

Agricultural Smart Growth Plan



for New Jersey



April 2006

INTRODUCTION



"Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous, and they are tied to their country and wedded to its liberty and interests by the most lasting bands."

--Thomas Jefferson

Preserving Equity

Recognizing the importance of equity, the State Planning Commission made it the number-one statewide policy of the State Development and Redevelopment Plan, adopted first in 1992 and again in 2001.

The impact assessments prepared by Rutgers University on both plans acknowledge the need to address equity by using a broad array of programs to preserve farmland, including the purchase or transfer of development rights.

This Agricultural Smart Growth Plan reflects the State Planning Commission's position that "the achievement, protection and maintenance of equity be a major objective in public policy decisions..."

Indeed, the maintenance of equity is an underlying tenet of this Agricultural Smart Growth Plan and a guiding principle that is carefully woven throughout all five components.

Introduction

For much of the past century, New Jersey communities planned with little thought to agriculture.

As the state's rolling hills and seemingly endless orchards gave way to development, town leaders often guided newfound ratables around or through the agrarian landscape. With such a large amount of agricultural land in many communities, leaders never thought of it *not* being there, or about the impact development would have on it.

By the last two decades of the 20th Century, some of those same civic leaders realized they had done themselves no favors by allowing so much of their former farmland to disappear. The agricultural landscape, they found, required far less in municipal services than its developed surroundings. Cows did not need textbooks or gym lockers. Peach trees never called the police or emergency squad.

A few decades back, forward-thinking leaders decided that they should plan *for* agriculture, not around it. They asked voters to dedicate special funding for farmland preservation, and were pleased to find many residents appreciated the state's agricultural heritage and were willing to do so. By targeting the preservation of important agricultural land, New Jersey is ensuring there will always be land available for agricultural production.

Agriculture thus became part of what is now known as "smart growth," the concept that there is a way to balance the need for development with the desire to maintain a high quality of life.

But there is so much more to planning for agriculture than raising money to buy the land or development rights. *Farmland* preservation also must be about *farming* preservation.

New Jersey has a finite land base of 4.8 million acres that is shared by urban, suburban and rural communities alike. Much of that land is already developed or has been preserved through various open space and farmland preservation initiatives. What remains is 1.7 million acres of unprotected, undeveloped land, more than half of which is actively devoted to agriculture and forestry production.

The state's unique landscape, with micro-climates and soil diversity, is conducive to producing a wide array of agricultural products, while its position on the map places it

squarely in the middle of major marketplaces. This unique composition and placement affords the state an opportunity to have one of the premier agricultural industries in the country.

Farmland can be found practically everywhere in New Jersey. Even those few areas that are more urban in nature are close to agricultural lands, and have capitalized on that proximity to New Jersey agriculture to bring farmers markets to their downtowns as a tool for revitalization.

New Jersey's farmland also runs the gamut from very small operations tucked into suburban settings to some of the world's largest farms of their type, such as Atlantic Blueberry, the world's largest high-bush blueberry farm.

This is land where the cranberries we enjoy on Thanksgiving are harvested, where the sweet corn we look forward to on the 4th of July is grown, and where the mums that decorate our homes in the fall are produced.

However, active farmland, with its open landscape and deep soil, is as attractive to backhoe as it is to tractor. As a result, farmland is in high demand for development in what is already the most densely populated state in the nation and is too often viewed as just another location for more houses. If New Jersey is to fight sprawl and retain its farmers, this thinking must change.

Consider what would occur if New Jersey were entirely paved over. Green, open spaces would vanish. Traffic would become even more congested than it already is. Air and water quality would suffer. Classrooms would be overcrowded and municipal services overburdened. Access to locally grown fresh food would diminish.

Who would want to live, work or raise a family in a state like that?

New Jerseyans must realize that an important balance exists between the state's cities, suburbs and rural areas. To maintain that balance, New Jersey needs agriculture.

Productive farmland:

- helps keep municipal taxes down,
- increases property values,
- benefits the environment,
- adds to a community's character,
- is part of New Jersey's heritage,

- ensures that New Jersey residents continue to have access to an abundant supply of locally produced fresh food and agricultural products.

Did you know New Jersey's food and agriculture complex contributes \$82 billion a year to the state's economy, according to the Rutgers Food Policy Institute.

New Jersey is one of the nation's top 10 producers of a variety of fruits and vegetables, from spinach and bell peppers to tomatoes and sweet corn. The state ranks second in blueberry production, third in cranberry production and fourth in peach production nationally.

Abraham Browning, a well-known political leader in Camden County in the 1800s, compared New Jersey to "an immense barrel filled with good things to eat and open at both ends with Pennsylvanians grabbing from one end and the New Yorkers from the other." Browning's remark, at the Centennial Exhibition in Philadelphia on Jersey Day, August 24, 1876, is believed to have led to New Jersey garnering the nickname Garden State.

Today, New Jersey is home to more than 9,000 farmers, some who own their land and others who lease. All are stewards of the agricultural working landscape – from fields to forests.

Many are growing crops that make *Jersey Fresh* produce known nationally. Others are raising livestock, primarily horses, which are recognized across the country. New Jersey's horticultural industry is among the strongest in the Northeast, and aquaculture continues to grow.

In order to sustain this modern-day, diverse food and agricultural industry, New Jersey must have a comprehensive Agricultural Smart Growth plan that ensures the farming community and local and county governments have the necessary guidance, education and tools to accommodate growth. At the same time, the plan must seek to ensure the state protects its most valuable natural resources, supports urban development and redevelopment, and encourages wiser use of the state's existing infrastructure.

Principal crops in New Jersey according to 2004 cash sales:

- Greenhouse, sod, nursery and Christmas trees, \$368.5 million
- Vegetables, \$158.3 million
- Equine, \$109 million
- Fruit, \$94.8 million
- Field Crops, \$58.2 million
- Dairy, \$32.3 million
- Poultry and Eggs, \$31.5million

New Jersey agriculture is at a critical crossroads today, as farmland is disappearing at an average rate of 10,000 acres a year.¹

While farmland preservation may be the cornerstone of the Agricultural Smart Growth Plan, the future of New Jersey agriculture in an expanding, worldwide market also depends upon innovative planning techniques, economic development, natural resource conservation, and programs and policies to sustain a viable industry.

These five components make up the Agricultural Smart Growth Plan and are inextricably linked. New Jersey cannot preserve the agricultural industry by protecting the land alone. Public policy must support farms and agriculture-related businesses. Agriculture must be integrated into economic development efforts. Growth planning must consider the needs of the individual farmer, the industry and New Jersey's rural communities. Education and training must equip the next generation of farmers to succeed in a rapidly changing agribusiness environment.

Five Components of the Agricultural Smart Growth Plan
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| <ul style="list-style-type: none">• Farmland Preservation• Agricultural Land Use Planning• Economic Development• Natural Resource Conservation• Agricultural Industry Sustainability |
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This Agricultural Smart Growth Plan reflects the definition of smart growth as set forth by the New Jersey State Development and Redevelopment Plan:

“Smart growth is the term used to describe well-planned, well-managed growth that adds new homes and creates new jobs, while preserving open space, farmland and environmental resources. Smart growth supports livable neighborhoods with a variety of housing types, price ranges and multi-modal forms of transportation. Smart growth is an approach to land-use planning that targets the state’s resources and funding in ways that enhance the quality of life for residents in New Jersey.

Smart growth principles include mixed-use development, walkable town centers and neighborhoods, mass transit accessibility, sustainable economic and social development and preserved green space. Smart growth can be seen all around us: it is evident in larger cities such as Elizabeth and

¹ U.S. Department of Agriculture, National Agriculture Statistics Service, Land in Farms

Jersey City; in smaller towns like Red Bank and Hoboken, and in rural communities like Chesterfield and Hope.

In New Jersey, smart growth supports development and redevelopment in recognized centers – a compact form of development – as outlined in the State Development and Redevelopment Plan, with infrastructure that serves the economy, the community and the environment.”

The New Jersey State Development and Redevelopment Plan provides a two-pronged approach to sustaining agriculture. First, under the plan, 23 statewide policies are designed to provide an effective agricultural strategy that creates a supportive climate for farming and plans for its future economic growth and development in ways that promote continued use of the land for agriculture without undermining property values. Second, planning area policies guide development into centers to protect the outlying agricultural areas by encouraging the use of planning and land use techniques that maintain a farmer’s equity in the land and provide for the more efficient use of land.

The agricultural community supports equitable and feasible density-transfer methods, such as clustering, to coordinate preservation planning in conjunction with regional growth management. The Department of Agriculture has even developed a Smart Growth Tool Kit that planners can use to guide them in these efforts. It can be found at <http://www.state.nj.us/agriculture/toolkit.htm>.

