\$792,259.52			
Mantua Twp.	253.01	21.01	2007	Cty EP	26.469	\$235,574.10	\$8,900.00	\$141,609.15	\$93,964.95			
Mantua Twp.	273	3		Cty IEP	27	\$648,100.00		\$0.00	\$648,100.00			
Mantua Twp.	263.01 273	4.03 20	2015	SADC EP	151.619	\$1,963,533.00	\$12,950.44	\$1,963,533.00	\$0.00			
Mantua Twp.	265	3, 3.01, 6.01, 6.02, 9.01, 10	2010	Cty EP	107.362	\$1,610,430.00	\$15,000.00	\$706,945.68	\$903,484.32			
Mantua Twp.	265	6	2006	Cty IEP	13	\$250,232.00		\$0.00	\$250,232.00			
Mantua Twp.	254	1, 2	2010	Cty PIG	43.748	\$1,058,701.60	\$24,200.00	\$135,327.38	\$923,374.22			
Mantua Twp. (also in E.Greenwich)	6	13		Cty EP	33	\$326,570.97	\$9,896.09	\$191,840.16	\$134,730.81			
Mantua Twp. (also in E.Greenwich)	5	12, 13	2007	Cty EP	25	\$290,000.00	\$11,600.00	\$142,500.00	\$147,500.00			
Mantua Twp.	5	14	2017	Cty IEP	13	\$32,100.00		\$0.00	\$32,100.00			
Mantua Twp.	260	13	2006	Cty IEP	12	\$272,023.00		\$0.00	\$272,023.00			
Mantua Twp.	265	9.05	2017	Cty IEP	19	\$149,569.00		\$0.00	\$149,569.00			
Mantua Twp.	265	9.02	2011	Cty PIG	24.851	\$347,914.00	\$14,000.00	\$208,748.40	\$139,165.60			
Mantua Twp. (also in E.Greenwich)	4	19	2015	Cty PIG	36	\$387,000.00	\$10,750.00	\$231,908.34	\$155,091.66			
Mantua Twp.	274	2.01		Cty IEP	23	\$353,600.00		\$0.00	\$353,600.00			
Mantua Twp.	274	2		Cty IEP	22	\$363,460.00		\$0.00	\$363,460.00			
Mantua Twp.	4	21	2018	Cty PIG	22.77	\$191,268.00	\$8,400.00	\$115,499.70	\$75,768.30			
Mantua Twp.	2	3, 4, 5, 9	2011	Cty PIG	93.233	\$1,491,728.00	\$16,000.00	\$894,950.40	\$596,777.60			
Mantua Twp.	4	7	2018	Cty PIG	49.585	\$595,020.00	\$12,000.00	\$357,012.00	\$238,008.00			
Mantua Twp.	1	3,5	2018	Cty PIG	42.89	\$501,813.00	\$11,700.00	\$295,941.00	\$205,872.00			
Mantua Twp. (also in E.Greenwich and Harrison)	1	1	2010	Cty EP	16.673	\$318,451.89	\$19,100.00	\$191,071.14	\$127,380.76			
Mantua Township Total	Farms: 24				1,089.67	\$15,164,916.46		\$7,261,921.17	\$7,902,995.29	\$0.00	\$0.00	\$0.00

			Year								Contributed	Contributed by
Municipality	Block	Lot	Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	by Pinelands	Federal
Monroe Twp. (also in Franklin)	7001	14, 18	2016	Cty IEP	18	\$78,613.20	\$4,367.40	\$0.00	\$78,613.20			
Monroe Twp. (also in Franklin)	7001	19	2016	Cty IEP	15	\$185,838.00	\$5,309.69	\$0.00	\$79,645.29			
Monroe Twp.	10401	2, 3	2007	Cty EP	112.274	\$168,411.00	\$1,500.00	\$129,115.10	\$39,295.90			
Monroe Twp.	15403	3, 4, 5, 23, 24	2006	Cty EP	29.31	\$468,960.00	\$16,000.00	\$281,376.00	\$187,584.00			
Monroe Twp.	10501	2	2008	Cty IEP	25	\$116,303.00		\$0.00	\$116,303.00			
Monroe Twp.	14801	10, 11, 13		Cty IEP	74	\$1,023,137.00		\$0.00	\$1,023,137.00			
Monroe Twp.	6801 6901	2, 3, 5 12, 22	2005	Cty EP	332.208	\$166,148.00	\$500.13	\$119,594.88	\$46,553.12			
Monroe Twp.	10401	5	2005	Cty EP	33.146	\$119,325.60	\$3,600.00	\$84,853.76	\$34,471.84			
Monroe Twp.	2501	5	2008	Cty IEP	30	\$176,388.00		\$0.00	\$176,388.00			
Monroe Township Tota	l Farms: 9	•			668.94	\$2,503,123.80		\$614,939.74	\$1,781,991.35	\$0.00	\$0.00	\$0.00
Newfield Boro	700	5	2019	Cty IEP	17	\$104,140.00		\$0.00	\$104,140.00			
Newfield Boro	700	15.01, 16, 17	2019	Cty IEP	26	\$166,720.00		\$0.00	\$166,720.00			
Newfield Boro	1000	3	2019	Cty IEP	27	\$174,016.00		\$0.00	\$174,016.00			
Newfield Boro	400	5	2020	Cty IEP	15	\$64,291.00		\$0.00	\$64,291.00			
Newfield Borough Tota	l Farms: 4				85	\$509,167.00		\$0.00	\$509,167.00	\$0.00	\$0.00	\$0.00
South Harrison Twp.	7 12	2	2007	Cty IEP	67	\$1,018,420.00		\$0.00	\$1,018,420.00			
South Harrison Twp.	7	16		Cty EP	18.52	\$62,505.00	\$3,375.00	\$41,727.41	\$20,777.59			
South Harrison Twp.	17	6, 9, 10		Cty EP	126.54	\$404,576.00	\$3,197.22	\$293,317.60	\$111,258.40			
South Harrison Twp.	19	3		Cty PIG	7.87	\$94,440.00	\$12,000.00	\$56,664.00	\$37,776.00			
South Harrison Twp.	5	6		Cty EP	116.989	\$228,128.55	\$1,950.00	\$171,388.89	\$56,739.66			
South Harrison Twp.	8	10.03	2004	Cty IEP	11	\$50,610.00		\$0.00	\$50,610.00			
South Harrison Twp.	5	5.03, 5.04	2004	Cty EP	31.49	\$160,344.00	\$5,091.90	\$108,330.00	\$52,014.00			
South Harrison Twp.	15	3, 92, 93	2019	Cty PIG	21.051	\$210,400.00	\$9,994.77	\$126,240.00	\$84,160.00			
South Harrison Twp. (also in Elk, Harrison, and Mantua)	8	4, 8, 9, 19	1999	Cty EP	135.00	\$451,115.59	\$3,341.56	\$324,566.08	\$126,549.51			
South Harrison Twp. (also in Harrison)	4.01	8		Cty EP	5.63	\$109,852.36	\$19,500.00	\$65,911.42	\$43,940.95			
South Harrison Twp. (also in Harrison)	2	5, 9	2004	Cty IEP	11	\$93,445.55	\$8,495.05	\$0.00	\$93,445.55			

Municipality	Block	Lot	Year Closed	Program	Acres	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed by Pinelands	Contributed by Federal
South Harrison Two	9	14, 16										
South Harrison Twp. (also in Woolwich)	16	1										
	17	5		Cty EP	158	\$308,216.92	\$1,950.74	\$215,751.84	\$92,465.08			
South Harrison Twp.	8	25	2003	Cty IEP	25.25	\$98,475.00	\$3,900.00	\$0.00	\$98,475.00			
South Harrison Twp.	18	3, 3.03										
ooddinnamoon rwp.	19	2	2009	Cty PIG	101.029	\$1,949,859.70	\$19,300.00	\$1,169,915.82	\$779,943.88			
South Harrison Twp.	21	6										
	28	1	2000	Cty EP	130.2	\$429,440.00	\$3,298.31	\$309,876.00	\$119,564.00			
South Harrison Twp.	13	4, 5.01	2003	Cty EP	48.94	\$278,958.00	\$5,700.00	\$183,525.00	\$95,433.00			
South Harrison Twp.	12	7										
	21	32	2005	Cty EP	31.954	\$226,873.40	\$7,100.00	\$142,195.30	\$84,678.10			
	13	2, 3										
South Harrison Twp.	14	14										
	21	1, 2	2003	Cty EP	278.833	\$1,059,565.40	\$3,800.00	\$680,352.52	\$379,212.88			
South Harrison Twp.	6	7	2011	Cty IEP	31	\$453,195.00		\$0.00	\$453,195.00			
South Harrison Twp.	14	13	2008	SADC EP	60.7	\$1,062,250.00	\$17,500.00	\$1,062,250.00	\$0.00			
South Harrison Twp.	8	10.02	2003	Cty IEP	9	\$60,227.00		\$0.00	\$60,227.00			
South Harrison Twp.	14	27	2007	Cty IEP	27	\$499,778.00		\$0.00	\$499,778.00			
South Harrison Twp.	5	10	2000	Cty EP	151.32	\$529,620.00	\$3,500.00	\$378,300.00	\$151,320.00			
South Harrison Twp.	17	Part of 4, 16	1998	Cty EP	53.21	\$159,630.00	\$3,000.00	\$117,062.00	\$42,568.00			
South Harrison Twp.	24	38, 41	2006	Cty EP	38.829	\$256,271.40	\$6,600.00	\$163,081.80	\$93,189.60			
South Harrison Twp. (also in Elk)	8	11, 17	1998	Cty EP	218	\$422,920.00	\$1,940.00	\$317,844.00	\$105,076.00			
South Harrison Twp.	18 27	5	1000		176.51	¢014 015 00	¢0.400.74	¢420.005.00	¢175.000.00			
	2/	2, 3, 6	1999	Cty EP	170.51	\$614,915.00	\$3,483.74	\$439,225.00	\$175,690.00			
South Harrison Twp.	1 5	2, 3, 6	0010		440.004	#4 040 040 00	\$11 000 00	A707 004 04	\$505 407 00			
	0	4	2013	Cty PIG	110.321	\$1,312,819.90	\$11,900.00	\$787,691.94	\$525,127.96			
South Harrison Twp.	1 5	1	2006	Cty EP	160.391	\$3,480,484.70	\$21,700.00	\$1,308,790.56	\$2,171,694.14			
	5	5	2000		100.391	φ 3,4 80,484.70	φ21,700.00	\$1,308,790.30	φ2,171,094.14			
South Harrison Twp.	6	13	2011	Cty IEP	90	\$1,489,433.00		\$0.00	\$1,489,433.00			
South Harrison Twp.	24	21, 28		Cty EP	24.86	\$99,440.00	\$4,000.00	\$69,608.00	\$29,832.00			
· · · · · ·	27	4	2000		24.00	\$00,440.00	φ-1,000.00	\$00,000.00	<i>\\</i> 20,002.00			
South Harrison Twp.	28	1	2008	NP PIG	90.184	\$1,739,000.00	\$19,282.80	\$838,094.00	\$521,700.00	\$0.00	\$0.00	\$289,476.00
South Harrison Twp.	24	4 19, 53		Cty IEP	11	\$105,554.00	<i>\</i> 10,202.00	\$0.00	\$105,554.00	φ0.00	ψ0.00	φ200,470.00
	31	5	2010	5., ILI	11	₩100,00 - #.00		\$0.00	φ100,00- 1 .00			
South Harrison Twp.	31	2	1997	Cty EP	32.992	\$65,584.00	\$1,987.88	\$49,188.00	\$16,396.00			
South Harrison Twp.	5	7		Cty PIG	49.82	\$1,434,931.20	\$28,802.31	\$753,643.80	\$681,287.40			
South Harrison Twp.	24	22	2022	Cty IEP	10	\$111,159.00		\$0.00	\$111,159.00			
South Harrison Twp.	8	10	2000	Cty EP	55.31	\$165,930.00	\$3,000.00	\$121,682.00	\$44,248.00			