New Jersey’s smart growth efforts must include agriculture, as that is what keeps farmlands green and productive, brings farm-fresh products into our homes and makes New Jersey a better place to live and visit. A strong, vibrant, and diverse agricultural industry will help the Garden State achieve its smart growth goals and strengthen New Jersey’s dynamic agricultural character.

By preserving this agricultural character, New Jersey continues to support traditional agriculture, but also provides opportunities for new and emerging agricultural markets, such as aquaculture, agri-tourism, organic and ethnic foods. Together, the traditional and the new enable the state’s agricultural industry to continue contributing to the economic success of a diverse Garden State.

This plan, developed by the Agriculture Smart Growth Working Group under the leadership of Agriculture Secretary Charles M. Kuperus and endorsed by the delegates to

the State Agricultural Convention, including the State Board of Agriculture, is a roadmap for agriculture in the 21st century and will be integrated into the statewide comprehensive plan for smart growth. The plan is not meant to replace the good planning work that is already taking place throughout the state, but is meant to focus on the five components that are critical to agriculture.

This plan is also meant to be integrated with plans developed by other state agencies, such as the departments of Community Affairs, Environmental Protection and Transportation. Integration will ensure that all state-level plans and programs support the objectives and strategies of the Agricultural Smart Growth Plan and will help avoid potential conflicts among various plans and programs.

Like the agricultural industry itself, this plan will evolve as New Jersey moves forward with its smart growth efforts. The New Jersey Department of Agriculture is committed to working with other state and federal agencies, county and local governments and the farming community to evaluate and refine the plan as necessary to maintain its effectiveness.

This plan ensures farmers, who are on the front lines in the fight against sprawl, have a voice in ongoing discussion about how and where New Jersey will grow.

Perhaps most importantly, the Agricultural Smart Growth Plan puts the interests of farmers and the agricultural industry in the forefront, as the state considers important decisions related to managing growth and balancing competing interests. This plan repositions agriculture for a strong future – a future that protects the state’s farms, creates new economic opportunities for farmers and ensures a better quality of life for all New Jerseyans.

FARMLAND PRESERVATION



Permanently preserving privately owned productive agricultural land ensures a stable land base for the future of the agricultural industry. Farmland preservation, the foundation of the Agricultural Smart Growth Plan, is an important investment in our economy, our farming heritage and the overall quality of life for each and every New Jersey resident for generations to come.

Overview

Agriculture's very existence is dependent upon a stable land base. Even with new innovations in greenhouse and hydroponics production, the availability of productive farmland is essential for the vast majority of agricultural production. Without farmland, where would farmers grow their crops? Or raise their livestock? What would happen to our local food supply? How would we recharge the aquifers that provide us our fresh drinking water?

These are serious questions as New Jersey's farmland faces an imminent threat of permanent conversion to non-farm uses. The state's citizens have already made it clear that the retention and development of an economically viable agricultural industry is a high priority, voting time and again to approve bond issues and dedicated property taxes for the preservation of farmland.

By year's end, New Jersey will have permanently preserved 140,000 acres of agricultural land since the establishment of the Farmland Preservation Program in 1983.

In November 1998, New Jersey citizens voted overwhelmingly to amend the State Constitution to dedicate a portion of existing sales tax revenues to farmland, open space and historic preservation. The resulting Garden State Preservation Trust Act, signed in 1999, established, for the first time, a stable source of funding for the Farmland Preservation Program, giving it the ability to preserve greater amounts of land than ever before.

Because of this public commitment, New Jersey continues to be a national leader in preserving farmland, with more than 17 percent of its agricultural land base preserved by the end of 2005. Clearly, New Jersey residents recognize the many important benefits of preserving farmland.

A primary, and often overlooked, benefit of farmland preservation is the positive fiscal impact on those communities and counties where substantial farmland exists. New Jerseyans are increasingly resistant to ever-higher property tax bills caused by the costs of servicing new growth and development, whether it is in the form of new schools, expanded road maintenance or increased police and fire protection. Numerous fiscal impact studies across the nation reinforce this conclusion, and typically show that farmland, unlike residential development, pays substantially more in taxes than it requires in services. One such study done by the American Farmland Trust in 2001 found that

A Unique Landscape

New Jersey's diverse agricultural industry has adapted to the **unique landscapes** of the Garden State.

The **rugged terrain** of the northwest is home to grain, livestock and dairy operations.

The **vast, well-drained sandy soils** of the south provide for an abundant vegetable and nursery industry.

The **rolling pasture lands** of central Jersey provide fruit, grain, hay and bucolic horse farms, while the **acidic soils and bogs** of the Pinelands produce beautiful blueberries and cranberries.

for every dollar paid in taxes, farmland only required 36 cents in services, unlike residential development that required \$1.15 in services for every \$1 paid.

In addition, unlike land preserved for public open space or recreation purposes, preserved farmland has the advantage of retaining the land in private ownership. As such, preserved farmland continues to pay property taxes, and continues to be maintained and insured by private landowners – a true fiscal “win-win” for local governments and their residents.

Finally, because only easements are purchased, the state is able to stretch its funds to preserve many more farms than if the land were purchased outright.

Preserved farmland also preserves a way of life for farmers and non-farmers alike. Where else could families go to pick their own strawberries in the spring and hunt for pumpkins in the fall? Who hasn’t slowed at least once to marvel at cows in a pasture or horses in a field as they drove along the state’s more scenic byways?

Many hard-working farmers who sell their rights to develop their land reinvest the capital back into their farm operations, retire debt, or use the income to acquire land and expand their existing agricultural operations. The easement purchase program also enables farmers to plan for retirement while still maintaining their land and deriving income from it.

Finally, preserved farmland often has a positive environmental impact locally and statewide; as well-managed, productive farmland provides a portion of the land base necessary to manage watersheds, recharge aquifers, manage wildlife and protect stream corridors.

This is especially true when proper conservation practices are implemented.

The State Agriculture Development Committee administers the Farmland Preservation Program. The voluntary program offers a variety of options for landowners that provide for the preservation of land in perpetuity or for a limited term of eight years.

The New Jersey State Agriculture Development Committee (SADC) recognizes the importance of focusing preservation efforts in viable agricultural areas in order to sustain the

Farmland Preservation Programs

- **County Easement Purchase:** Landowners sell the development rights to their county. Landowners retain ownership of the land, but agree to permanent deed restrictions that prohibit nonagricultural development. The state provides grants to counties to fund between 60 to 80 percent of the cost to purchase the development rights on approved farms. The county, municipality, or both come up with the difference of 20 to 40 percent.
- **Direct Easement:** The state purchases the development rights on farmland directly from the landowner, and the landowner retains ownership of the land.
- **Fee Simple:** Farms are purchased outright from willing sellers, permanently preserved for agricultural use and resold or leased with deed restrictions attached.
- **Grants to Nonprofits:** The state provides cost-sharing grants of up to 50 percent to assist nonprofit organizations in permanently preserving farms.
- **Planning Incentive Grants:** These are grants to municipalities or counties that have identified specific project areas where they intend to permanently protect large blocks of reasonably contiguous farmland. Municipalities must have an agricultural advisory committee and their master plan must contain a farmland preservation plan.
- **Eight Year Program:** An eight-year program allows landowners to voluntarily restrict nonagricultural development on their property for eight years in exchange for selected easement - purchase benefits, such as protection from emergency water restrictions and access to soil and water conservation matching grants.

agricultural industry of the state, and primarily preserves farms in Agricultural Development Areas, or those areas defined as regions of productive agricultural lands that have a strong potential for future production. The SADC also recognizes, however, the important role that remaining farmland plays in more developed areas of the state where remaining farms offer important opportunities for agri-tourism, availability of fresh produce and nursery products, and the green “breathing space” enjoyed by so much of the public.

In keeping with the New Jersey State Development and Redevelopment Plan, the SADC, through its Strategic Targeting Project, is working with counties and other state agencies to develop a more strategic approach to identifying and prioritizing farmland preservation investments among all levels of government in each of the 18 out of 21 counties that actively preserve farmland. This coordinated planning approach will improve preservation efforts and guide decision making across all programs within the State’s Farmland Preservation Program and ultimately enhance the agricultural industry.

The Strategic Targeting Project has three primary goals:

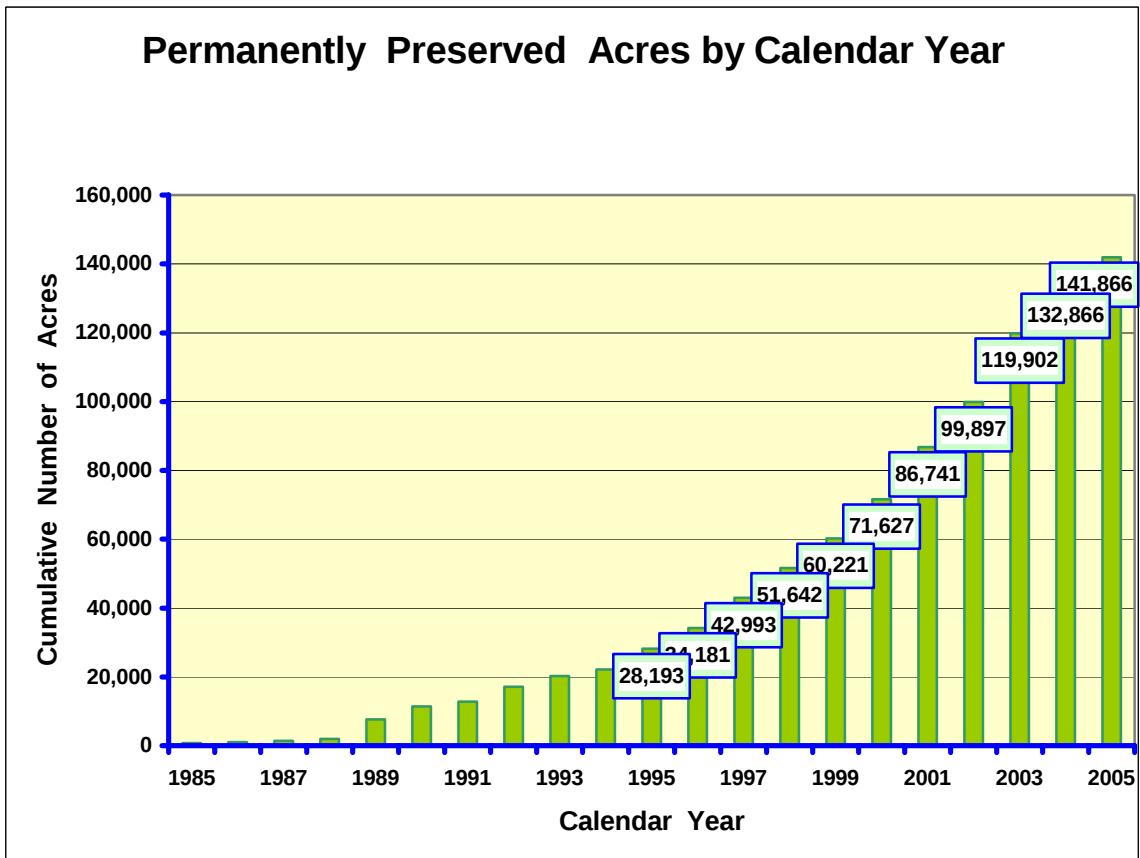
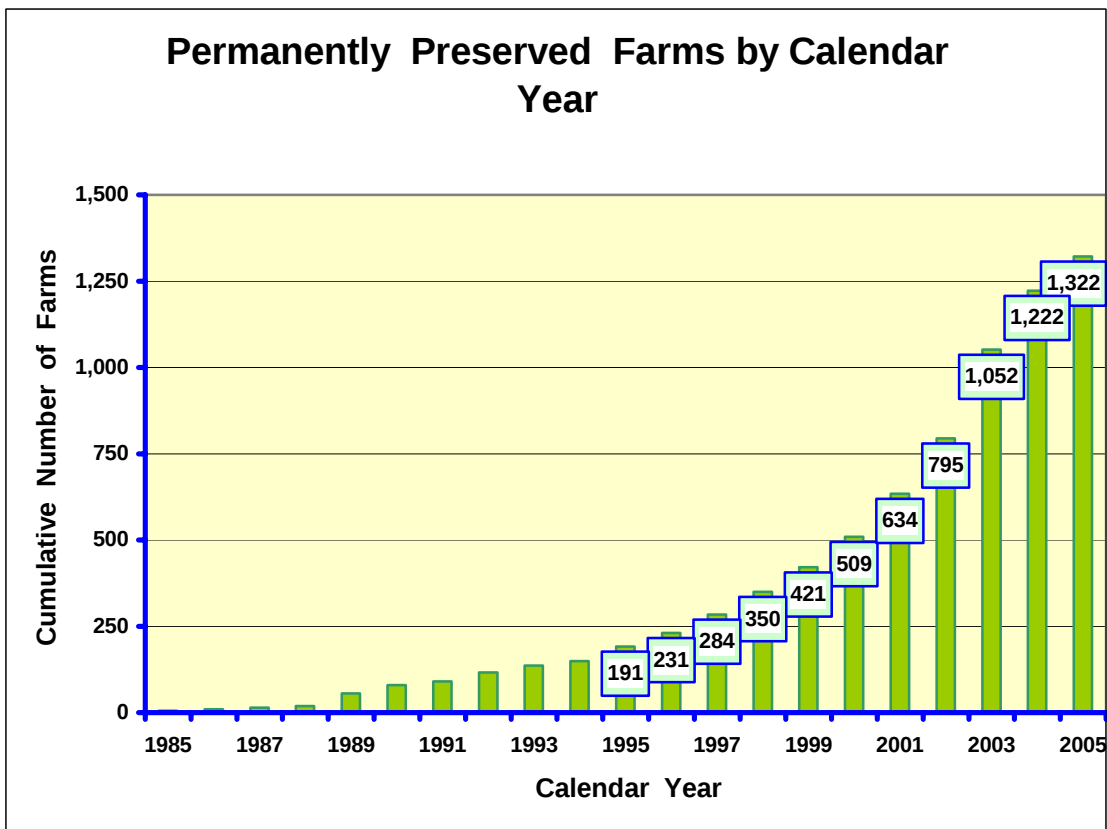
- Coordinate farmland preservation/agricultural retention efforts with proactive planning initiatives;
- Create and update maps to more accurately target preservation efforts in areas of important agricultural land;
- Coordinate farmland preservation efforts with open space, recreation and historic preservation investments.

Accompanying the emphasis on the strategic preservation of farmland is a new move to streamline and shorten the farmland preservation process. To that end, in early 2005, the SADC appointed a Process Review Committee that evaluated each of the SADC’s five preservation programs and made recommendations for program improvement.

The primary recommendations of the group included; 1) eliminating redundancy between the county and state evaluation of farms; 2) increasing program flexibility and efficiency by processing preservation applications on a year-round basis; 3) empowering each county to accelerate preservation by creating a county “block grant” of funding that can be spent on any farm that is included in the county’s adopted farmland preservation plan; 4) increasing the rate of preservation through competition among the counties; and 5) adopting new minimum quality standards that insure every farm preserved using state funds advances the agricultural viability of the state.

Upon adoption of these program changes in 2006, all farmland preservation partners, including landowners, municipalities, counties and non-profit organizations, can expect a leaner, more efficient and more effective farmland preservation program.

A landowner's decision to permanently preserve land is a serious commitment. Therefore, it is imperative that efforts to preserve productive agricultural land are efficient, coordinated and manageable, and serve to encourage greater participation in the program.



Objectives & Strategies

Accelerate the preservation of important agricultural land in order to secure the maximum land base possible to maintain and enhance a viable agricultural industry.

- Permanently preserve a minimum of 18,000 acres of farmland per year.
- Support the creation of a new and expanded funding source that will succeed the Garden State Preservation Trust Fund due to expire in 2009.
- Share and coordinate the data of the Strategic Targeting Project to ensure consistency among municipal, county and state preservation goals.
- Develop a proactive outreach strategy to coordinate and streamline local, regional and state farmland preservation efforts, and effectively communicate among all levels.
- Encourage counties and municipalities to participate in the Farmland Preservation Program and promote the establishment of dedicated funding sources as a tool for leveraging state funds.
- Explore creative financing mechanisms, such as Installment Purchase Agreements, that increase landowner interest in farmland preservation and maximize the leveraging of available funding sources.

Use the Farmland Preservation Program as a strategic tool to support the agricultural industry while meeting local planning goals.

- Continue collaborating with counties regarding the preparation of Comprehensive Farmland Preservation Plans in conjunction with their municipalities.
- Assist municipal planning boards in establishing agricultural advisory committees to consider the impact of their actions on the local agricultural industry.
- Assist municipalities in preparing and adopting a farmland preservation element to incorporate into their master plans.
- Develop partnerships and coordinate program activities with various environmental, historic, scenic and agricultural organizations to minimize potential conflicts and ensure the preservation of land that best serves the surrounding region.
- Create additional incentives and tools that will facilitate farmland transfers to beginning and expanding farmers.