M	Dissis		Year	Due due un	•	Total Operat		State Ocat	0	Municipal Ocat	Contributed	
Municipality South Harrison Twp.	Block 21	Lot	Closed 2000	Program Cty EP	Acres 29.25	Total Cost \$106,344.00	\$3,635.69	State Cost \$62,793.90	County Cost \$43,550.10	Municipal Cost	by Pinetanus	Federal
South Harrison Twp.	3	7	2000	,	32.209	\$100,344.00	\$5,000.00	\$90,185.20	\$70,859.80			
	28	4 3.01		.,		. ,						
South Harrison Twp.	3	6		SADC Fee	127.88 62	\$1,852,600.00	\$14,487.02	\$1,852,600.00	\$0.00			
South Harrison Twp.	6	8		Cty IEP	-	\$604,583.00	40,007,01	\$0.00	\$604,583.00			
South Harrison Twp.	6	8	1997	Cty EP	50.03	\$151,981.50	\$3,037.81	\$111,120.90	\$40,860.60			
South Harrison Twp.	2	3.01, 4	2000	Cty EP	50	\$185,000.00	\$3,700.00	\$131,000.00	\$54,000.00			
(also in Harrison) South Harrison Twp.	19	1		Cty PIG	27.818	\$609,214.20	\$21,900.00	\$365,528.52	\$243,685.68			
	19	2, 3		SADC EP	125.924							
South Harrison Twp.	17	2, 3				\$1,888,410.45	\$14,996.43	\$1,888,410.45	\$0.00			
South Harrison Twp.		1		Cty IEP	17	\$185,471.00		\$0.00	\$185,471.00			
South Harrison Twp.	14	-		Cty IEP	84	\$903,318.00		\$0.00	\$903,318.00			
South Harrison Twp.	14	5, 30		Cty EP	95.55	\$263,622.45	\$2,759.00	\$194,090.72	\$69,531.73			
South Harrison Twp.	5 14	11	2020	SADC EP	128.814	\$932,480.50	\$7,238.97	\$932,480.50	\$0.00			
South Harrison Twp.		7, 7.01, 7.02, 7.03, 7.04, 7.05, 7.06, 7.07, 7.08, 7.09, 7.10, 7.11, 7.12, 7.13, 7.14 2										
	14.01		2018	Cty PIG	64.347	\$595,209.75	\$9,250.00	\$286,505.43	\$308,704.32			
South Harrison Twp.	3	5										
(also in Harrison)	, in the second	č		Cty EP	75	\$277,500.00	\$3,700.00	\$183,090.00	\$94,410.00			
South Harrison Twp.	9	15	1997	Cty EP	60.596	\$212,086.00	\$3,500.00	\$151,490.00	\$60,596.00			
South Harrison Twp.	11	7, 30	2007	Cty EP	27.73	\$429,815.00	\$15,500.00	\$257,889.00	\$171,926.00			
South Harrison Towns	hip Total Fai	ms: 53			3784.90	\$30,657,048.52		\$16,803,407.60	\$13,474,434.92	0	0	\$289,476.00
Washington Twp.	82.21	28	2012	Cty IEP	35	\$793,408.00		\$0.00	\$793,408.00			
Washington Twp.	82.21	1.01	2003	Cty EP	7.8	\$106,723.00	\$13,682.44	\$64,033.80	\$42,689.20			
Washington Twp.	79 82.21	2, 3, 3.05 1.04, 29.01, 30	2000	Cty EP	146.895	\$1,668,219.00	\$11,356.54	\$948,481.76	\$719,737.24			
Washington Twp.	82.21	29	1998	Cty EP	37.09	\$426,535.00	\$11,500.00	\$319,901.25	\$106,633.75			
Washington Twp.	198	Part of 12	2008	Cty IEP	7	\$285,184.00		\$0.00	\$285,184.00			
Washington Township	Total Farms	:5		•	233.79	\$3,280,069.00		\$1,332,416.81	\$1,947,652.19	0	0	0
West Deptford Twp.	374 375	1 2	2013	Cty PIG	116.1	\$1,010,800.00	\$8,706.29	\$606,480.00	\$404,320.00			
West Deptford Twp.	351.27	7.11		Muni PIG	16	\$477,517.72		\$0.00	\$382,014.17	\$95,503.55		
West Deptford Townsh					132.1	\$1,488,317.72		\$606,480.00	\$786,334.17	\$95,503.55	\$0.00	\$0.00
Woolwich Twp.	46	12.01	2018	Muni TDR	0	\$0.00	\$0.00	\$0.00	\$0.00			
Woolwich Twp.	48	1,2		Muni TDR	29.997	\$107,100.00	\$3,570.36	\$76,500.00	\$0.00	\$30,600.00		
Woolwich Twp.	41	5, 5.01, 5.02	2003	Cty IEP	29	\$136,600.00		\$0.00	\$136,600.00			
Woolwich Twp.	41	5.06		Cty IEP	6	\$43,326.00		\$0.00	\$43,326.00			

Municipality	Block	Lot	Year Closed	Dregrom	A	Total Cost	Cost Per Acre	State Cost	County Cost	Municipal Cost	Contributed	Contributed by Federal
Municipality Woolwich Twp.	41	6.04		Program Cty IEP	Acres 12	\$87,480.00	COST PET ACTE	\$0.00	\$87,480.00	Municipal Cost	by Pilletanus	rederat
wootwich twp.	41	0.04	2006	CLYIEF	12	<i></i>		\$0.00	φ07,400.00			
Woolwich Twp.	51	3										
(also in Harrison)	56	6										
	59	11	2010	Cty PIG	21	\$384,300.00	\$18,300.00	\$219,302.38	\$164.997.62			
Woolwich Twp.	46	3.01		Muni PIG	77.4	\$1,447,380.00	\$18,700.00	\$868,428.00	\$289,476.00	\$289,476.00		
Woolwich Twp.	44	7	2011	Cty PIG	52.9	\$793,500.00	\$15,000.00	\$476,100.00	\$317,400.00			
Woolwich Twp.	13	2	2016	Muni TDR	53.788	\$315,000.00	\$5,856.32	\$225,000.00	\$0.00	\$90,000.00		
Woolwich Twp.	1	4	2009	SADC EP	139	\$1,644,077.00		\$1,644,077.00	\$0.00			
	43	6, 7			1							
Woolwich Twp.	44	6										
	46	10	1989	Cty EP	164.452	\$493,356.00	\$3,000.00	\$394,684.80	\$98,671.20			
Woolwich Twp.	46	8	2012	Cty IEP	23	\$420,208.00		\$0.00	\$420,208.00			
Woolwich Twp.	46	6	2010	Cty PIG	27.994	\$447,904.00	\$16,000.00	\$268,742.40	\$179,161.60			
	38	4										
Woolwich Twp.	39	5	2014	Cty PIG	81.369	\$1,464,642.00	\$18,000.00	\$878,558.40	\$586,083.60			
Woolwich Twp.	2	23	2016	Muni TDR	49.775	\$315,000.00	\$6,328.48	\$225,000.00	\$0.00	\$90,000.00		
Woolwich Twp.	54	16.01	2002	Muni TDR	15	\$61,628.00		\$0.00	\$0.00	\$61,628.00		
Woolwich Twp.	44	1	2007	Cty EP	33.88	\$559,020.00	\$16,500.00	\$335,412.00	\$223,608.00			
Woolwich Twp.	46	9	2009	Cty IEP	16	\$281,700.00		\$0.00	\$281,700.00			
Woolwich Twp.	43	8										
wootwich twp.	44	10	2004	Cty EP	44.79	\$282,177.00	\$6,300.00	\$181,399.50	\$100,777.50			
Woolwich Twp.	43	9.01	2005	Cty IEP	28	\$145,132.00		\$0.00	\$145,132.00			
Woolwich Twp.	44	8, 8.02	2011	Cty PIG	91.446	\$1,120,213.50	\$12,250.00	\$672,128.10	\$448,085.40			
Mashuish Turr	47	4										
Woolwich Twp.	55	4, 4.01	2011	Muni PIG	47.54	\$736,870.00	\$15,500.00	\$434,403.00	\$151,233.50	\$151,233.50		
Woolwich Twp.	47	5.02	2008	Muni PIG	24.216	\$474,633.60	\$19,600.00	\$284,780.16	\$94,926.72	\$94,926.72		
Woolwich Twn	46	9.01										
Woolwich Twp.	47	5.03	2007	Cty IEP	29	\$477,462.00		\$0.00	\$477,462.00			
Woolwich Twp. (also in South Harrison)	42	3	1993	Cty EP	4.394	\$8,571.55	\$1,950.74	\$6,000.09	\$2,571.47			
Woolwich Twp.	20	1	2016	Muni TDR	29.967	\$87,750.00	\$2,928.22	\$62,678.57	\$0.00	\$25,071.43		
Woolwich Twp.	17	6	2016	Muni TDR	60.463	\$680,348.97	\$11,252.32	\$485,963.55	\$0.00	\$194,385.42		
Woolwich Twp.	59	7.02	2006	Cty IEP	6	\$63,360.00		\$0.00	\$63,360.00			
Woolwich Twp.	55	1	2011	Cty PIG	77.992	\$857,912.00	\$11,000.00	\$504,847.20	\$353,064.80			
Woolwich Twp.	45	10	2013	Cty IEP	67	\$326,604.00		\$0.00	\$326,604.00			
Woolwich Twp.	43	3	2017	Muni TDR	14.89	\$120,000.00	\$8,059.10	\$85,714.26	\$0.00	\$34,285.74		
Woolwich Twp.	21	1	2016	Muni TDR	45.748	\$495,000.00	\$10,820.15	\$353,571.43	\$0.00	\$141,428.57		
Woolwich Twp.	21	3	2016	Muni TDR	16.251	\$168,000.00	\$10,337.83	\$120,000.00	\$0.00	\$48,000.00		

	Black		Year	D		7.4.10		0	0		Contributed	Contributed by
Municipality Woolwich Twp.	Block 21	Lot	Closed	Program Muni TDR	Acres 56.083	Total Cost \$776,000.00	\$13,836.63	State Cost \$554,285.71	County Cost \$0.00	Section Science Scienc	by Pinelands	Federal
Woolwich Twp.	40	10		Muni TDR	35.701	\$103,162.50	\$2,889.62	\$73,687.50	\$0.00	\$29,475.00		
Woolwich Twp.	46	Part of 7		Cty EP	16.35	\$114,450.00	\$7,000.00	\$71,940.00	\$42,510.00	φ23,473.00		
Woolwich Twp.	1	3		Muni TDR	125.83	\$1,399,476.25	\$11,121.96	\$999,625.89	\$42,510.00	\$399,850.36		
Woolwich Twp.	11	2,24		Cty IEP	25	\$405,780.00	ψ11,121.00	\$0.00	\$405,780.00	4000,000.00		
Woolwich Twp.	2	18		Muni TDR	41.178	\$195,000.00	\$4,735.54	\$139,285.71	\$0.00	\$55,714.29		
Woolwich Twp.	59	3		Cty EP	28.27	\$288,354.00	\$10,200.00	\$157,746.60	\$130,607.40	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>		
Woolwich Twp.	43	13, 14		Cty PIG	129.018	\$1,528,863.30	\$11,850.00	\$917,317.98	\$611,545.32			
Woolwich Twp.	14	12		Muni PIG	58.668	\$1,349,364.00	\$23,000.00	\$284,236.72	\$532,563.64	\$532,563.64		
Woolwich Twp.	42	2		Muni TDR	23.562	\$211,650.00	\$8,982.68	\$151,178.57	\$0.00	\$60,471.43		
Woolwich Twp.	42	2.03		Muni TDR	16.297	\$143,175.00	\$8,785.36	\$102,267.86	\$0.00	\$40,907.14		
Woolwich Twp.	1	4, 4.01		SADC EP	138.642	\$1,644,077.40	\$11,858.44	\$1,644,077.40	\$0.00	¢ .0,007.12.1		
Woolwich Twp.	39	2, 3, 4		SADC EP	42	\$629,850.06	\$14,996.43	\$629,850.06	\$0.00			
wootmen rwp.	3	1	2005	OADO EI	72	φ020,000.00	φ14,000.40	φ020,000.00	φ0.00			
Woolwich Twp.	5	1	2009	Cty IEP	62	\$881,362.00		\$0.00	\$881,362.00			
Woolwich Twp.	13	5.01		Muni PIG	24.492	\$297,577.80	\$12,150.00	\$178,546.68	\$59,515.56	\$59,515.56		
Woolwich Twp.	31 40	4 12, 14, 14.01, 14.05		Muni TDR	154.8517	\$1,312,500.00	\$8,475.85	\$937,500.38	\$0.00	\$374,999.62		
Woolwich Twp.	59	7	2012	Cty IEP	6	\$72,114.00		\$0.00	\$72,114.00			
Woolwich Twp.	55	3	2013	Muni PIG	16.537	\$254,669.80	\$15,400.00	\$152,801.88	\$50,933.96	\$50,933.96		
Woolwich Twp.	12 13	6 2.02	2017	Muni TDR	58.326	\$568,750.00	\$9,751.23	\$406,250.00	\$0.00	\$162,500.00		
Woolwich Twp.	45	9,9.01	2013	SADC EP	83.589	\$512,164.80	\$6,127.18	\$512,164.80	\$0.00			
Woolwich Twp.	41	7, 7.01, 7.02, 7.03, 7.04, 7.05, 7.06, 7.07, 7.08, 7.09, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.16, 7.17, 7.18, 7.19, 7.20, 7.21, 7.22, 7.23, ROW #1, ROW #2										
Woolwich Township T	otal Farms:	54	2018	Muni PIG	36.467 2599.11	\$725,693.30 \$28,460,289.83	\$19,900.00	\$435,415.98 \$17,151,470.55	\$145,138.66 \$7,923,999.95	\$145,138.66 \$3,384,819.33	\$0.00	\$0.00
Gloucester Total Farm					20,798	\$178,628,557	\$8,589	\$86,012,016	\$87,333,879	\$5,218,858	\$30,000	\$289,476
		[[,, _, _ _, , ,,,,,,,,,,,,,,,,,,,,	Cost Share:	48.2%	48.9%	2.9%		0.2%

APPENDIX D SADC Minimum Eligibility Criteria

Minimum Eligibility Criteria are based upon the SADC's rules for farmland preservation and project eligibility.¹ In order to be eligible for preservation the site must be developable, have soils capable of supporting agricultural or horticultural production, and meet minimum tillable land standards. (N.J.A.C. 2:76-6.20)

In summary:

For all lands less than or equal to 10 acres:

- The land must produce at least \$2,500 worth of agricultural or horticultural products annually; and
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be tillable; and
- At least 75% or a minimum of 5 acres of the land (whichever is less) must be capable of supporting agriculture or horticulture; and
- The land in question must exhibit development potential as defined by the SADC (based upon zoning, ability to be subdivided, less than 80% wetlands, less than 80% slopes of 15% or more); or
- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

For lands greater than 10 acres:

- At least 50% or a minimum of 25 acres of land (whichever is less) must be tillable;and
- At least 50% or a minimum of 25 acres of land (whichever is less) must have soils capable of supporting agriculture or horticulture; and
- The land in question must exhibit development potential as defined by the SADC; or
- The land must meet the above criteria or be eligible for allocation of development credits pursuant to a Transfer of Development Credits (TDR) program.