Five Components of the Agricultural Smart Growth Plan

- **Farmland Preservation**
 - Agricultural Land Use Planning
 - Economic Development
 - Natural Resource Conservation
 - Agricultural Industry Sustainability

Improve and streamline the Farmland Preservation Program.

- Adopt the recommendations of the Process Review Committee which will streamline the process of application processing, value certification and closing review at all levels.
- Develop a landowner guide that summarizes the Farmland Preservation Program and helps landowners make informed decisions and better understand the process.
- Develop additional easement options to provide a greater incentive for keeping preserved agricultural land in active production.
- Continue to use the most recent comparable assessments available when conducting appraisals, thereby ensuring land value and encouraging landowners to participate in the program.

By targeting the preservation of important agricultural land, New Jersey is ensuring there will always be land available for agriculture production. Yet, just because the land is available doesn't guarantee the viability of the agricultural industry. Farmland preservation efforts must consider and incorporate the next four components of the Agricultural Smart Growth Plan if New Jersey's agricultural industry is truly going to thrive.

Agricultural Land Use Planning



Under the agricultural land use planning approach, land conservation is the central organizing principle around which livable communities are created. Purchase of development rights programs coupled with agricultural land use planning efforts help New Jersey grow in ways that consume less land and strike a balance between preservation and growth.

Overview

New Jersey is the most densely populated state in the nation. Farmland is disappearing at an average rate of 10,000 acres a year. Fields where dairy cows once grazed and peach trees once blossomed are now home to shopping malls, houses and highways.

Many New Jersey towns are fed up with this development and want to stop growth completely. Some scramble to preserve any parcel of land slated for development. Others downzone open land – typically active farmland – to reduce the number of homes that are built and to limit infrastructure costs associated with residential development.

But these random and reactionary preservation efforts actually encourage sprawl and result in the loss of farmland.

Downzoning and large lot zoning may reduce the number of homes that can be built, but it also spreads out those homes in such a way that consumes more land, with none of the remaining land useable for farming, forestry or recreation. Lots become “too large to mow, but too small to plow.”

Downzoning also devalues agricultural land by reducing its development potential. When a municipality decreases the land’s development potential, it also reduces a farmer’s net worth and hurts the farmer’s ability to obtain flexible financing at competitive interest rates. This in turn increases the pressure on New Jersey’s farmers whose land is often their primary financial asset.

The American Farmland Trust found the problem does not lie in growth itself, but in wasteful and destructive land use. From 1982 to 1997, the population in the United States grew by 17 percent, while urbanized land grew by 47 percent. Furthermore, the nation’s farmland disappeared 51 percent faster in the 1990s than it did in the 1980s. Clearly, New Jersey is not alone in its struggle with the difficult task of managing growth.

While New Jersey should not stop growth, it can plan for it in a way that protects the state’s most valuable farmland and other natural resources and ensures the continued viability of its agricultural industry.

Five Components of the Agricultural Smart Growth Plan

- Farmland Preservation
- **Agricultural Land Use Planning**
- Economic Development
- Natural Resource Conservation
- Agricultural Industry Sustainability

The only avenue for a community to take in order to combat undesired growth is to make the necessary planning and zoning changes before the surge of development begins. If planning is not done prior, landowner expectations may aggravate property right issues and hinder the ability for the community to implement growth control measures.

The loss of agricultural land is the most visible negative effect on a community who does not have the tools in place to control growth. Existing agricultural operations are also impacted to adapt to increasing land values and increasing residents within the community, agricultural operations may have to change to more intensive agricultural operations with high value products in order to survive.

In an effort to coordinate farmland preservation and agriculture retention efforts with local proactive planning initiatives, the State Agriculture Development Committee has developed the Strategic Targeting Project. This type of land use planning can be accomplished using an array of planning techniques that accommodate growth in rural areas while retaining productive agricultural lands.

Agriculture is an industry. An industry in which land is the primary instrument of production and a farmer's primary asset. Therefore it is imperative to retain the land base by identifying and prioritizing key parcels for preservation. Once these critical agricultural areas are identified, efforts can be made to steer development away from them and into areas with existing infrastructure or to marginal lands where infrastructure can be provided. Prioritizing the importance of agricultural lands in a regional context, as called for in the Strategic Targeting Project, allows for the coordination of farmland preservation and agricultural retention efforts with proactive land use planning at all levels of government.

The New Jersey State Development and Redevelopment Plan outlines many agricultural policies and specific land use techniques that should be implemented in the agricultural regions of the state. These are areas with most of New Jersey's prime farmland, which has the greatest potential of sustaining the agricultural industry in the future. In these planning areas, growth should be focused in existing and new rural centers where development is mixed in use and compact. Ideally, the areas outside of

these centers are maintained for agriculture by using planning techniques that address landowner equity and support farming.

Municipalities and counties have the option of using tools such as capacity analysis and build-out analysis to determine opportunities for – as well as the implications of – future growth and preservation. Capacity analysis evaluates the ability of the environment and infrastructure, such as water supply, to support projected growth. Build-out analysis illustrates what a town, region or county will look like if built to the full extent allowed by existing zoning. Such an illustration can be an effective way to demonstrate the importance of proactive planning that balances the need to accommodate future growth and preserve natural resources.

Even municipalities that have little agricultural land and are more urban in character have tools at their disposal to plan for agriculture. Urban areas can enhance the opportunities for agriculture in neighboring suburbs and rural areas by establishing farmers markets and providing for the inclusion of food processing facilities to which New Jersey farmers can sell their products.

Below are some of the land use techniques and infrastructure systems that support development and redevelopment. These techniques and systems enable the accommodation of growth, the preservation of farmland and the continued viability of the agricultural industry. These techniques must be used in tandem with the other components of the Agriculture Smart Growth Plan to sustain agriculture in New Jersey.

Agriculture-Friendly Zoning: Agriculture-friendly zoning is a comprehensive land use practice that coordinates zoning and land use policy in a proactive way to encourage agribusiness and reduce the incidence of farmer-homeowner nuisance issues. The agricultural land use zone identifies active farms, farm product processing and farm support businesses as permitted uses. The zoning regulations would consider the needs of farm operations and permit increased lot coverage, housing for agricultural labor, reduced front setbacks and less restrictive signage regulations.

These regulations can significantly reduce the regulatory obstacles, fees, fines, and nuisance complaints faced by many farmers when trying to comply with regulations designed for residential development, not farms.

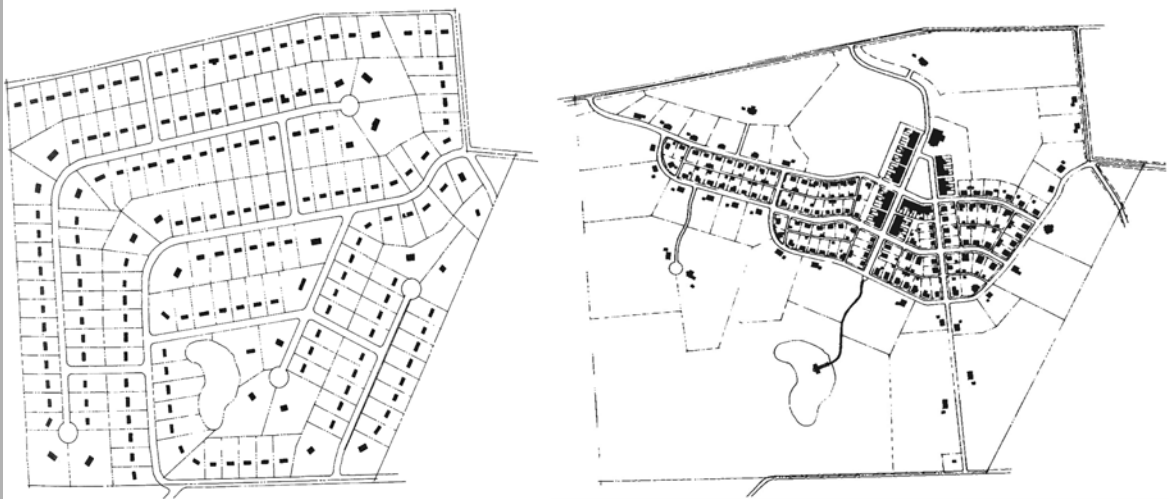
Clustering: Clustering is a development design technique that concentrates buildings on a portion of land to allow the remainder to be preserved for agriculture, recreation, or environmental purposes. Clustering is most effective when applied regionally as a component of a larger, overarching land use planning strategy, but the technique can be effectively applied on a single parcel of land. When administered correctly, as an application of consistent land-use policy, clustering conserves land, cuts infrastructure costs, maintains landowner equity, and reduces the cost of government services. It is also important for a municipality to require a developer to include state Right to Farm Act language in the deeds to the developed portion of a cluster project and ensure that the homeowners' association regulations specifically do not prohibit farming activities on the remaining parcel when the remainder is specifically set aside for agricultural preservation.

Clustering can be implemented on a voluntary or mandatory basis. Typically, in voluntary situations, strong incentives are provided to encourage the use of clustering as opposed to existing conventional zoning. Clustering in agricultural areas should be accompanied by land use policy that ensures that the most productive farmland is preserved while accommodating development on marginal land.

Most successful clustering schemes involving lots smaller than ½ acre use alternative wastewater treatment systems. Towns in New Jersey and across the country are using a variety of wastewater technologies that provide treatment for small-scale communities ranging from 10 units to several hundred. These systems can be utilized to enable compact growth patterns and can improve water quality in areas where septic systems are failing. These systems produce clean water at the point of discharge that can replenish critical groundwater resources or can provide effluent for irrigation, municipal street cleaning and other suitable uses.

When these systems are used to cluster development on marginal lands, with the majority of the remaining land set aside with an easement restricting development, hundreds of acres of farmland can be preserved at no cost to the public. Having pre-approved designs for these “stand-alone” wastewater treatment systems can reduce the cost and limit the number of hookups. The use of innovative infrastructure systems gives

municipalities and counties the ability to plan for the future development of their community according to their own vision. More than 30 of these systems have been serving several New Jersey communities for a number of years and are functioning well.



Conventional Versus Cluster Development

Clustering is particularly appropriate in rural areas that wish to remain rural while accommodating additional growth. (Plans from *Rural By Design* by Randall Arendt, 1994.)

The plan on the left illustrates a conventional development pattern, in which uniform-sized large lots (typically 2.5 acres or greater) blanket an entire development site, consuming all the land and obliterating the distinctive, natural features that made the site a special place. The small pond at the center is hidden behind private lots, off-limits to most residents. In contrast, the cluster development plan at right uses a greater variety of lot sizes (generally 1/4 to 1 acre in size) to accommodate the same number of units, while preserving substantial areas as open space. The pond is preserved as an accessible amenity, linked with roadways to a trail. As a result of more connections and linkages between streets, travel distances are shorter throughout the development. The sparse arrangement of homes along the main roads on the perimeter allows an attractive, unobstructed view of the development's rural surroundings. (From *Growing Smart in Minnesota*, The St. Croix Valley Development Design Study, prepared for the Metropolitan Council by Calthorpe Associates, January 2000)

Density Transfer: New Jersey amended its Municipal Land Use Law (MLUL) in 1996 to encourage flexibility regarding density, intensity of land use and design. Density transfer techniques can be used to engage landowners in a specific region of a municipality to change traditional land use patterns. For example, the development potential from four farms can be transferred to one farm, allowing for the accommodation of growth and the permanent protection of four out of five farms.

Agricultural Land Use Planning Techniques

- Agriculture Friendly Zoning
- Clustering
- Density Transfer
- Lot Size Averaging
- Transfer of Development Rights (TDR)
- County Participation in Subdivision Review
- Planned Unit Developments (PUDs)
- Ordinance Reform

Lot Size Averaging: Lot size averaging is a simple method to permit flexibility in lot size on a parcel of land. This is an effective technique for smaller parcels (10-20 acres) that are proposed for subdivision where flexibility in lot size may help to preserve resources. The overall density remains the same. Only the lot sizes vary.

Transfer of Development Rights (TDR): Transfer of development rights (TDR) programs can protect farmland by shifting development from agricultural areas to areas targeted for growth. TDR is the clustering of development, a tool that can be implemented in a portion of a township, township-wide or regionally. TDR allows landowners to transfer the right to develop from one parcel of land – called a sending area, the area to be preserved – to a different parcel of land – called a receiving area, the area to accommodate growth.

Although it began as a pilot program in Burlington County, TDR can now be implemented in every part of the state. To implement TDR, receiving areas and sending areas are designated and mapped in accordance with a comprehensive plan. The sending area may include agricultural land, but the receiving areas must have the capacity and infrastructure necessary to support increased development and must be designed to meet other smart growth principles. As a result, identifying the receiving area is the most challenging and critical aspect of TDR, as specific guidance is needed regarding

infrastructure criteria in the receiving area. The state is committed to working with municipalities to assist in all aspects of TDR implementation.

Once the development rights are transferred from the sending area, the land is permanently restricted from development. For this program to succeed, communities must agree on its use as a tool to protect special resources and direct future growth. A market must exist for both the development rights and the higher density development that will result in the receiving area.

TDR programs can be voluntary or mandatory depending on the municipality's goals and needs. In a voluntary program, the owner of property in a sending area can either transfer the development potential of that property to a receiving area or develop the property in accordance with the land use ordinance in effect prior to the adoption of the TDR ordinance. In a mandatory program, the owner of property in a sending area can either transfer the development potential of that property at the full value to a receiving area or develop the property at a much-reduced density.

Chesterfield, Burlington County: A TDR Success Story

Established in 1997, Chesterfield Township's voluntary TDR program reflects the desire of its residents to promote the agricultural industry and retain the rural landscape of the township while encouraging planned economic and residential development.

The program aims to steer development from a 7,000-acre sending area to a 500-acre receiving area. Through the use of creative land use and design techniques, the township created a planned village center with a mix of housing types, commercial businesses, offices and public spaces. Critical to the success of the project was the extension of the sewer line from the Wagner Correctional Facility to the receiving area.

The township participated in the State Planning Commission's Center Designation process, designating the receiving areas as planned villages, Crosswicks as an existing village and Chesterfield and Sykesville as existing hamlets.

Chesterfield already had a strong farmland preservation program under which it preserved 4,000 acres of out of the 14,000 that make up the township.

The following elements are critical to a successful TDR program:

- Identification of “sending” and “receiving” areas.
- Consideration for the protection of landowner equity in the sending area when creating a basis for credit allocation.
- Economic balance between the capacity of the receiving and sending area to ensure that development credits are used and that they have the appropriate market value. Growth must be feasible, permitted, well designed and coordinated with infrastructure investments in the receiving area.
- Permanent development restrictions on lands in the sending area when the credit option has been used.
- Performance standards, such as progress reports, sunset provisions and economic analysis, to ensure a TDR program will be implemented.
- An appropriate level of state agency review to assure that performance measures are met and program components are working effectively.
- Distinction between voluntary and mandatory programs to clarify program criteria and ensure the use of proper safeguards for landowners.

County Involvement in Preliminary Subdivision Review: Although New Jersey is a home rule state wherein local governments have adopted the enabling legislation that grants them sole responsibility over the development of their land, a significant benefit to regional land use management may be realized by enabling the County Agriculture Development Boards (CADBs) to review and comment on subdivision and development proposals.

Planned Unit Developments (PUDs): Under planned unit developments, zoning provisions permit large lots to be developed in a more flexible way than allowed by the underlying zoning. These ordinances may allow developers to mix land uses and develop at greater densities with more design flexibility, including concentrating the infrastructure needed to service the development or offering other community facilities and services. Local governments can utilize these ordinances to negotiate significant design and use changes in development applications, while requiring developers to compensate for the

impacts of their projects by setting aside the undeveloped portion to be permanently maintained as agricultural land or open space.

Ordinance Reform: Municipalities have the ability to reform local zoning ordinances to encourage more compact growth and mixed-use development patterns in and around existing town centers or in new centers. These techniques can be used in ways that consider land equity. To encourage this type of development pattern, municipalities can:

- Provide incentives to cluster development in centers.
- Reduce lot sizes, setbacks and yard requirements.
- Allow a mix of commercial and residential uses in centers.
- Increase permitted building heights.
- Encourage pedestrian and bicycle-friendly features.
- Provide for shared parking areas.
- Permanently preserve a majority of the area's farmland.
- Plant street trees and develop parks and recreation facilities and other amenities designed to make town centers more attractive places to live and work.

(More information is available in the publication entitled, "Designing New Jersey." This document offers design principles and guidelines as a tool to build better communities.)

Municipalities examining their land-use plans have numerous options. While some take significant work and public involvement, that work pays off in a balanced plan that protects agricultural and other natural resources while guiding a well-reasoned build-out. In that way, today's municipal officials can create benefits for future generations of residents.

Objectives & Strategies

Municipalities, counties and regions where significant farmland exists should work on a regional level to ensure that innovative conservation planning techniques are employed to help accommodate growth in an equitable manner that preserves and supports agriculture.