For a farm application to qualify for SADC cost share, the farm must have at least one parcel listed on the targeted farm list; comprise an assemblage of substandard parcels which together meet SADC minimum standards; or have sufficient justification by the Gloucester CADB that the parcels were not identified as targeted due to a specific mapping issue or other error.

Within the identified project area, candidate farms are identified which meet the tillable land and soils minimum eligibility standards. To determine farms that are potentially eligible for preservation, a series of queries were made utilizing the ArcGIS digital mapping software for soils and tillable land. These are described in further detail below and shown on target farm map.

1 Adopted by the SADC May 21, 2007, and July 25, 2019.

Appendix D. SADC Minimum Eligibility Criteria

Farmland that meets the SADC Criteria for Tillable Land: Tillable acreage was determined using the NJDEP 2020 Land Use/Land Cover mapping for agricultural lands. The land categories that are defined as the "tillable land" are as follows:

- · Agricultural Wetlands (Modified)
- Confined Feeding Operations
- Cropland and Pastureland
- Former Agricultural Wetland
- Orchards/Vineyards/Nurseries/Horticultural Areas
- Other Agriculture

Farm parcels were sorted by size based upon the SADC Minimum Eligibility Criteria for tillable land:

Farm Size	Requirements
0-6.667 acres	75% tillable
6.667-10 acres	5 acres tillable
10-50 acres	50% tillable
50+ acres	25 tillable acres

Farmland that meets the SADC Criteria for Agricultural Soils: Agricultural soils as defined by the SADC are those soils capable of supporting agricultural or horticultural production. The use of the NRCS Soil Survey identifying prime, statewide, and unique agricultural soils is the first and best indication of the farmland soils.

Farm parcels are sorted by size based upon the SADC Minimum Eligibility Criteria for soils:

Farm Size	Requirements
0-6.667 acres	75% soils capable of supporting agricultural production
6.667-10 acres	5 ac of soils capable of supporting agricultural production
10-50 acres	50% soils capable of supporting agricultural production
50+ acres	25 ac of soils capable of supporting agricultural production

Farmland that meets SADC Criteria for both Tillable Land and Soils: Utilizing the tillable acreage determined from the NJDEP 2020 Land Use/Land Cover mapping for agricultural lands and soil acreage determined using the Soil Survey as prepared by the NRCS for prime farmland soils, soils of statewide importance and soils of unique importance, farm parcels were sorted by size based upon the SADC Minimum Eligibility Criteria for tillable land and soils.

Gloucester County may proceed without state funding on projects that do not meet these Minimum Eligibility Standards, but typically, Gloucester County will not cost share on applications that do not meet SADC minimum standards. In all cases, the CADB will review and process applications from landowners for farmland preservation and follow all state procedures to ensure consistency in application review and processing.