- Work aggressively to promote and facilitate the State Planning Commission's plan endorsement process to encourage consistent land use plans at all levels of government.
- Use tools such as build-out analysis and capacity analysis to help land-use planners make informed decisions about accommodating growth and preserving agriculture and natural resources.
- Strengthen and promote the use of existing alternative planning tools and create new tools that facilitate the accommodation of growth in ways that consume less land and allow for the preservation of the most productive farmland.
- Develop a technical support network that will promote and facilitate the use of agricultural land use planning efforts.
- Work with the Department of Environmental Protection to encourage the use of alternative wastewater treatment systems in their wastewater rules.
- Work to identify and promote the use of "pre-approved" alternative wastewater treatment systems as a feasible and cost-effective way to facilitate less land consumptive land-use patterns.
- Continue to develop and improve an agriculture-friendly "Planners Tool Kit," with model ordinances and geographical representations of a variety of land-use planning techniques, for rural municipalities and counties.
- Use the data of the Strategic Targeting Project to make informed land use planning decisions regarding the preservation of farmland and the accommodation of growth.

- Work with the Department of Transportation to identify potential Transit Village locations to encourage compact, mixed-used development around transit hubs in rural areas.
- Work with land-use organizations to explore constructive approaches to refining and encouraging land-use techniques outlined in this plan.

By integrating growth planning with preservation planning, New Jersey will be able to ensure the continued viability of its agricultural industry and rural communities. With the appropriate tools, towns will be able to control their own destinies, residents will take comfort in knowing what their town will look like in 20 years and farmers will have peace of mind knowing that their investment in their land is secure.

ECONOMIC DEVELOPMENT



Stabilizing and fostering an active and productive agricultural industry is critical to retaining viable farms. Facilitating investments in agricultural infrastructure supports, maintains and expands the business of farming. At the same time, identifying and facilitating the creation of new markets helps farmers access an ever-changing marketplace.

Overview

Just as important as preserving the state's farmland is preserving the state's farmers and the agricultural industry that sustains them.

New Jersey's diverse food and agriculture complex is valued at approximately \$82 billion and benefits not only the state's economy, but also all New Jerseyans who enjoy locally grown food and farm products and an agricultural working landscape in their community. From fruits and vegetables, nursery stock and aquacultured shellfish to livestock and field crops like corn and soybeans – New Jersey is far from a one-crop state.

Helping the industry to grow and expand is essential to maintaining the various working landscapes of agriculture. A strong and vibrant agricultural industry will be in a position to resist development pressure and help New Jersey contain sprawl and achieve its smart growth goals.

Meanwhile, redevelopment efforts in urban areas also can bring benefits for farmers in the areas around those cities. Community redevelopment sometimes overlooks farmers markets, which provide a benefit to all involved by connecting farmers in search of customers with residents looking for greater access to fresh agricultural products.

The New Jersey State Development and Redevelopment Plan recognizes agriculture as a significant contributor to the state's economy and supports the industry's future economic growth in ways that promote the continuation of agricultural land use. Several of the agricultural policies in the plan address economic development specifically.

In addition, the Department has developed an Agricultural Development Initiative that is designed to address the rising production costs of agricultural businesses. That program aims to assist in the development of new agricultural products, create new markets for existing products and expand access to existing markets.

Most municipalities and counties do not consider agriculture when they plan for economic development activities in their region. Although farmland preservation efforts have increased significantly throughout the state, protecting farmland from development alone does not guarantee that the land will be actively and viably farmed. Formulating

strategies that address farming as an economic engine supports farmland preservation efforts and strengthens the business of farming.

The geographical data contained in the Strategic Targeting Project will be a valuable tool to help municipalities and counties as well as the state identify key areas to locate agricultural industries and support businesses, based on the agricultural production of the region. Identifying the state's key agricultural regions will help focus agricultural retention efforts and enable the implementation of the objectives outlined throughout this Agriculture Smart Growth Plan.

The New Jersey Department of Agriculture's approach to smart growth planning connects farmland preservation efforts with economic development strategies and marketing opportunities for today's farmers.

Expanding the Marketplace

As a result of efforts by the New Jersey Department of Agriculture to establish 10 new market opportunities

- New Jersey schools received 3,300 cases of New Jersey peaches in 2003 to help alleviate a late-season oversupply of peaches.
- The Borgata Hotel and Casino contracted with a Buena farmer to supply custom-ordered produce for its 11 restaurants – the first partnership of this type between a casino and New Jersey farmer.
- The Jersey Bred Festival drew more than 13,000 people to Monmouth Park in 2004 for the second-ever full card of races for New Jersey-bred thoroughbreds.
- New community farmers markets opened bringing the number of farmers markets operating statewide to a record 76 as of 2005.

New Jersey's proximity to large, affluent markets has always been an advantage for the state's food and agriculture industry. In addition, the state's increasing immigrant population creates a new demand for food and agricultural products. As consumer demands change, so too must the agricultural industry. Identifying these new markets and providing the products consumers demand is an ongoing effort in the ever-changing agricultural industry.

In January 2005, the delegates of the 90th State Agricultural Convention endorsed economic development strategies

for 10 key sectors of New Jersey's food and agriculture industry. These strategies address horticulture, produce, dairy, aquaculture, field crops, livestock, organic farming, equine, wine production and agri-tourism. These strategies are currently being implemented.

Many of the strategies deal with shortening the market chain between producer and consumer, ensuring that the producer increased value in his products and the consumer more direct access to fresh agricultural goods.

The Department recognizes that a healthy agricultural industry is largely dependent on healthy plants and animals. Accordingly, the Department administers numerous programs to ensure the health of livestock and poultry and plant stock. These programs help to safeguard animal and human health and ensure pest-free plants in the marketplace.

At the same time, the Department realizes that promoting the wide variety of agricultural products the Garden State offers is critical to sustaining the industry. The Department's Jersey Fresh promotion program is a long-standing economic development tool. This nationally recognized marketing and grading program promotes the consumption of Jersey produced agricultural products and ensures consumers a high-quality product. For more than 20 years, the *Jersey Fresh* program has been successful at strengthening consumer awareness of the traditional New Jersey-grown fruits and vegetables. The Department will build on the success of this program and broaden the umbrella of products that are identified as Jersey produced. In addition, strategies for supporting value-added products will be developed to increase farmer participation in the market chain and allow for additional income beyond the sale of fresh-market, New Jersey-grown commodities.

Value-added agriculture refers to taking raw agricultural products and refining them in some way to add further value to them, for example, through processing or packaging. New markets typically start out small, but have the potential to grow into highly profitable sectors as agriculture continues to evolve to meet the demands of a changing marketplace.

Another way to ensure a strong food and agriculture industry statewide is for state agencies, counties and municipalities to commit to ensuring regulations and programs are flexible and supportive of the farming community. It is critical that other state agencies, especially the Department of Environmental Protection, the Department of Transportation, the Department of Community Affairs, the Department of Labor and the New Jersey Commerce Commission, consider the Agricultural Smart Growth Plan when

making important decisions regarding existing and proposed infrastructure, developing and amending regulations and programs, and protecting environmental and historic resources.

It is especially critical for the Department of Agriculture to collaborate with the Department of Environmental Protection to craft regulations that provide flexibility for agricultural operations, while protecting the environment yet allowing for further economic growth in the food and agricultural industry. The New Jersey Department of Agriculture is committed to working with other state agencies to promote economic development activities and other improvements that will support and grow New Jersey's agricultural industry.

Clearly, New Jersey's agricultural industry is not static. The history of agriculture in the state has been one of change, with varying sectors leading the industry at different times. In the early 1900s, poultry and dairy were leaders. Later in the 1900s, fruits and vegetables were the largest commodity groups. Today, the leading sector is ornamental horticulture and greenhouse products, with fruits and vegetables and the equine industry following in second and third.

In much the same way entertainment technology has changed over the past 100 years – from phonograph records to tapes to compact discs to MP3 players – agriculture also has developed and changed. The key to maintaining the various sectors of a changing industry is to stay on top of marketing trends. For instance, fast food restaurants that were not a big buyer of fresh produce five years ago have had to adapt to the nation's desire to eat healthier. Today, for example, the McDonald's restaurant chain is one of the largest buyers of the nation's apple crop as it has introduced fruit salads into its menu options.

Advancing technology brings opportunities like renewable fuels. Corn and soybean farmers who grew those crops for sale as feed five years ago now have the chance to sell them to the manufacturers of ethanol and bio-diesel, as alternative fuels become a viable option to the rising cost of fossil fuels. In New Jersey, it is the farm community and the Department who are leading the way toward these future markets. Farmers who produce the feed stocks for such fuels also have a part in the ownership of the production process.

Clearly, the Department and the state can play a proactive role in working to implement food and agriculture development strategies that help our industry keep pace with changes in the marketplace.

Objectives & Strategies

Develop new growth opportunities to help agriculture meet the needs of a changing marketplace.

- Identify new emerging trends in agricultural markets and develop new markets each year.
- Work cooperatively with state agencies to facilitate and promote infrastructure and market opportunities like renewable fuels, food-processing facilities and farm markets.
- Implement the economic development strategies endorsed by the State Agricultural Convention as part of the Department's industry-building efforts including: broadening the Jersey Fresh promotion effort to include organic, horticulture, aquaculture and other New Jersey-grown products, as demonstrated by the recent launching of the Jersey Grown and Jersey Seafood brands.
- Increasing consumer awareness of the benefits of buying locally produced agricultural products, and identifying new markets for New Jersey products and potential venture funding mechanisms for agribusiness entrepreneurs.
- Strengthen existing markets by working with them to upgrade facilities and coordinate promotional efforts.
- Work to develop facilities that can refine the region's production of corn, soybeans or waste stream products into renewable fuels like ethanol, bio-diesel and bio-gas.
- Continue to work with Rutgers University's Cook College to continue demographic research into the ethnically diverse marketplace of the Northeast corridor and develop new products to meet the needs of the marketplace, including those of residents in urban centers.
- Continue to collaborate with the New Jersey Agricultural Experiment Station's food innovation center and Rutgers Cooperative Extension to launch proactive and innovative programs and activities that address new

Five Components of the Agricultural Smart Growth Plan

- Farmland Preservation
- Agricultural Land Use Planning
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opportunities and technology and the needs of the agricultural and food industries.

- Continue to improve the nutrition of New Jersey's citizens through programs such as Healthy Choices, Healthy Kids, WIC (Women, Infants, and Children), and the Seniors Farmers Market Nutrition Program.

- Explore funding options to advance the

development and expansion of agricultural facilities and infrastructure systems.

- Use food mapping – a tool to identify gaps in the food distribution system – to identify new markets for New Jersey's farmers and educate consumers about the source of their food.

Municipalities and counties with significant agricultural resources should incorporate agriculture into their economic development plans.

- Include agricultural representation in local and regional business organizations and economic development agencies.
- Integrate agriculture into traditional business support systems.
- Engage local Chambers of Commerce and associated organizations to develop a Community Supported Agriculture (CSA) program that links growers with local buyers and residents.
- Work with the Office of State Tourism to promote agri-tourism and eco-tourism activities to support the farm economy by allowing farmers to benefit from additional sources of income.
- Coordinate historic preservation, open space and recreation efforts with agricultural preservation/retention efforts.

Healthy Choices, Healthy Kids

Q. What is it?

A. A statewide initiative to combat childhood obesity and improve academic performance by promoting better nutrition and physical activity in schools.

Q. What agencies are involved?

A. The departments of Agriculture, Education and Health and Senior Services.

Q. What's the Department of Agriculture's role?

A. Developed a model school nutrition policy that sets standards for fat and sugar content; providing training on incorporating more fruits and vegetables into the school meal program, and continue working with Rutgers University to implement a Farms to Schools program.

- Create economic development incentives and include flexible land use regulations to support the expansion of food and farm-related businesses.
- Use the Strategic Targeting Project priority areas to identify locations for agricultural support businesses.

The State can spur municipalities and counties to develop agricultural development plans by launching efforts that provide farmers with the resources they need to remain as viable businesses in their communities. This can be accomplished by the establishment of an Agricultural Development Initiative that could include an agricultural innovation fund to be used for the marketing and development of the food and agriculture industry. Ways the fund could help farmers combat rising production costs include:

- Provide equity investment capability to fund large-scale projects
- Provide a revolving loan fund, allowing farmers and food industry entrepreneurs to obtain low-interest loans to fund projects that would expand or create new markets
- Provide a loan guarantee program
- Act as leverage for federal cost-share programs

In addition, the Agricultural Development Initiative could include:

- Promoting the development and use of Green Energy, such as solar, wind, ethanol, bio-diesel and bio-gas technologies
- Creating labor resources, including training for producers, farm management and workers to improve productivity while maintaining a manageable bottom-line.
- Strengthen New Jersey brands by increasing the budget for *Jersey Fresh*, *Jersey Grown* and *Jersey Seafood* promotional programs

In order for agriculture to be successful in New Jersey, it must be economically viable. Looking ahead for new and emerging markets, as well as alternative uses for products already grown in the state, is just as important as preserving farmland. The

diversity of New Jersey's agricultural products, coupled with the state's close proximity to major markets, creates a foundation for continued success for New Jersey's third largest industry. Key to this success will be the commitment from municipalities, counties and other state agencies to incorporate agriculture into their economic development efforts.

NATURAL RESOURCE CONSERVATION



As stewards of the land, farmers must protect the quality of our environment and conserve the natural resources that sustain it by implementing conservation practices that improve water quality, conserve water and energy, prevent soil erosion and reduce the use of nutrients and pesticides.

Overview

Soil. Water. Energy. Little could grow without them.

That is why protecting and conserving these and other natural resources should be a priority of all who live and work in New Jersey, including farmers. This is not a new idea for New Jersey or the nation. Since 1935, when the Soil Conservation Act was passed - during the worst of the Dust Bowl - this country has recognized the importance of the land and its relation to the overall well being of the nation.

Various state and federal programs have been initiated to protect natural resources. The programs have evolved over the years to take advantage of advances in agricultural practices.

The New Jersey Department of Agriculture helps to protect the state's soil health, water quality and related natural resources through the stewardship efforts of its natural resource conservation program. This program offers technical, financial and regulatory assistance and provides educational outreach to landowners throughout the state.

In addition to the Department's program, a variety of other federal and state programs exist to provide technical and financial assistance to landowners for the conservation, protection and improvement of soil, water, air, and related resources.

A number of programs provide assistance to eligible landowners to address wetlands, woodlands, and wildlife habitat. A few of the voluntary programs even provide payments to producers who have historically practiced good stewardship on their land and provide incentives to those who want to do more.

The 2002 Farm Bill also provided funding for the Environmental Quality Incentives Program (EQIP), which provides technical, financial and educational assistance to farmers for conservation practices that address natural resource concerns. However,

Soil and Water Conservation Projects

In the past four years, the State Agriculture Development Committee approved 350 cost-sharing grants totaling \$4.5 million to assist landowners in implementing soil and water conservation projects on farms that are permanently preserved or enrolled in eight-year programs. The Committee last year increased its cost-share from 50 to 75 percent of costs to provide even greater incentive for landowners to undertake these projects. Eligible projects include those designed to control and prevent soil erosion and sediment damages; control pollution on farmland; impound, store and manage water for agricultural purposes; or improve management of land and soils to achieve maximum agricultural productivity.

federal funding has not provided the much-needed technical and engineering assistance for conservation planning and design.

Therefore the New Jersey Department of Agriculture has organized the 2007 Farm Bill Work Group. The Work Group's mission is to assess the needs of New Jersey's high value agricultural industry and develop recommendations that influence the enhancement of programs that support New Jersey and the Northeastern region as the federal representatives develop the 2007 Farm Bill.

One area of focus of the 2007 Farm Bill will be a greater emphasis on identifying barriers that impact participation in programs and determine where outreach is needed. The Department will also ask that the next Farm Bill address the need for new or revised conservation plans and the ability to provide the technical support required for their development and implementation. Focus will also be placed on identifying the engineering assistance required to develop animal waste management systems for larger animal operations and assist entrepreneurs who may utilize and market end products.

In 1999, the New Jersey Department of Agriculture established three regional Agricultural Conservation Service Centers and provided annual funding for technical and engineering assistance in order to reduce backlogs and meet new application demands.

The Department is working in conjunction with the Natural Resources Conservation Service to continue to provide and enhance these service centers and has hired staff in order to provide the necessary technical assistance staff and to farmers.

In addition to the NRCS support, the Department has hired two Conservation Specialists to provide one-on-one technical assistance to farmers. These individuals work out of existing NRCS offices and provide proactive educational and outreach services about existing state and federal conservation programs that are available and assist them with the development and implementation of farm conservation plans.

Outside of the Farm Bill programs, the Department, the New Jersey Department of Environmental Protection and USDA's Farm Service Agency jointly developed a Conservation Reserve Enhancement Program (CREP) proposal. New Jersey's program seeks to enroll 30,000 acres of agricultural lands into conservation practices that will improve the quality of runoff from these lands.