APPENDIX E Target Farms

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Clayton Borough	2105	25	WILLIAMSTOWN RD	15.06	15.03	Pinelands North	100%	99%
Clayton Borough	1901	7	339 AURA RD	5.09	5.09	Still Run	100%	94%
Clayton Borough	1901	8	FAIRVIEW ST	1.03	1.03	Still Run	100%	100%
Clayton Borough	2004	1	EAST AVE	0.7	0.70	Still Run	100%	100%
Clayton Borough	502	4	AURA RD	28.56	28.33	Still Run	100%	71%
Clayton Borough	502	7	COYLE RD	8.52	9.52	Still Run	100%	83%
Deptford Township	399	7	GLASSBORO RD	88.42	86.86	Mantua Creek	81%	47%
Deptford Township	420	4	30 BLACKWOOD BARNSBORO	23.84	23.84	Mantua Creek	91%	85%
Deptford Township	421	3	SALINA RD	52.18	52.63	Mantua Creek	100%	96%
Deptford Township	422	38	GLASSBORO RD	20.35	21.06	Mantua Creek	96%	97%
East Greenwich Township	1001	1	WOLFERT STATION RD	17.54	17.54	Repaupo-Mantua Creek	73%	60%
East Greenwich Township	1001	2	615 KINGS HWY	70.37	70.23	Repaupo-Mantua Creek	58%	55%
East Greenwich Township	1004	5	600 KINGS HWY	119.32	119.30	Repaupo-Mantua Creek	58%	44%
East Greenwich Township	1005	11	CEDAR RD	17.88	17.87	Repaupo-Mantua Creek	100%	75%
East Greenwich Township	1005	2.01	100 GATTUSO LN	22.27	22.02	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1005	7.01	101 GATTUSO LN	11.46	11.48	Repaupo-Mantua Creek	100%	74%
East Greenwich Township	1005	7	E COHAWKIN RD	17.79	18.78	Repaupo-Mantua Creek	100%	99%
East Greenwich Township	101	1	598 TOMLIN STATION RD	22.84	22.79	Repaupo-Mantua Creek	66%	67%
East Greenwich Township	101	5	W WOLFERT STATION RD	5	6.49	Repaupo-Mantua Creek	100%	76%
East Greenwich Township	102	11	N WOLFERT STATION RD	14.74	14.34	Repaupo-Mantua Creek	100%	51%
East Greenwich Township	102	3.02	136 W TOMLIN STATION RD	2	2.00	Repaupo-Mantua Creek	95%	90%
East Greenwich Township	102	9	N WOLFERT STATION RD	13.34	14.77	Repaupo-Mantua Creek	100%	80%
East Greenwich Township	103.07	13.01	DEMOCRAT RD	33.67	32.89	Repaupo-Mantua Creek	100%	54%
East Greenwich Township	103	20	DEMOCRAT RD	48.59	48.50	Repaupo-Mantua Creek	85%	79%
East Greenwich Township	103	21	DEMOCRAT RD	56.82	56.72	Repaupo-Mantua Creek	92%	73%
East Greenwich Township	103	6	N WOLFERT ST RD	19	20.79	Repaupo-Mantua Creek	65%	56%
East Greenwich Township	103	7	N WOLFERT STATION RD	24.44	28.57	Repaupo-Mantua Creek	100%	79%
East Greenwich Township	104	4	TOMLIN ST RD	16.81	16.78	Repaupo-Mantua Creek	99%	75%
East Greenwich Township	105	3.01	TOMLIN STATION RD	6.35	6.95	Repaupo-Mantua Creek	94%	74%
East Greenwich Township	105	3.03	TOMLIN STATION RD	5	6.00	Repaupo-Mantua Creek	89%	77%
East Greenwich Township	105	4	85 W WOLFERT STATION RD	25.65	29.14	Repaupo-Mantua Creek	100%	89%
East Greenwich Township	1102	2.02	24 W TOMLIN STATION RD	6	5.82	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1102	3.01	KINGS HWY	5.35	5.87	Repaupo-Mantua Creek	100%	85%
East Greenwich Township	1103.06	4.03	E TOMLIN STATION RD	5	5.57	Repaupo-Mantua Creek	100%	78%
East Greenwich Township	1106	5	E RATTLING RUN RD	8.1	9.13	Repaupo-Mantua Creek	100%	80%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
East Greenwich Township	1107	11	63 E RATTLING RUN RD	9.291	9.25	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1107	12	55 E RATTLING RUN RD	6	5.83	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1107	18	E TOMLIN STATION RD	14.99	14.99	Repaupo-Mantua Creek	74%	74%
East Greenwich Township	1107	4	TOMLIN STATION RD	55.25	56.72	Repaupo-Mantua Creek	74%	48%
East Greenwich Township	1107	5	67 E RATTLING RUN RD	9.09	9.07	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1202.05	22	WOLFERT STATION RD	12.73	12.73	Repaupo-Mantua Creek	100%	99%
East Greenwich Township	1202	4	UNION RD	52.17	51.61	Repaupo-Mantua Creek	80%	75%
East Greenwich Township	1203	4	585 UNION RD	2.29	2.29	Repaupo-Mantua Creek	100%	92%
East Greenwich Township	1203	5	UNION RD	7.56	7.06	Repaupo-Mantua Creek	90%	71%
East Greenwich Township	1204	4	CEDAR RD	21.54	21.54	Repaupo-Mantua Creek	99%	96%
East Greenwich Township	1207	10.01	CEDAR RD	6.15	6.15	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1207	7	UNION RD	11.61	11.64	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1301	1	UNION RD	49.37	49.37	Repaupo-Mantua Creek	82%	77%
East Greenwich Township	1301	2	COHAWKIN RD	18.19	18.23	Repaupo-Mantua Creek	94%	98%
East Greenwich Township	1302	1	UNION RD	34.28	36.28	Repaupo-Mantua Creek	99%	92%
East Greenwich Township	1302	2	UNION RD	30.66	30.66	Repaupo-Mantua Creek	100%	98%
East Greenwich Township	1302	9	CEDAR RD	14.32	14.37	Repaupo-Mantua Creek	90%	96%
East Greenwich Township	1303.04	1	COHAWKIN RD	26	26.69	Repaupo-Mantua Creek	97%	94%
East Greenwich Township	1303.04	27	780 HERITAGE RD	0.03	0.03	Repaupo-Mantua Creek	100%	100%
East Greenwich Township	1303	5	166 E COHAWKIN RD	28.86	29.36	Repaupo-Mantua Creek	100%	87%
East Greenwich Township	1303	6	COHAWKIN RD	3.47	3.47	Repaupo-Mantua Creek	100%	97%
East Greenwich Township	1304	1.02	212 PINE MILL RD	1.29	1.29	Repaupo-Mantua Creek	100%	98%
East Greenwich Township	1304	11	PINE MILL RD	66.47	63.60	Repaupo-Mantua Creek	89%	88%
East Greenwich Township	1304	15	301 JESSUP MILL RD	1.09	1.08	Repaupo-Mantua Creek	100%	99%
East Greenwich Township	1305	2	CEDAR RD	12.49	12.32	Repaupo-Mantua Creek	100%	92%
East Greenwich Township	1306	2	220 E COHAWKIN RD	7.22	8.62	Repaupo-Mantua Creek	100%	75%
East Greenwich Township	1401	2	COHAWKIN RD	43.96	44.96	Repaupo-Mantua Creek	100%	93%
East Greenwich Township	1401	5.01	86 SESAME ST	23.28	24.28	Repaupo-Mantua Creek	98%	80%
East Greenwich Township	1404	1	MANTUA RD	14.77	17.15	Repaupo-Mantua Creek	95%	66%
East Greenwich Township	205	13.02	COHAWKIN RD	4.5	4.50	Repaupo-Mantua Creek	100%	85%
East Greenwich Township	206	11	COHAWKIN RD	16.39	16.94	Repaupo-Mantua Creek	91%	92%
East Greenwich Township	401	14	COHAWKIN RD	15	15.57	Repaupo-Mantua Creek	73%	72%
Elk Township	10	11.01	603 BRIDGETON PK	34.02	35.09	Still Run	100%	90%
Elk Township	11	11	822 BRIDGETON PK	5.95	5.96	Still Run	100%	100%
Elk Township	11	12	816 BRIDGETON PK	8.43	9.92	Still Run	100%	88%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Elk Township	11	7	900 BRIDGETON PK	34.58	15.54	Still Run	100%	100%
Elk Township	12	1	821-841 BRIDGETON PK	15.17	15.87	Still Run	100%	100%
Elk Township	12	10	1675 ELLIS MILL RD	9.01	9.01	Still Run	100%	70%
Elk Township	12	7	699 FERRELL RD	11.37	11.21	Still Run	100%	99%
Elk Township	12	8	1661 ELLIS MILL RD	8.78	8.73	Still Run	100%	96%
Elk Township	15	3	1700 ELLIS MILL RD	25.26	12.26	Still Run	100%	66%
Elk Township	15	4	1690 ELLIS MILL RD	24.56	24.56	Still Run	100%	59%
Elk Township	15	7	LAUX RD	78.72	54.61	Still Run	100%	96%
Elk Township	17	1	1500 & 1530 ELLIS MILL RD	16.89	16.73	Still Run	100%	90%
Elk Township	17	6.01	1490 ELLIS MILL RD	23.08	23.15	Still Run	95%	73%
Elk Township	170	14	FAIRVIEW RD	44.85	44.85	Still Run	100%	97%
Elk Township	170	17	487 WHIG LN	6.76	8.04	Still Run	100%	80%
Elk Township	170	18	477 WHIG LN	33.92	34.97	Still Run	100%	74%
Elk Township	171	24	501 FAIRVIEW RD	2.07	2.14	Still Run	100%	92%
Elk Township	172	6	460 WHIG LN	13.94	13.82	Still Run	100%	82%
Elk Township	175	11	1192 AURA RD	0.6	7.35	Still Run	100%	87%
Elk Township	175	12.01	AURA RD	5.84	5.87	Still Run	100%	96%
Elk Township	175	12.02	AURA RD	4.93	4.94	Still Run	100%	100%
Elk Township	176	3	AURA RD	9.32	10.81	Still Run	96%	64%
Elk Township	178	14	241 CLAYTON AVE	10.03	11.61	Still Run	97%	78%
Elk Township	18	14	LAUX RD	11.02	11.10	Still Run	100%	67%
Elk Township	18	24	LAUX RD	49.81	50.15	Still Run	99%	75%
Elk Township	18	28	1049 WHIG LN	63.89	64.98	Still Run	96%	87%
Elk Township	18	47	ELK RD	11.27	10.98	Still Run	100%	90%
Elk Township	18	48	ELK RD	35.11	36.32	Still Run	100%	87%
Elk Township	19	1	419 ELK RD	8.31	10.31	Still Run	100%	71%
Elk Township	19	12	961 WHIG LN	44	44.92	Still Run	100%	94%
Elk Township	19	14	HARDINGVILLE RD	44.04	43.14	Still Run	100%	98%
Elk Township	2	2.05	301 BRIDGETON PK	1.01	1.05	Still Run	100%	94%
Elk Township	217	1	1265 ELK RD	42.72	43.72	Still Run	100%	78%
Elk Township	24	4.01	1460 ELLIS MILL RD	11.28	12.06	Still Run	99%	66%
Elk Township	24	6	1452 ELLIS MILL RD	7.53	8.53	Still Run	94%	62%
Elk Township	27	1.01	707 CLEMS RUN	8.33	11.32	Still Run	85%	73%
Elk Township	27	2	729 CLEMS RUN	13.61	17.11	Still Run	95%	80%
Elk Township	27	3.01	735 CLEMS RUN	5.63	6.64	Still Run	100%	81%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Elk Township	28	15.01	HARDINGVILLE RD	66.59	66.59	Still Run	99%	82%
Elk Township	28	9	HARDINGVILLE RD	9.19	11.00	Still Run	87%	63%
Elk Township	29	5	775 CLEMS RUN	31.69	29.41	Still Run	97%	92%
Elk Township	31	14.01	AURA RD	9.62	9.62	Still Run	100%	95%
Elk Township	31	2.02	799 AURA RD	5.12	5.12	Still Run	100%	94%
Elk Township	31	22	AURA RD	39.86	40.86	Still Run	100%	54%
Elk Township	31	5.01	701 AURA RD	38.11	37.79	Still Run	100%	90%
Elk Township	31	7	AURA RD	60.37	59.87	Still Run	100%	59%
Elk Township	31	8	AURA RD	92.87	68.82	Still Run	100%	88%
Elk Township	32	1	AURA RD	169.92	169.92	Still Run	100%	83%
Elk Township	33	12.13	933 & 941 WHIG LN	46.97	46.94	Still Run	100%	99%
Elk Township	33	12.14	844 CLEMS RUN	5.22	6.62	Still Run	100%	77%
Elk Township	36	1.04	111 POND VIEW CT	1.47	1.47	Still Run	100%	90%
Elk Township	36	1.05	115 POND VIEW CT	55.07	56.47	Still Run	100%	46%
Elk Township	36	1.06	110 POND VIEW CT	1.06	1.06	Still Run	100%	80%
Elk Township	36	7	869 ELK RD	9.88	9.88	Still Run	100%	98%
Elk Township	36	8	886 ELK RD	5.02	6.18	Still Run	100%	76%
Elk Township	38	2	970 WHIG LN	19.17	15.90	Still Run	100%	98%
Elk Township	38	5	HARDINGVILLE RD	3.5	3.40	Still Run	100%	98%
Elk Township	38	6	ELK RD	1.35	0.67	Still Run	100%	100%
Elk Township	39	2	ELK RD	21	20.79	Still Run	100%	82%
Elk Township	39	3	ELK RD	5.45	5.45	Still Run	100%	95%
Elk Township	39	6	820 HARDINGVILLE RD	19.83	20.17	Still Run	100%	72%
Elk Township	40	8	835 HARDINGVILLE RD	8.03	9.23	Still Run	100%	66%
Elk Township	41	15.01	ELK RD	7.96	7.17	Still Run	100%	99%
Elk Township	41	16	ELK RD	2.65	2.65	Still Run	100%	97%
Elk Township	41	2	274 RICHWOOD RD	20.54	20.57	Still Run	100%	85%
Elk Township	41	27	274 RICHWOOD RD	30	70.57	Still Run	88%	36%
Elk Township	42	10	968 ELK RD	5.42	6.41	Still Run	100%	86%
Elk Township	44	16	BUCK RD	34.39	34.39	Still Run	100%	84%
Elk Township	44	4	730 BUCK RD	80.63	80.11	Still Run	100%	76%
Elk Township	44	6	ELK RD	55.71	56.85	Still Run	100%	76%
Elk Township	44	8	1074 ELK RD	10.16	11.16	Still Run	100%	87%
Elk Township	45	15	DUTCH ROW RD	4.7	4.73	Still Run	100%	94%
Elk Township	45	23	MONROEVILLE RD	31.7	31.61	Still Run	100%	93%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Elk Township	46	8	DUTCH ROW RD	2.89	2.89	Still Run	100%	100%
Elk Township	48	1	BUCK RD	11.62	0.94	Still Run	100%	100%
Elk Township	5	1	328 BRIDGETON PK	31.8	33.14	Still Run	100%	98%
Elk Township	5	11.02	BRIDGETON PIKE	1.44	1.43	Still Run	100%	87%
Elk Township	5	7	374 BRIDGETON PK	9.27	10.77	Still Run		
Elk Township	5	9	502 BRIDGETON PK	8.64	8.64	Still Run	100%	73%
Elk Township	51	2	ELK RD	15.32	2.66	Still Run	100%	94%
Elk Township	51	4	ELK RD	12.05	13.14	Still Run	100%	52%
Elk Township	52	1.01	426 CEDAR BRIDGE RD	5.53	5.53	Still Run	100%	97%
Elk Township	52	12.02	1129 ELK RD	9.4	9.25	Still Run	100%	97%
Elk Township	54	17	1152 AURA RD	13.62	13.84	Still Run	100%	84%
Elk Township	54	20	AURA RD	108.04	110.50	Still Run	100%	55%
Elk Township	54	21	AURA RD	18.12	20.75	Still Run	100%	88%
Elk Township	54	6.02	961 ELK RD	7.83	10.07	Still Run	100%	89%
Elk Township	54	6.03	949 ELK RD	10.13	11.43	Still Run	100%	51%
Elk Township	55.02	1	AURA RD	19.17	0.22	Still Run	100%	100%
Elk Township	55	18.02	610 WHIG LN	9.54	9.57	Still Run	100%	84%
Elk Township	58	1	625 WHIG LN	20.94	21.28	Still Run	99%	94%
Elk Township	6	21	361 BRIDGETON PK	1.8	9.02	Still Run	100%	66%
Elk Township	65	4.02	670 FAIRVIEW RD	10.3	10.26	Still Run	100%	53%
Elk Township	65	5	BUCK RD	69.39	69.44	Still Run	100%	77%
Elk Township	67	21	265 UNION ST	8.58	9.59	Still Run	100%	80%
Elk Township	68	10	128 BUCK RD	63.6	63.55	Still Run	100%	75%
Elk Township	7	1	641 BRIDGETON PK	27.78	27.78	Still Run	100%	92%
Elk Township	8	6.01	768 BRIDGETON PK	4.96	4.98	Still Run	100%	99%
Elk Township	8	6.02	755 BRIDGETON PK	5.01	5.00	Still Run	100%	84%
Elk Township	9	3	735 BRIDGETON PK	18.58	21.58	Still Run	100%	94%
Elk Township	9	7.05	630 FERRELL RD	5	6.85	Still Run	100%	85%
Franklin Township	1002.03	11.01	2480 SHERIDAN AVE	8.32	9.30	Pinelands North	100%	97%
Franklin Township	1002.03	11	2525 SHERIDAN AVE	8.34	9.33	Pinelands North	100%	92%
Franklin Township	1002.03	6	1664 STANTON AVE	8.62	9.60	Pinelands North	100%	80%
Franklin Township	104	41	1503 CLAYTON WILLIAMSTOWN	21.49	23.14	Pinelands North	98%	84%
Franklin Township	104	42	3335 WILLIAMSTOWN RD	28.66	28.66	Pinelands North	100%	70%
Franklin Township	701	16	1876 STANTON AVE	30.8	32.99	Pinelands North	100%	67%
Franklin Township	702	13	4289 W MALAGA RD	63.159	63.28	Pinelands North	100%	68%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Franklin Township	702	14.01	W MALAGA RD	30.85	30.74	Pinelands North	100%	90%
Franklin Township	702	14	W MALAGA RD	52.27	52.26	Pinelands North	100%	94%
Franklin Township	702	15	4047 W MALAGA RD	22.65	24.38	Pinelands North	100%	91%
Franklin Township	702	42.01	3566 TUCKAHOE RD	5	5.97	Pinelands North	100%	76%
Franklin Township	702	42	TUCKAHOE RD	17.94	18.60	Pinelands North	100%	78%
Franklin Township	702	44	TUCKAHOE RD	3.56	3.38	Pinelands North	100%	99%
Franklin Township	702	45	3658 TUCKAHOE RD	44.41	45.40	Pinelands North	100%	71%
Franklin Township	1001	34	1248 STANTON AVE	7.95	7.95	Pinelands South	100%	93%
Franklin Township	1001	61	COLES MILL ROAD	5.6	6.59	Pinelands South	100%	82%
Franklin Township	1001	74	COLES MILL RD (BACK)	24.29	25.29	Pinelands South	100%	72%
Franklin Township	1001	83	3215 MAIN RD	62.69	65.33	Pinelands South	100%	49%
Franklin Township	1001	92	MARSHALL MILL RD	1.43	1.43	Pinelands South	100%	94%
Franklin Township	1101	52	CARPENITO AVE	8.43	8.43	Pinelands South	100%	67%
Franklin Township	1101	87	1348 PENNSYLVANIA AVE	14.65	15.65	Pinelands South	100%	56%
Franklin Township	1201	14	651 MARSHALL MILL RD	19.13	20.32	Pinelands South	100%	58%
Franklin Township	1201	18	493 MARSHALL MILL RD	5.65	9.63	Pinelands South	100%	56%
Franklin Township	1201	20	433 MARSHALL MILL RD	19.03	20.56	Pinelands South	100%	65%
Franklin Township	1201	28	DELSEA DR	9.54	9.52	Pinelands South	94%	87%
Franklin Township	1201	30	1374 DELSEA DR	44.42	47.41	Pinelands South	100%	56%
Franklin Township	1306	17.01	201 FRANKLIN ST	8.053	8.06	Pinelands South	100%	95%
Franklin Township	1306	17	215 FRANKLIN ST	8.053	8.03	Pinelands South	100%	87%
Franklin Township	1306	18	954 DELSEA DR	16.09	16.79	Pinelands South	100%	63%
Franklin Township	5601	17	ST GEORGE ST	5.83	5.82	Pinelands South	100%	80%
Franklin Township	5601	18	HARDING HWY & ST GEORGE	9.9	9.88	Pinelands South	100%	94%
Franklin Township	5601	30	HARDING HWY	3.05	3.04	Pinelands South	100%	98%
Franklin Township	5601	33	HARDING HWY	16.53	7.53	Pinelands South	100%	98%
Franklin Township	5602	25	DUTCH MILL RD	1.79	1.80	Pinelands South	98%	78%
Franklin Township	5602	28.01	DUTCH MILL RD	1.41	1.41	Pinelands South	100%	100%
Franklin Township	5602	28.02	DUTCH MILL RD	1.5	1.50	Pinelands South	100%	100%
Franklin Township	5602	28.03	DUTCH MILL RD	1.53	1.59	Pinelands South	100%	100%
Franklin Township	5602	28	DUTCH MILL RD	1.56	1.57	Pinelands South	100%	100%
Franklin Township	5602	29	2257 MAIN RD	7.38	4.12	Pinelands South	100%	94%
Franklin Township	5602	31	2215 MAIN RD	5.48	5.97	Pinelands South	100%	80%
Franklin Township	5602	32.02	MAIN RD (BACK)	2.54	2.48	Pinelands South	100%	100%
Franklin Township	5602	35	1997 MAIN RD	33.25	34.25	Pinelands South	100%	72%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Franklin Township	5602	39	5531 LAKE RD	19.97	21.08	Pinelands South	100%	93%
Franklin Township	5602	44	LAKE ROAD	11.33	13.80	Pinelands South	100%	75%
Franklin Township	5602	59	ST GEORGE ST	13.25	13.05	Pinelands South	100%	97%
Franklin Township	5602	60	596 ST GEORGE ST	19.66	21.12	Pinelands South	100%	88%
Franklin Township	5602	61	ST GEORGE ST	9.7	9.72	Pinelands South	100%	99%
Franklin Township	5602	63	740 ST GEORGE ST	5.27	6.26	Pinelands South	100%	80%
Franklin Township	5701	49	565 DUTCH MILL RD	22.51	24.30	Pinelands South	100%	81%
Franklin Township	5701	50	491 DUTCH MILL RD	16.38	19.29	Pinelands South	100%	55%
Franklin Township	5702	59.36	MAIN RD	53.67	53.71	Pinelands South	100%	88%
Franklin Township	5702	62	1331 DUTCH MILL RD	11.54	12.52	Pinelands South	100%	93%
Franklin Township	5702	64	1289 DUTCH MILL RD	8.2	10.68	Pinelands South	100%	93%
Franklin Township	5702	71	DUTCH MILL RD (BACK)	27.82	27.65	Pinelands South	100%	88%
Franklin Township	5801	35	1813 DUTCH MILL RD	17.36	18.36	Pinelands South	100%	53%
Franklin Township	5801	37	1765 DUTCH MILL ROAD	10.84	11.81	Pinelands South	100%	86%
Franklin Township	5801	48	2318 MAIN RD	24.4	25.85	Pinelands South	100%	72%
Franklin Township	5801	49	2360 MAIN RD	8.86	9.86	Pinelands South	100%	86%
Franklin Township	5801	51	2424 MAIN RD	6.17	7.46	Pinelands South	100%	74%
Franklin Township	5801	57	1721 DUTCH MILL RD	55.66	55.55	Pinelands South	100%	53%
Franklin Township	5802	22.02	DUTCH MILL RD	3.4	3.41	Pinelands South	100%	100%
Franklin Township	5802	22.03	DUTCH MILL RD	4.2	4.19	Pinelands South	100%	100%
Franklin Township	5802	22.04	DUTCH MILL RD	70.37	70.37	Pinelands South	100%	98%
Franklin Township	5802	26	5809 LAKE RD (UNIT A/B)	14.16	16.13	Pinelands South	100%	82%
Franklin Township	5802	28.02	2050 MAIN RD	9.34	10.32	Pinelands South	100%	61%
Franklin Township	5802	28	2020 MAIN RD	16.16	17.13	Pinelands South	100%	86%
Franklin Township	5802	34	1526 DUTCH MILL RD	11.53	12.00	Pinelands South	100%	70%
Franklin Township	5901	10	3000 MAIN RD	14.17	15.64	Pinelands South	100%	50%
Franklin Township	5901	8	MAIN RD	4.14	6.05	Pinelands South	100%	85%
Franklin Township	5901	88	CLARK AVE	21.23	21.32	Pinelands South	100%	94%
Franklin Township	5901	9	2952 MAIN RD	12.07	13.04	Pinelands South	100%	78%
Franklin Township	5901	94	MAIN RD (BACK)	31.96	7.89	Pinelands South	100%	100%
Franklin Township	6002	28.01	2432 TUCKAHOE RD	4.06	5.05	Pinelands South	100%	78%
Franklin Township	6002	28.02	2404 TUCKAHOE RD	2	7.97	Pinelands South	100%	77%
Franklin Township	6002	28.04	2356 TUCKAHOE RD	5.05	6.54	Pinelands South	100%	82%
Franklin Township	6103	6	4559 COLES MILL RD	2.92	2.81	Pinelands South	100%	94%
Franklin Township	6201	32	4448 COLES MILL RD	12.75	13.83	Pinelands South	100%	62%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Franklin Township	6402	19.01	VICTORIA AVE (BACK)	13.73	13.79	Pinelands South	100%	81%
Franklin Township	6402	22	PINEY HOLLOW RD	20.41	20.37	Pinelands South	100%	77%
Franklin Township	6402	24	3265 VICTORIA AVE	19.47	19.47	Pinelands South	100%	72%
Franklin Township	6402	28	VICTORIA AVE	13.07	14.32	Pinelands South	100%	68%
Franklin Township	6402	45	VICTORIA AVE	5.27	5.26	Pinelands South	100%	93%
Franklin Township	6402	5	2933 VICTORIA AVE	14.91	16.63	Pinelands South	100%	83%
Franklin Township	6502	8	DUTCH MILL & VICTORIA AVE	52.83	52.83	Pinelands South	100%	90%
Franklin Township	6503	17	3220 VICTORIA AVE	11.01	11.14	Pinelands South	100%	92%
Franklin Township	6503	18	VICTORIA AVE	26.37	26.32	Pinelands South	100%	64%
Franklin Township	6503	19	VICTORIA AVE	2.65	2.65	Pinelands South	100%	90%
Franklin Township	6503	25	PINEY HOLLOW RD (BACK)	19.96	19.96	Pinelands South	100%	74%
Franklin Township	6503	29	1337 PINEY HOLLOW RD	20.99	22.49	Pinelands South	100%	59%
Franklin Township	6503	30	1221,1231 PINEY HOLLOW RD	23.75	25.66	Pinelands South	100%	86%
Franklin Township	6503	35	1063 PINEY HOLLOW RD	24.47	25.97	Pinelands South	100%	72%
Franklin Township	6503	37	286 PINEY LN	5.02	6.60	Pinelands South	100%	86%
Franklin Township	6601	2	UNEXPECTED RD	21.48	11.29	Pinelands South	100%	100%
Franklin Township	6601	4	UNEXPECTED RD	22.84	22.81	Pinelands South	100%	61%
Franklin Township	6602	1	1302-1350 PINEY HOLLOW RD	10.98	10.99	Pinelands South	100%	100%
Franklin Township	6602	11	2034 PINEY HOLLOW ROAD	33.92	41.61	Pinelands South	100%	96%
Franklin Township	6602	15	UNEXPECTED RD	18.94	18.94	Pinelands South	100%	96%
Franklin Township	6602	5	PINEY HOLLOW RD	249.15	248.69	Pinelands South	94%	11%
Franklin Township	6602	8	PINEY HOLLOW RD	3.23	3.22	Pinelands South	100%	88%
Franklin Township	6701.01	15	TUCKAHOE RD	42.41	42.32	Pinelands South	92%	69%
Franklin Township	6701.01	17	HARDING HIGHWAY	21.93	11.42	Pinelands South	100%	90%
Franklin Township	6701.01	18	S BLUE BELL RD	5.18	5.07	Pinelands South	86%	90%
Franklin Township	6702	2	186 TUCKAHOE RD	8.51	9.51	Pinelands South	100%	58%
Franklin Township	6702	44	161 PINEY LN	46.54	48.54	Pinelands South	100%	92%
Franklin Township	6802	13	1692 FLORA RD	13.49	13.50	Pinelands South	100%	54%
Franklin Township	6802	16	FLORA RD	8.25	9.73	Pinelands South	100%	56%
Franklin Township	6802	18	FLORA RD	11.18	11.15	Pinelands South	100%	91%
Franklin Township	6803	1	FOREST GROVE RD	5	4.55	Pinelands South	100%	100%
Franklin Township	6803	10	1928 FOREST GROVE RD	16.06	16.57	Pinelands South	100%	81%
Franklin Township	6803	18	FLORA RD	10	10.14	Pinelands South	100%	88%
Franklin Township	6803	3	1750 FOREST GROVE RD	10.82	11.50	Pinelands South	100%	62%
Franklin Township	6803	5	1816 FOREST GROVE RD	7.29	9.39	Pinelands South	100%	83%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Franklin Township	6803	6.01	FLORA RD	5.93	5.84	Pinelands South	100%	100%
Franklin Township	6803	8	FOREST GROVE RD	8.66	8.83	Pinelands South	100%	68%
Franklin Township	6804	12	WEYMOUTH RD	4.89	4.99	Pinelands South	100%	99%
Franklin Township	6804	19	FOREST GROVE RD (BACK)	4.23	3.02	Pinelands South	100%	100%
Franklin Township	6804	20	FOREST GROVE RD	8.11	8.11	Pinelands South	100%	99%
Franklin Township	6804	21	FOREST GROVE RD	14.74	14.74	Pinelands South	100%	98%
Franklin Township	6804	22	FOREST GROVE RD	9.64	9.64	Pinelands South	100%	100%
Franklin Township	6804	23	FOREST GROVE RD	13.33	13.50	Pinelands South	100%	100%
Franklin Township	6804	40	296 S BLUE BELL RD	18.73	17.03	Pinelands South	100%	66%
Franklin Township	6804	7	WEYMOUTH RD	26.35	13.52	Pinelands South	100%	99%
Franklin Township	6805	1	655 HARDING HWY	27.02	26.83	Pinelands South	100%	52%
Franklin Township	6805	25	WEYMOUTH RD	14.78	15.48	Pinelands South	100%	95%
Franklin Township	6805	27	WEYMOUTH RD (BACK)	9.54	9.54	Pinelands South	100%	100%
Franklin Township	6805	28	WEYMOUTH RD (BACK)	23.83	34.83	Pinelands South	100%	72%
Franklin Township	6805	29	WEYMOUTH RD	17.74	17.97	Pinelands South	100%	100%
Franklin Township	6805	30	1659 WEYMOUTH RD	29.64	29.64	Pinelands South	100%	97%
Franklin Township	6805	35	S BLUE BELL RD	18.4	20.36	Pinelands South	100%	84%
Franklin Township	7001	28	1037 WEYMOUTH RD	8.41	10.39	Pinelands South	100%	73%
Franklin Township	7001	30	WEYMOUTH RD	20.7	20.80	Pinelands South	100%	84%
Franklin Township	7002	10	1584 CATAWBA AVE	17.99	18.84	Pinelands South	98%	97%
Franklin Township	7002	11.01	1626 CATAWBA AVE	3	21.78	Pinelands South	100%	91%
Franklin Township	7002	25.01	WEYMOUTH RD	16.53	16.81	Pinelands South	100%	55%
Franklin Township	7002	30.02	WEYMOUTH RD	12.08	14.94	Pinelands South	100%	58%
Franklin Township	7003	3	1350 WEYMOUTH RD	20.07	21.53	Pinelands South	100%	66%
Franklin Township	7003	30	538 MAIN RD	6.76	7.77	Pinelands South	100%	70%
Franklin Township	7004	10.02	WEYMOUTH RD	10.35	10.31	Pinelands South	100%	93%
Franklin Township	7004	24	WEYMOUTH RD	12.58	12.61	Pinelands South	100%	93%
Franklin Township	7004	25	1000 WEYMOUTH RD	15.22	15.22	Pinelands South	100%	63%
Franklin Township	7004	36	573 MAIN RD	16.8	17.87	Pinelands South	100%	71%
Franklin Township	7004	41.01	1069 STRAWBERRY AVE	8.25	10.03	Pinelands South	100%	75%
Franklin Township	7004	41	1083 STRAWBERRY AVE	10.93	10.93	Pinelands South	100%	62%
Franklin Township	7004	65.01	795 STRAWBERRY AVE	5.95	8.44	Pinelands South	100%	60%
Franklin Township	7004	65	783 STRAWBERRY AVE	13.32	13.26	Pinelands South	100%	86%
Franklin Township	7004	9	664 WEYMOUTH RD	5.18	5.68	Pinelands South	100%	81%
Franklin Township	7101	28.01	HARDING HWY	24.29	24.29	Pinelands South	100%	88%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Franklin Township	7101	31	886 HARDING HWY	9.45	10.43	Pinelands South	100%	93%
Franklin Township	7101	35	964 HARDING HWY	55.28	55.28	Pinelands South	100%	56%
Franklin Township	7101	50	HARDING HWY	12.35	12.37	Pinelands South	100%	78%
Franklin Township	7101	59	MAIN RD (BACK)	3.44	3.43	Pinelands South	100%	100%
Franklin Township	7101	60	MAIN RD (BACK)	8.56	8.56	Pinelands South	100%	100%
Franklin Township	7101	62	644 FABRIZIO LN	9.19	10.33	Pinelands South	100%	88%
Franklin Township	7101	64	FABRIZIO LN	49.95	49.61	Pinelands South	100%	55%
Franklin Township	7101	66	1748 MAIN RD	12.81	13.99	Pinelands South	100%	85%
Franklin Township	7101	67	1796 MAIN RD	8.42	10.40	Pinelands South	100%	84%
Franklin Township	7101	68.01	MAIN RD	10	10.21	Pinelands South	100%	100%
Franklin Township	7101	68.02	MAIN RD	10	9.51	Pinelands South	100%	87%
Franklin Township	7101	68	1844 MAIN RD	5.82	6.81	Pinelands South	100%	81%
Franklin Township	7101	8	1259 TUCKAHOE RD	101.04	103.11	Pinelands South	100%	44%
Franklin Township	7102	7	1268 MAIN RD	41.31	22.55	Pinelands South	100%	92%
Franklin Township	7202	1.03	5632 LAKE RD	4.45	4.46	Pinelands South	100%	99%
Franklin Township	7202	1.04	5624 LAKE RD	1.72	1.74	Pinelands South	100%	100%
Franklin Township	7202	1	1899 MAIN RD	8.49	9.72	Pinelands South	100%	86%
Franklin Township	7202	10	1444 HARDING HWY	13.11	13.09	Pinelands South	100%	82%
Franklin Township	7202	35	LAKE RD	27.66	27.66	Pinelands South	100%	97%
Franklin Township	7202	36	5538 LAKE RD	14.86	15.86	Pinelands South	100%	59%
Franklin Township	7202	7	MAIN RD	16.28	16.25	Pinelands South	100%	67%
Franklin Township	7203	15	1625 HARDING HWY	5.38	6.64	Pinelands South	100%	78%
Franklin Township	7203	2	490 MADISON AVE	7.04	11.02	Pinelands South	100%	58%
Franklin Township	7203	22	MAIN RD	6.1	6.10	Pinelands South	100%	97%
Franklin Township	7203	23	1299 MAIN RD	32.02	32.92	Pinelands South	100%	82%
Franklin Township	7203	37	CATAWBA AVE	19.11	18.67	Pinelands South	100%	95%
Franklin Township	7203	38	CATAWBA AVE	0.62	0.49	Pinelands South	100%	95%
Franklin Township	1902	1	1457 FRIES MILL RD	256.06	256.06	Still Run	100%	97%
Franklin Township	1903	1	FRIES MILL RD	21.13	21.13	Still Run	100%	75%
Franklin Township	2302	30	DELSEA DR	46.03	46.03	Still Run	100%	89%
Franklin Township	2401	1	S BROAD ST	12.26	12.25	Still Run	97%	51%
Franklin Township	2404	10	SWEDESBORO RD	13.62	13.38	Still Run	100%	99%
Franklin Township	2404	11	856 SWEDESBORO RD	45.24	47.15	Still Run	99%	58%
Franklin Township	2404	12	SWEDESBORO RD	4.43	4.43	Still Run	100%	97%
Franklin Township	2404	17	1018 SWEDESBORO RD	10.6	11.58	Still Run	100%	78%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Franklin Township	2404	18	ARBUTUS AVE	28.96	28.90	Still Run	89%	64%
Franklin Township	2601	3	SWEDESBORO RD	8.21	8.21	Still Run	100%	97%
Franklin Township	2601	38	1907 MONROEVILLE RD	17.83	18.83	Still Run	100%	60%
Franklin Township	2601	9	SWEDESBORO RD	29.89	8.40	Still Run	100%	91%
Franklin Township	2701	20.01	MONROEVILLE RD	2.21	2.21	Still Run	100%	100%
Franklin Township	2702	19	1378 MONROEVILLE RD	65.16	66.03	Still Run	100%	57%
Franklin Township	2702	2	1193 WILLOW GROVE RD	13.6	15.57	Still Run	100%	82%
Franklin Township	2702	27	1512 MONROEVILLE RD	15.04	15.04	Still Run	100%	100%
Franklin Township	2702	4	1115 WILLOW GROVE RD	56.5	57.70	Still Run	100%	98%
Franklin Township	2703	16	556 GARRISON RD	12.29	13.76	Still Run	100%	62%
Franklin Township	2703	40	587 WILLOW GROVE RD	35.58	36.51	Still Run	100%	76%
Franklin Township	2704	1	GARRISON RD	1.54	1.54	Still Run	100%	100%
Franklin Township	2801	38	ROYAL AVE	66.97	66.97	Still Run	79%	57%
Franklin Township	2801	50.01	WILLOW GROVE RD	21.63	21.53	Still Run	100%	98%
Franklin Township	2801	51	WILLOW GROVE RD	42.39	42.53	Still Run	89%	98%
Franklin Township	2801	52	WILLOW GROVE RD	38.32	38.32	Still Run	98%	99%
Franklin Township	3101	1	225 TAYLOR RD	59.58	60.06	Still Run	100%	64%
Franklin Township	3101	31	TAYLOR RD	32.61	32.66	Still Run	100%	66%
Franklin Township	3103	1	115 WILLOW GROVE RD	0.9	0.93	Still Run	100%	100%
Franklin Township	3103	2	WILLOW GROVE RD	1.33	1.33	Still Run	100%	100%
Franklin Township	3103	3	WILLOW GROVE RD	1.34	1.84	Still Run	100%	87%
Glassboro Borough	195	1	AURA RD	7.291	7.29	Still Run	71%	75%
Glassboro Borough	195	2	ELLIS STREET	6.53	6.59	Still Run	95%	87%
Glassboro Borough	197.04	143	GLASSBORO FERRELL	29.64	29.94	Still Run	92%	76%
Greenwich Township	222	1	SWEDESBORO RD	12.86	12.85	Delaware River	100%	64%
Greenwich Township	242	4.01	411 DEMOCRAT RD	16.05	17.10	Delaware River	100%	57%
Greenwich Township	244	1	415 DEMOCRAT RD	16.37	3.34	Delaware River	100%	100%
Greenwich Township	256	1	SWEDESBORO RD	37.27	36.64	Delaware River	52%	51%
Greenwich Township	259	1.01	DEMOCRAT RD	36.83	28.12	Delaware River	94%	74%
Greenwich Township	260	1	SWEDESBORO RD	43.28	43.26	Delaware River	90%	56%
Greenwich Township	260	3	SWEDESBORO AVE	22.8	22.77	Delaware River	100%	100%
Greenwich Township	263	7	554 TOMLIN STATION RD	22.54	23.49	Delaware River	80%	79%
Greenwich Township	264	2	TOMLIN STATION RD	44.3	44.30	Delaware River	95%	78%
Greenwich Township	265	1	TOMLIN STATION RD	17.84	17.80	Delaware River	82%	86%
Harrison Township	10.02	3.07	106 LAUREL CT	8.36	10.06	Raccoon Creek	100%	76%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Harrison Township	10	12	549 CLEMS RUN	7.38	7.38	Raccoon Creek	100%	86%
Harrison Township	10	2	167 EWAN RD	17.41	18.32	Raccoon Creek	100%	66%
Harrison Township	10	21	EWAN RD	12.97	15.08	Raccoon Creek	100%	52%
Harrison Township	15	5	203 EWAN RD	8.57	9.87	Raccoon Creek	100%	64%
Harrison Township	17	1.01	HARRISONVILLE RD	134.3	139.75	Raccoon Creek	73%	60%
Harrison Township	17	2	51 NUTT LN	18.5	20.14	Raccoon Creek	85%	82%
Harrison Township	17	4	252 RICHWOOD RD	23.42	23.42	Raccoon Creek	100%	99%
Harrison Township	17	6	RICHWOOD RD	21.44	21.44	Raccoon Creek	96%	99%
Harrison Township	17	7.01	126 EWAN RD	19.58	19.53	Raccoon Creek	84%	87%
Harrison Township	19	1.09	401 BISHOP RD	1.03	1.03	Raccoon Creek	100%	90%
Harrison Township	19	1	HARRISONVILLE RD	4.587	4.52	Raccoon Creek	100%	100%
Harrison Township	19	2.01	155 HARRISONVILLE RD	2	2.00	Raccoon Creek	100%	100%
Harrison Township	19	2	169 HARRISONVILLE RD	81.89	49.72	Raccoon Creek	100%	95%
Harrison Township	19	3	158 RICHWOOD RD	44.83	44.83	Raccoon Creek	100%	91%
Harrison Township	28	3	HEILIG RD	2.58	2.27	Raccoon Creek	100%	100%
Harrison Township	29.16	3	207/205 HEILIG RD	29.55	30.09	Raccoon Creek	100%	97%
Harrison Township	29.16	4	BARNSBORO RD	11.28	11.07	Raccoon Creek	100%	100%
Harrison Township	29.17	6	MULLICA HILL RD	38.51	38.82	Raccoon Creek	100%	96%
Harrison Township	29.17	9.06	451 MULLICA HILL RD	1.48	1.48	Raccoon Creek	100%	76%
Harrison Township	3	32	223 WILLIAMSON LN	45.96	45.96	Raccoon Creek	96%	97%
Harrison Township	3	33	213 RICHWOOD RD	29.11	30.11	Raccoon Creek	94%	97%
Harrison Township	3	5.01	WILLIAMSON LN	9.49	9.49	Raccoon Creek	100%	90%
Harrison Township	3	5.02	WILLIAMSON LN	9.264	9.59	Raccoon Creek	100%	100%
Harrison Township	31.06	11.04	452 MULLICA HILL RD	1.04	1.04	Raccoon Creek	100%	98%
Harrison Township	31.06	11	480 MULLICA HILL RD	46	49.00	Raccoon Creek	97%	92%
Harrison Township	31	1.19	BISHOP RD (BACK)	5.1	5.10	Raccoon Creek	100%	94%
Harrison Township	31	1	235 BISHOP RD	10.19	14.19	Raccoon Creek	97%	57%
Harrison Township	33.01	5.04	GRIFFIN RD	1	1.00	Raccoon Creek	100%	100%
Harrison Township	33.01	5.05	GRIFFIN RD	1	1.00	Raccoon Creek	100%	100%
Harrison Township	33.01	5	CLEMS RUN	12.23	12.23	Raccoon Creek	100%	100%
Harrison Township	33	1	CLEMS RUN	67.88	68.02	Raccoon Creek	88%	98%
Harrison Township	33	10.03	CLEMS RUN	6.45	8.45	Raccoon Creek	99%	68%
Harrison Township	33	10	253 CLEMS RUN	7.04	7.04	Raccoon Creek	95%	73%
Harrison Township	33	2	368 MULLICA HILL RD	28.35	28.05	Raccoon Creek	95%	88%
Harrison Township	33	4	BISHOP RD	30.87	30.87	Raccoon Creek	68%	81%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Harrison Township	33	5	CLEMS RUN	23.19	23.19	Raccoon Creek	100%	96%
Harrison Township	34	2	WALTERS RD	16.53	16.53	Raccoon Creek	100%	92%
Harrison Township	34	43	237 MULLICA HILL RD	19.06	19.06	Raccoon Creek	100%	93%
Harrison Township	36	2.02	JEFFERSON RD	0	4.99	Raccoon Creek	100%	100%
Harrison Township	41.01	1	243 N MAIN ST	10.02	10.02	Raccoon Creek	68%	87%
Harrison Township	44	2	WOLFERT STATION RD	43.48	43.67	Raccoon Creek	85%	91%
Harrison Township	45.01	3	UNION RD	9.25	9.25	Raccoon Creek	100%	99%
Harrison Township	45.29	8	WOLFERT STATION RD (BACK)	14.04	14.04	Raccoon Creek	78%	58%
Harrison Township	45	11	351 WOLFERT STATION RD	95.61	95.66	Raccoon Creek	99%	96%
Harrison Township	45	16	140 SWEDESBORO RD	61.77	62.77	Raccoon Creek	99%	87%
Harrison Township	5	1	347 RICHWOOD RD	11.16	12.19	Raccoon Creek	100%	89%
Harrison Township	5	10	AURA RD	78.01	78.08	Raccoon Creek	82%	82%
Harrison Township	5	11	AURA RD	29.16	29.14	Raccoon Creek	81%	87%
Harrison Township	5	13	317 RICHWOOD RD	40.04	42.36	Raccoon Creek	65%	57%
Harrison Township	5	7	RICHWOOD RD	20.36	20.36	Raccoon Creek	99%	98%
Harrison Township	5	8	WILLIAMSON LN	34.257	34.26	Raccoon Creek	58%	82%
Harrison Township	50	2.01	219 WOODLAND AVE	17.33	18.33	Raccoon Creek	83%	60%
Harrison Township	50	2.02	161 WOODLAND AVE	24.17	26.77	Raccoon Creek	60%	55%
Harrison Township	50	3.01	HIGH ST	12.08	12.08	Raccoon Creek	56%	59%
Harrison Township	56	11	211 COMMISSIONERS RD	18.16	19.46	Raccoon Creek	100%	77%
Harrison Township	56	4.01	216 BRIDGETON PK	10.49	10.49	Raccoon Creek	100%	100%
Harrison Township	56	4.02	208 BRIDGETON PK	18.61	18.61	Raccoon Creek	100%	88%
Harrison Township	56	4.03	220 BRIDGETON PK	8.05	10.35	Raccoon Creek	90%	66%
Harrison Township	57	15	221 BRIDGETON PK	105.68	106.73	Raccoon Creek	67%	76%
Harrison Township	6	5	ELLIS MILL RD	46.54	46.54	Raccoon Creek	100%	86%
Harrison Township	6	6.01	1222 ELLIS MILL RD	9.87	9.87	Raccoon Creek	94%	52%
Harrison Township	8	1	CLEMS RUN	7.95	7.95	Raccoon Creek	100%	64%
Logan Township	1003	10	OAK GROVE RD	98.03	93.40	Delaware River	91%	58%
Logan Township	1003	13	OAK GROVE RD	8.9	8.89	Delaware River	100%	78%
Logan Township	1003	7	JENNIE LN	38.55	38.37	Delaware River	100%	97%
Logan Township	1004	1	OAK GROVE RD	9.55	9.21	Delaware River	83%	72%
Logan Township	1101	1	OAK GROVE	13.21	13.22	Delaware River	100%	85%
Logan Township	502	6	FLOODGATE RD	69.55	69.55	Delaware River	97%	51%
Logan Township	604	17	REPAUPO STATION RD	34.86	37.86	Delaware River	100%	84%
Logan Township	701	12	PAULSBORO RD	43.75	42.12	Delaware River	100%	78%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Logan Township	701	19	PAULSBORO RD	11.43	12.43	Delaware River	100%	62%
Logan Township	701	20	PAULSBORO RD	44.1	45.17	Delaware River	100%	57%
Logan Township	701	3	REPAUPO STATION RD	19.28	19.78	Delaware River	100%	74%
Logan Township	702	10	ASBURY STATION RD	60	60.64	Delaware River	73%	63%
Logan Township	702	11	501 ASBURY STATION RD	53.97	53.45	Delaware River	63%	51%
Logan Township	703	12	ASBURY STATION RD	1.03	1.03	Delaware River	100%	100%
Logan Township	703	13	ASBURY STATION RD	1.04	1.04	Delaware River	100%	98%
Logan Township	703	15	PAULSBORO RD	21.87	22.85	Delaware River	100%	91%
Logan Township	703	5	ASBURY STATION RD	44.54	45.54	Delaware River	100%	55%
Logan Township	703	9	560 ASBURY STATION RD	11.31	13.31	Delaware River	100%	66%
Logan Township	801	31	602 PAULSBORO RD	108.86	110.18	Delaware River	100%	56%
Mantua Township	248	2.06	BETHEL MILL RD	15.16	15.16	Bethel Mill	67%	63%
Mantua Township	1	4	WOLFERT STATION RD	4.52	4.37	Repaupo-Mantua Creek	100%	76%
Mantua Township	254	5.01	MAIN ST	8.89	9.89	Repaupo-Mantua Creek	100%	62%
Mantua Township	256	5.02	GOLF CLUB RD	9	10.41	Repaupo-Mantua Creek	100%	71%
Mantua Township	259.01	3	131 HEILIG RD	3	3.00	Repaupo-Mantua Creek	100%	100%
Mantua Township	259.01	4	141 HEILIG RD	3	3.01	Repaupo-Mantua Creek	100%	100%
Mantua Township	259.01	5	HEILIG RD	9.66	9.85	Repaupo-Mantua Creek	100%	100%
Mantua Township	259.01	6	HEILIG RD	1.75	2.04	Repaupo-Mantua Creek	100%	98%
Mantua Township	260	15.01	BARNSBORO RD	7.14	9.14	Repaupo-Mantua Creek	100%	55%
Mantua Township	260	16	BARNSBORO RD	16.87	17.55	Repaupo-Mantua Creek	100%	97%
Mantua Township	260	4.01	PITMAN RD	11.21	12.71	Repaupo-Mantua Creek	100%	90%
Mantua Township	260	4	PITMAN RD	34.62	32.49	Repaupo-Mantua Creek	99%	97%
Mantua Township	261.01	14	MULLICA HILL RD	4.07	4.07	Repaupo-Mantua Creek	100%	100%
Mantua Township	261.01	15.02	LAMBS RD	0.95	0.91	Repaupo-Mantua Creek	100%	96%
Mantua Township	261.01	16.04	LAMBS RD	8.02	8.01	Repaupo-Mantua Creek	100%	98%
Mantua Township	263	3.01	BREAKNECK RD	17.75	16.61	Repaupo-Mantua Creek	87%	65%
Mantua Township	263	3	BREAKNECK RD	7.5	9.48	Repaupo-Mantua Creek	100%	71%
Mantua Township	264	3	769 JACKSON RD	0.195	0.21	Repaupo-Mantua Creek	100%	100%
Mantua Township	265	1	JACKSON & JEFFERSON RD	94.24	98.34	Repaupo-Mantua Creek	77%	64%
Mantua Township	265	2.01	JEFFERSON RD	63.05	63.05	Repaupo-Mantua Creek	97%	92%
Mantua Township	265	3.03	JEFFERSON RD	3.5	3.50	Repaupo-Mantua Creek	100%	97%
Mantua Township	272	1.04	745 BRIDGETON PIKE	24.91	25.32	Repaupo-Mantua Creek	75%	74%
Mantua Township	272	17	BRIDGETON PK	16.73	16.73	Repaupo-Mantua Creek	100%	100%
Mantua Township	273	22	BRIDGETON PK	60.46	62.32	Repaupo-Mantua Creek	79%	83%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Mantua Township	273	25	BRIDGETON PK	34.65	34.65	Repaupo-Mantua Creek	86%	88%
Mantua Township	273	26.01	885 BRIDGETON PIKE	16.29	19.58	Repaupo-Mantua Creek	100%	80%
Mantua Township	273	26.02	BRIDGETON PK	25.89	25.89	Repaupo-Mantua Creek	93%	65%
Mantua Township	274	7.02	BREAKNECK RD	9.74	10.98	Repaupo-Mantua Creek	84%	56%
Mantua Township	276	20	JEFFERSON RD	24.93	25.93	Repaupo-Mantua Creek	100%	78%
Mantua Township	3	1	CEDAR RD	5.38	5.21	Repaupo-Mantua Creek	100%	100%
Mantua Township	4	1	COHAWKIN RD	7.57	8.55	Repaupo-Mantua Creek	95%	81%
Mantua Township	4	13	BRIDGETON PK	35.74	35.96	Repaupo-Mantua Creek	75%	75%
Mantua Township	4	15	HERITAGE RD	18.35	18.25	Repaupo-Mantua Creek	100%	84%
Mantua Township	4	17.01	COHAWKIN RD	8.57	9.82	Repaupo-Mantua Creek	100%	79%
Mantua Township	4	17	COHAWKIN RD	6	7.00	Repaupo-Mantua Creek	100%	72%
Mantua Township	4	19.01	COHAWKIN RD	1.15	1.15	Repaupo-Mantua Creek	100%	100%
Mantua Township	4	26	HERITAGE RD	16.18	17.18	Repaupo-Mantua Creek	95%	55%
Mantua Township	4	4	BRIDGETON PK	41.41	41.23	Repaupo-Mantua Creek	95%	82%
Mantua Township	4	7.01	COHAWKIN RD	14.98	16.06	Repaupo-Mantua Creek	100%	93%
Mantua Township	5	1	HERITAGE RD	3.3	3.31	Repaupo-Mantua Creek	100%	100%
Mantua Township	5	10.03	780 HERITAGE RD	8.8	9.80	Repaupo-Mantua Creek	98%	59%
Mantua Township	5	16	BRIDGETON PK	30.84	32.00	Repaupo-Mantua Creek	100%	96%
Mantua Township	5	3	HERITAGE RD	52.75	53.61	Repaupo-Mantua Creek	61%	55%
Mantua Township	5	4	BOODY MILL RD	27.68	28.72	Repaupo-Mantua Creek	100%	85%
Monroe Township	2501	8	NEW BROOKLYN RD	13.17	15.70	New Brooklyn	100%	89%
Monroe Township	10301	2	BLUE BELL RD	14.13	14.74	Pinelands North	100%	87%
Monroe Township	10501	1	1601 BLUE BELL RD	102.7	101.02	Pinelands North	100%	33%
Monroe Township	10801	18.01	AMES RD	57.43	57.43	Pinelands North	97%	53%
Monroe Township	10801	18.02	AMES RD	7	9.98	Pinelands North	100%	62%
Monroe Township	10801	18.03	AMES RD	8.17	10.42	Pinelands North	100%	78%
Monroe Township	10801	18.04	SYKESVILLE RD	7.7	9.71	Pinelands North	100%	54%
Monroe Township	10801	24	AMES RD	33.15	34.65	Pinelands North	100%	70%
Monroe Township	10901	1	BLUE BELL RD	4.2	4.08	Pinelands North	100%	97%
Monroe Township	10901	13	AMES RD	73.47	74.67	Pinelands North	100%	97%
Monroe Township	10901	17	BLUE BELL RD	34.78	35.80	Pinelands North	98%	72%
Monroe Township	10901	25	AMES RD	7.38	8.42	Pinelands North	100%	94%
Monroe Township	10901	32	AMES RD	8.16	8.20	Pinelands North	100%	93%
Monroe Township	12601	101.02	S TUCAKHOE RD	3.21	3.89	Pinelands North	100%	98%
Monroe Township	12601	97	148 S TUCKAHOE RD	12.39	7.94	Pinelands North	100%	92%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Monroe Township	12601	99	S TUCKAHOE RD	2.58	2.47	Pinelands North	100%	100%
Monroe Township	12701	18	CLAYTON RD	6.18	6.14	Pinelands North	100%	88%
Monroe Township	12701	19	1387 FRANKLINVILLE-WMSTWN	17.65	19.35	Pinelands North	100%	97%
Monroe Township	12801	10	CLAYTON RD	25	26.17	Pinelands North	100%	93%
Monroe Township	6101	23	E PINEY HOLLOW RD	84.32	52.46	Pinelands South	99%	72%
Monroe Township	6101	8	BLACK HORSE PK	12.18	12.18	Pinelands South	55%	92%
Monroe Township	6401	21	BLACK HORSE PK	6.64	9.22	Pinelands South	58%	56%
Monroe Township	6901	10	PINEY HOLLOW RD	24.86	27.03	Pinelands South	99%	82%
Monroe Township	8101	17	JACKSON RD	3.36	3.34	Pinelands South	100%	99%
Monroe Township	8101	18	JACKSON RD	3.64	3.61	Pinelands South	100%	100%
Monroe Township	8101	19	JACKSON RD	7.38	7.68	Pinelands South	100%	92%
Monroe Township	8101	42	COLES MILL RD	8.05	10.48	Pinelands South	88%	82%
Monroe Township	8101	44	COLES MILL RD	6.66	7.88	Pinelands South	100%	65%
Monroe Township	8101	61	WHITEHALL RD	7.5	7.22	Pinelands South	100%	98%
Monroe Township	8101	62	WHITEHALL RD	7.37	7.34	Pinelands South	100%	97%
Monroe Township	8101	67	WHITEHALL RD	1.71	1.80	Pinelands South	100%	100%
Monroe Township	8101	68	WHITEHALL RD	3.64	3.59	Pinelands South	100%	100%
Monroe Township	8101	74	WHITEHALL RD	11.11	3.70	Pinelands South	100%	99%
Monroe Township	14801	42	1640 PITMAN DOWNER RD	21.37	21.87	Pitman Downer	100%	97%
Monroe Township	14901	10	PITMAN DOWNER RD	5.91	6.90	Pitman Downer	100%	88%
Monroe Township	14901	44	PITMAN DOWNER RD	5.83	5.85	Pitman Downer	100%	86%
Monroe Township	14901	45	PITMAN DOWNER RD	5.9	5.81	Pitman Downer	100%	90%
Monroe Township	14901	8	PITMAN DOWNER RD	2.04	1.94	Pitman Downer	100%	87%
Newfield Borough	402	1	MADISON AVE & FAWN DR	31.69	32.69	Pinelands South	100%	71%
Newfield Borough	700	24	504 CATAWBA AVE	17.68	18.68	Pinelands South	95%	72%
South Harrison Township	1	1.01	FRANKLINVILLE RD	1	1.00	Raccoon Creek	100%	100%
South Harrison Township	13	5.02	LINCOLN MILL RD	5.73	5.72	Raccoon Creek	100%	99%
South Harrison Township	13	5	385 LINCOLN MILL RD	22.87	23.67	Raccoon Creek	100%	84%
South Harrison Township	14	10	147 CEDAR GROVE RD	8.34	9.84	Raccoon Creek	100%	68%
South Harrison Township	14	12	374 LINCOLN MILL RD	8.29	9.92	Raccoon Creek	100%	71%
South Harrison Township	14	16	824 MONROEVILLE RD	8.69	8.13	Raccoon Creek	100%	72%
South Harrison Township	14	20	181 CEDAR GROVE RD	8.02	8.78	Raccoon Creek	100%	90%
South Harrison Township	14	24	163 CEDAR GROVE RD	7.85	8.97	Raccoon Creek	100%	81%
South Harrison Township	14	30.01	364 LINCOLN MILL RD	24.76	26.84	Raccoon Creek	100%	68%
South Harrison Township	14	30.05	LINCOLN MILL RD	9.81	11.81	Raccoon Creek	100%	58%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
South Harrison Township	14	31	125 CEDAR GROVE RD	28.7	30.64	Raccoon Creek	100%	81%
South Harrison Township	14	32	LINCOLN MILL RD	8.19	10.18	Raccoon Creek	100%	62%
South Harrison Township	14	6.02	1555 COMMISSIONERS RD	6.89	9.04	Raccoon Creek	100%	70%
South Harrison Township	14	6	1525 COMMISSIONERS RD	7.98	11.83	Raccoon Creek	100%	66%
South Harrison Township	15	12	FRANKLINVILLE RD	177.48	143.10	Raccoon Creek	86%	49%
South Harrison Township	15	17	422 FERRELL RD	14.14	15.12	Raccoon Creek	100%	50%
South Harrison Township	15	26	372 FERRELL RD	9.03	9.20	Raccoon Creek	100%	92%
South Harrison Township	17	7	70 VESTRY RD	6.01	5.89	Raccoon Creek	81%	88%
South Harrison Township	17	8	32 VESTRY RD	46.81	36.71	Raccoon Creek	100%	95%
South Harrison Township	18	1.03	45 VESTRY RD	37.89	41.71	Raccoon Creek	94%	96%
South Harrison Township	18	3.01	107 VESTRY RD	15.32	17.79	Raccoon Creek	80%	62%
South Harrison Township	20	2	642 HARRISONVILLE RD	127.83	124.68	Raccoon Creek	100%	93%
South Harrison Township	20	3.03	NJSH RTE 45	32.17	32.11	Raccoon Creek	81%	92%
South Harrison Township	20	3	1564 NJSH RTE 45	7.42	7.37	Raccoon Creek	100%	97%
South Harrison Township	20	4	948 MULLICA HILL RD	27.67	27.62	Raccoon Creek	100%	97%
South Harrison Township	20	5	918 MULLICA HILL RD	4.55	4.55	Raccoon Creek	100%	99%
South Harrison Township	20	7	RTE 668	20.08	20.04	Raccoon Creek	100%	99%
South Harrison Township	23	4.01	213 FERRELL RD	1.481	1.48	Raccoon Creek	79%	95%
South Harrison Township	23	4.02	217 FERRELL RD	1.563	1.56	Raccoon Creek	100%	90%
South Harrison Township	23	4.03	221 FERRELL RD	1.558	1.56	Raccoon Creek	95%	94%
South Harrison Township	24	16.01	FERRELL RD	7.43	8.94	Raccoon Creek	100%	79%
South Harrison Township	24	73	RTE 694	10.55	10.35	Raccoon Creek	100%	57%
South Harrison Township	28	11	RTE 668	46.6	42.94	Raccoon Creek	100%	84%
South Harrison Township	28	2	750 ELDRIDGES HILL RD	9.83	9.68	Raccoon Creek	100%	97%
South Harrison Township	28	9	NJSH RTE 45	39.23	38.95	Raccoon Creek	98%	63%
South Harrison Township	29	4	747 ELDRIDGES HILL RD	33.8	36.52	Raccoon Creek	72%	64%
South Harrison Township	3	15	714 FRANKLINVILLE RD	7.12	9.82	Raccoon Creek	98%	75%
South Harrison Township	3	29	1818 NJSH RTE 45	6.86	9.70	Raccoon Creek	100%	73%
South Harrison Township	31	8	1 FERRELL RD	19.04	19.93	Raccoon Creek	92%	86%
South Harrison Township	32	3.01	LINCOLN MILL RD	15.61	15.63	Raccoon Creek	100%	59%
South Harrison Township	32	3.02	82 LINCOLN MILL RD	15.65	15.59	Raccoon Creek	100%	63%
South Harrison Township	32	3	LINCOLN MILL RD	15.6	15.65	Raccoon Creek	71%	70%
South Harrison Township	32	4	LINCOLN MILL RD	29.68	29.47	Raccoon Creek	100%	78%
South Harrison Township	4	14	507 FISLERVILLE RD	7.29	8.92	Raccoon Creek	100%	76%
South Harrison Township	5	14	406 MONROEVILLE RD	57.74	59.00	Raccoon Creek	69%	47%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
South Harrison Township	5	2	465 FRANKLINVILLE RD	5.54	7.04	Raccoon Creek	100%	78%
South Harrison Township	5	27	FRANKLINVILLE RD	5.74	5.50	Raccoon Creek	100%	100%
South Harrison Township	5	8.02	TOMLIN STATION RD	10.094	10.11	Raccoon Creek	100%	94%
South Harrison Township	5	9	NJSH RTE 45	15.26	14.56	Raccoon Creek	100%	74%
South Harrison Township	6	4.01	NJSH RTE 45	16.58	16.78	Raccoon Creek	54%	81%
South Harrison Township	6	6	NJSH RTE 45	17.69	17.49	Raccoon Creek	100%	78%
South Harrison Township	7	1.01	452 LINCOLN MILL RD	5.41	6.64	Raccoon Creek	93%	83%
South Harrison Township	7	1	609 FRANKLINVILLE RD	83.07	85.59	Raccoon Creek	77%	84%
South Harrison Township	7	16.01	29 FRANKLINVILLE RD	19.03	19.22	Raccoon Creek	99%	91%
South Harrison Township	8	6	422 FISLERVILLE RD	7.95	8.93	Raccoon Creek	100%	87%
South Harrison Township	8	7	FISLERVILLE RD	38.21	38.16	Raccoon Creek	100%	98%
South Harrison Township	9	4	574 HARRISONVILLE RD	83.3	84.37	Raccoon Creek	91%	90%
South Harrison Township	9	5	MONROEVILLE RD	65.73	67.87	Raccoon Creek	76%	96%
South Harrison Township	9	6	NJSH RTE 45	52.64	54.15	Raccoon Creek	82%	51%
South Harrison Township	9	7	1543 NJSH RTE 45	10.2	11.23	Raccoon Creek	100%	99%
South Harrison Township	9	8	550 HARRISONVILLE RD	40.77	42.49	Raccoon Creek	73%	94%
Washington Township	82.21	29.05	246 CHAPEL HEIGHTS RD	0.8	0.79	Chapel Heights	100%	100%
Washington Township	20.01	2	421 SALINA RD	53.71	54.71	Mantua Creek	74%	63%
Washington Township	198	11	455 HURFFVILLE GRENLOCH	7.01	9.01	Washington North	71%	70%
Washington Township	198	12.08	453 HURFFVILLE GRENLOCH	1.59	1.59	Washington North	88%	100%
West Deptford Township	326	5	TILDEN RD	23.96	24.02	Repaupo-Mantua Creek	81%	63%
West Deptford Township	352	3	OFF JESSUP RD	22.81	24.51	Repaupo-Mantua Creek	82%	68%
West Deptford Township	353	1	KINGS HWY	10.33	10.22	Repaupo-Mantua Creek	100%	53%
West Deptford Township	353	2.02	KINGS HWY	12.48	13.29	Repaupo-Mantua Creek	100%	63%
West Deptford Township	353	2.04	KINGS HWY	5.92	5.92	Repaupo-Mantua Creek	100%	80%
West Deptford Township	354	2	JESSUP RD	6.15	4.64	Repaupo-Mantua Creek	100%	100%
West Deptford Township	374	2.08	OGDEN STATION RD	15.29	15.22	Repaupo-Mantua Creek	100%	59%
West Deptford Township	374	3.22	OGDEN STATION RD	4.97	5.04	Repaupo-Mantua Creek	100%	77%
Woolwich Township	1	11	1958 OLDMANS CREEK RD	10.52	10.50	Oldmans Creek	100%	74%
Woolwich Township	1	2	2250 OLDMANS CREEK RD	77.7	78.70	Oldmans Creek	94%	66%
Woolwich Township	1	5.01	OLDMANS CREEK RD	28.02	28.02	Oldmans Creek	72%	67%
Woolwich Township	1	6	2040 OLDMANS CREEK RD	196.9	207.62	Oldmans Creek	79%	27%
Woolwich Township	1	8	1998 OLDMANS CREEK RD	128.56	130.73	Oldmans Creek	86%	70%
Woolwich Township	11	1	341 STONE MEETING HOUSE R	34.46	34.24	Oldmans Creek	100%	99%
Woolwich Township	13	3	489 STONE MEETING HOUSE R	14.23	17.23	Oldmans Creek	100%	96%

				Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Woolwich Township	13	4	527 STONE MEETING HOUSE R	15.26	17.38	Oldmans Creek	100%	96%
Woolwich Township	13	5	386 PAULSBORO RD	8.26	8.95	Oldmans Creek	100%	85%
Woolwich Township	14	13	423 PAULSBORO RD	78.9	78.90	Oldmans Creek	87%	64%
Woolwich Township	14	28	140 MILL RD	11.46	12.47	Oldmans Creek	82%	65%
Woolwich Township	14	5.03	403 PAULSBORO RD	4.37	4.29	Oldmans Creek	100%	96%
Woolwich Township	14	5	369 PAULSBORO RD	6.44	6.44	Oldmans Creek	100%	96%
Woolwich Township	14	6.01	429 PAULSBORO RD	5.02	4.99	Oldmans Creek	100%	95%
Woolwich Township	14	6.02	421 PAULSBORO RD	15.43	15.43	Oldmans Creek	100%	92%
Woolwich Township	14	9	451 PAULSBORO RD	6.55	7.55	Oldmans Creek	100%	95%
Woolwich Township	19	1	191 MILL RD	25.86	27.37	Oldmans Creek	79%	80%
Woolwich Township	19	4	139 MILL RD	33.63	31.13	Oldmans Creek	84%	52%
Woolwich Township	2	10	1355 AUBURN RD	77.64	77.64	Oldmans Creek	98%	71%
Woolwich Township	2	11	1911 OLDMANS CREEK RD	11.27	11.27	Oldmans Creek	100%	99%
Woolwich Township	2	12	1991 OLDMANS CREEK RD	95.35	92.62	Oldmans Creek	82%	73%
Woolwich Township	2	13	2063 OLDMANS CREEK RD	82.9	84.24	Oldmans Creek	93%	91%
Woolwich Township	2	14	2101 OLDMANS CREEK RD	15.62	15.62	Oldmans Creek	100%	100%
Woolwich Township	2	15	2157 OLDMANS CREEK RD	67.62	67.49	Oldmans Creek	72%	63%
Woolwich Township	2	16	2273 OLDMANS CREEK RD	43.12	25.81	Oldmans Creek	100%	76%
Woolwich Township	20	3	369 ASBURY STATION RD	14.47	18.37	Oldmans Creek	86%	75%
Woolwich Township	20	4	ASBURY STATION RD	42.02	42.02	Oldmans Creek	80%	50%
Woolwich Township	24	2	1810 OLDMANS CREEK RD	22.83	22.78	Oldmans Creek	93%	81%
Woolwich Township	28	1	1410 AUBURN RD	40	40.14	Oldmans Creek	97%	91%
Woolwich Township	28	3	1366 AUBURN RD	30.24	42.61	Oldmans Creek	74%	64%
Woolwich Township	28	4	1314 AUBURN RD	29.13	29.01	Oldmans Creek	97%	63%
Woolwich Township	39	1	670 WOODSTOWN RD	10.54	10.12	Oldmans Creek	95%	100%
Woolwich Township	41	1.01	298 WOODSTOWN RD	9.81	9.99	Oldmans Creek	100%	51%
Woolwich Township	41	1	141 HARRISONVILLE RD	47.73	47.26	Oldmans Creek	100%	96%
Woolwich Township	41	10	857 RUSSELL MILL RD	17.88	17.88	Oldmans Creek	68%	72%
Woolwich Township	41	4.03	227 HARRISONVILLE RD	7.4	7.40	Oldmans Creek	75%	74%
Woolwich Township	41	6.01	263 HARRISONVILLE RD	5.2	6.20	Oldmans Creek	97%	76%
Woolwich Township	41	8	RUSSELL MILL	42.65	43.53	Oldmans Creek	100%	92%
Woolwich Township	42	1	361 HARRISONVILLE RD	11.85	11.83	Oldmans Creek	100%	98%
Woolwich Township	43	10	160 HARRISONVILLE RD	36.2	36.20	Oldmans Creek	91%	81%
Woolwich Township	43	15	731 RUSSELL MILL RD	23.19	25.19	Oldmans Creek	81%	65%
Woolwich Township	43	5	131 DAVIDSON RD	7.85	9.86	Oldmans Creek	60%	72%

			1	Acres	Acres		Percent	Percent
Municipality	Block	Lot	Property Location	(Tax Data)	(GIS)	Project Area	Agricultural	Tillable
Woolwich Township	46	11.02	DAVIDSON RD	13.91	13.86	Oldmans Creek	93%	88%
Woolwich Township	46	11.03	MONROEVILLE RD	13.74	13.74	Oldmans Creek	100%	99%
Woolwich Township	46	11	285 MONROEVILLE RD	13.5	13.81	Oldmans Creek	97%	96%
Woolwich Township	46	7.04	DAVIDSON RD	6.27	6.38	Oldmans Creek	100%	97%
Woolwich Township	47	2.01	251 FRANKLINVILLE RD	10.89	11.04	Oldmans Creek	100%	100%
Woolwich Township	47	2	263 FRANKLINVILLE RD	26.61	27.60	Oldmans Creek	100%	88%
Woolwich Township	48	4.02	396 RUSSELL MILL RD	42.54	44.61	Oldmans Creek	72%	51%
Woolwich Township	50	2.08	HIGH ST	1.96	1.92	Oldmans Creek	100%	99%
Woolwich Township	50	2	490 FRANKLINVILLE RD	19.13	19.13	Oldmans Creek	100%	90%
Woolwich Township	50	3	FRANKLINVILLE RD	9.68	9.68	Oldmans Creek	100%	99%
Woolwich Township	50	4	510 FRANKLINVILLE RD	14.32	14.34	Oldmans Creek	100%	100%
Woolwich Township	54	9.01	110 FRANKLINVILLE RD	8.95	10.95	Oldmans Creek	100%	75%
Woolwich Township	55	4.02	272 FRANKLINVILLE RD	9	9.20	Oldmans Creek	89%	88%
Woolwich Township	55	7	169 RUSSELL MILL RD	67.91	74.67	Oldmans Creek	81%	69%
Woolwich Township	56	1	170 RUSSELL MILL RD	111.34	109.50	Oldmans Creek	70%	67%
Woolwich Township	56	3	90 RUSSELL MILL RD	24.13	24.13	Oldmans Creek	69%	67%
Woolwich Township	57	7.01	190 BACK CREEK RD	16.17	18.16	Oldmans Creek	100%	93%
Woolwich Township	57	7	190 BACK CREEK RD	6.93	6.93	Oldmans Creek	100%	83%
Woolwich Township	7	2	225 LOCKE AVE	58.54	59.19	Oldmans Creek	82%	51%
			Total Target Farms Acre	age:	15,686			

APPENDIX F Gloucester County RTFO Analysis

A. *Definitions* -- Most of the municipal ordinances do not include the model's definitions of the farm market, commercial farm, farm management unit, or pick-your-own operation. Mantua Township is an exception.

B. Recognition of Right to Farm as Permitted Use in All zones, including a list of 18 non-inclusive practices and activities – Most municipal ordinances are not as specific or comprehensive in their permitted uses as Section B. For example, they do not address the operation of farm markets as part of their RTF code or reference the Standard Industry Classification for agriculture. While many address numerous farm laborers; only a few specifically address farm labor housing. Many address farm equipment, but most do not specifically address slow-moving farm machinery over roads within the municipality; Mantua is the exception. The model ordinance has been updated, since the 2008 version of this Plan, to include item 18, the generation of power or heat from biomass, wind, or solar energy.

C. Recommendation that farm operators adhere to generally accepted agricultural management practices – Most municipalities reference accepted agricultural management practices, although not in detail or using the language of the model ordinance. Some reference country-wide farming practices or local farming practices.

D. Conformance to applicable State and Federal law – Most municipalities do not pick up this item as stated, although several reference conformances to state, federal, and/ or municipal laws, rules, statutes, or regulations. Mantua Township includes this in its entirety.

E. Allows permitted uses on holidays, weekdays, weekends, day or night, including attendant or incidental noise, odors, dust, and fumes – All municipalities except Monroe include a version of this item although one municipality places a prohibition on air cannons prohibited between sundown and sunrise.

F. Recognizes benefits of farming – The majority include a version of this item.

G. Complaint process through CADB or SADC – Only three municipalities, Woolwich, Mantua, and Franklin include this process

H. Agricultural Mediation Program – Only Woolwich and Mantua mention this program.

I. Notice to purchasers and users of adjacent property – Two of the ten municipalities include a notice requirement, although they may not directly follow the model ordinance language.

Buffers, while not part of the model RTF ordinance, have been recommended to mitigate RTF complaints, and several of the municipalities do address agricultural buffers in other sections of their code.