This program encourages farm owners to voluntarily implement conservation practices on their land by offering financial incentives. The program provides a 10-year enrollment period and targets the installation of riparian buffers, filter strips, contour buffer strips and grass waterways. Farmers will be able to enroll their land in the Conservation Reserve Enhancement Program by installing conservation practices under 10-15 year rental agreements and/or permanent easement contracts. Even though the program is still in its infancy, to date 79 landowners throughout the state representing over 550 acres have enrolled in the CREP programs.

Of the 2.1 million acres of forested land in New Jersey, 1.3 million are privately owned, 326,000 are owned by the state and 73,000 are federally owned. The remainder are owned by other public entities. Combined, forested land and productive farmland account for more than 60 percent of New Jersey's land base.

Forestlands are often components of larger traditional agricultural operations, but are also considered to be a form of agriculture on their own. Like other forms of agriculture, woodlands require management strategies to continue to provide income to the landowner while ensuring the protection and preservation of other vital resources, including clean surface water, adequate groundwater supplies, and soil retention.

Recent droughts have sensitized farmers to the need for adequate farm water supplies, efficient water conservation irrigation systems and an irrigation water management regimen that reduces unnecessary water use. Although agriculture accounts for a small portion of the state's total water use, the availability of an adequate and sustainable water supply for agricultural purposes is becoming more problematic.

Competing user demands and limitations in critical water supply areas only exacerbate this problem. The Department is working with Rutgers Cooperative Extension, the Natural Resources Conservation Services, the United States Geological Survey, the New Jersey Department of Environmental Protection and the farm community to assess the water needs of agriculture and to assist in the development of essential rules, policies and guidelines to ensure an adequate water supply to meet the current and future needs of the agricultural industry.

Finally, as part of a national Clean Water Action Plan, the U.S. Department of

Agriculture and the U.S. Environmental Protection Agency have proposed a unified national strategy for addressing water quality concerns on animal farm operations. At the request of the U.S. Environmental Protection Agency, the New Jersey Department of Environmental Protection prepared a statewide strategy outlining how Concentrated Animal Feeding Operations (CAFOs) and Animal Feeding Operations (AFOs) will be managed and/or regulated.

The strategy, under existing legislative authority and through cooperative agreements, calls for the state Department of Environmental Protection to administer the required permits for CAFOs and the New Jersey Department of Agriculture to administer the appropriate measures for AFOs. A CAFO general permit is now available through the Department of Environmental Protection.

The primary requirement of the permit is the development and implementation of a comprehensive waste management plan. The Department of Agriculture is developing an animal waste program with criteria and standards for the proper disposal of animal wastes, including the waste generated from aquaculture. This program will emphasize the use of cost-effective voluntary measures and limit the need for permits, primarily through the implementation of self-certified animal waste management plans.

Through these numerous efforts coordinated between the state and federal levels, New Jersey's agricultural community is proving itself to be an important player in protecting our state's natural resources. Clearly, there is more work to be done, and the agricultural community has shown initiative in pursuing alternative energy sources, such as solar, wind and bio-gas in running farm operations, and by being a leader in the pursuit of ethanol and bio-diesel fuel markets.

Objectives & Strategies

Farmers should prepare and implement farm conservation plans to address total natural resource concerns, including those related to soil, water, air, and other natural resources.

They can also become more involved in storm water management, environmental restoration and sustainability. In addition to their statutory regulatory functions, Soil Conservation Districts can provide important technical assistance and engage in greater public outreach in these areas and in the development and implementation of healthy soil management strategies.

Five Components of the Agricultural Smart Growth Plan

- Farmland Preservation
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- **Natural Resource Conservation**
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- Provide outreach information to ensure farmers take full advantage of all federal and state conservation programs and to educate them about the benefits of having and implementing farm conservation plans and participating in agricultural conservation programs.
- Work with the Natural Resources Conservation Service and the Soil Conservation Districts to ensure that an adequate technical assistance delivery system is in place to meet the anticipated demand for conservation cost-share funding under the current 2002 Farm Bill, future 2007 Farm Bill and other federal and state conservation programs.
- Re-examine the role of the 15 Soil Conservation Districts to restore and expand their traditional duties with respect to natural resource conservation. Soil Conservation Districts can play key roles in planning, managing and monitoring the growing inventory of public open space, including publicly acquired farmland.
- Promote and assist in the development of farm conservation plans for all agricultural operations.
- Continue the development of the comprehensive animal waste program that provides for the proper disposal of animal wastes, including the waste generated from aquaculture, to guide the development of farm conservation plans for livestock operations.

- Continue to aggressively implement the Conservation Reserve Enhancement Program in New Jersey to allow for the creation of riparian buffers and appropriate improvements to protect and improve water quality.
- Work cooperatively with the Department of Environmental Protection and the Natural Resource Conservation Service to seek and establish incentives for farmers who implement forest management plans.
- Explore and expand the use of beneficial insects and other biological controls to reduce the use of chemical pesticides.
- Ensure that agricultural water needs are adequately considered and met on a long-term and sustainable basis.
- Work in conjunction with the Department of Environmental Protection to update New Jersey's Water Supply Master Plan in order to identify the water needs of farmers. Represent agricultural interests on the Water Supply Advisory Council, the Public Advisory Committee and its subcommittee to ensure water and agricultural needs are met not only for today's farmers, but to sustain future agricultural operations.
- Encourage and work to accelerate the use of efficient water conservation technologies, such as drip irrigation. Identify and promote new and efficient methods to conduct water distribution on farms, utilizing farm ponds and water reuse options.
- Develop accurate data regarding agricultural water use by using GIS technology to maintain an agricultural water use database and track information on water use by location, types of systems and crops.
- Continue to work with the New Jersey Department of Environmental Protection to streamline the water certification and registration process that is now available online on the Department of Environmental Protection's website.
- Promote the use of innovative technologies, recycling, energy conservation and renewable energy systems on New Jersey's farms.

- Examine the solid waste stream generated by the state's food and agricultural operations and determine the feasibility of expanding the Department's existing recycling program.
- Promote, provide technical assistance for and inform the agricultural community about new and existing energy conservation and renewable energy programs by promoting the financial and environmental benefits of implementing these programs.
- Promote the use of current technology systems utilizing precision agriculture to reduce inputs and increase productivity on farms.

To protect the state's natural resources is to also protect the state's agricultural industry. Few would argue about the importance of an abundant supply of clean water and clean soil to maintaining a viable agriculture. Preserving farms and planning for growth are key to maintaining the industry, but what kind of industry would there be without the natural resources to sustain it?

Through the use of conservation practices and through policies and programs at the state, county and local levels, New Jersey can ensure that natural resources will remain available to sustain not only the state's agricultural industry, but all who live and work in the Garden State.

AGRICULTURAL INDUSTRY SUSTAINABILITY



Creating an environment that supports the agricultural industry at the municipal, county and state levels demonstrates that agriculture is a preferred land use in New Jersey and encourages the retention of thriving and diverse farming operations. Educating the next generation of farmers, welcoming newcomers and ensuring the safety and well-being of today's farm workers are critical components of maintaining a profitable, strong agricultural industry poised for a bright future.

Overview

Sustaining a profitable, technologically advanced agricultural industry ensures that Garden State residents will continue to have access to an abundant supply of locally grown food and agricultural products.

Preserving the land base is the initial step. The next is ensuring the farmer can continue to work profitably on the land.

A thriving industry is largely dependent upon, education, public policies, including laws, rules and programs that are tailored to meet the agricultural industry's unique needs. At the same time, the industry must have access to a well-trained and educated workforce to be successful.

In addition, while the general public appreciates the products of New Jersey's agricultural industry, many may not understand the process that brings fresh eggs to their breakfast tables, apples to their children's lunches and corn to their summer barbecues.

The public must recognize that commercial agriculture is first and foremost a business – a business that may create noise and odors or generate traffic from delivery trucks and tour buses. The existence of viable farms and agricultural operations – and therefore the open space New Jerseyans enjoy – is largely dependent upon the business' ability to operate profitably.

Agriculture must be recognized as a priority by state and local leaders when making policy decisions regarding taxation, regulations, financial incentives and educational opportunities.

Tax incentives, such as the Farmland Assessment program, keep land in farms by reducing the property tax on active farmland. However, this incentive program does not apply to farm structures, such as barns and storage facilities, and farmsteads. Abatements and exemptions that encourage farmers to maintain their buildings in good working order

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and do not penalize them for renovating or replacing old or unsafe structures can benefit not only the farmer, but the entire community.

Regulatory programs, such as the New Jersey Department of Environmental Protection's Water Allocation Program, give special consideration to the industry's water needs and provide for a separate certification and registration process.

Financial incentives, such as the income averaging legislative proposal introduced in March 2003, help stabilize a farmer's bottom line by recognizing the high-risk, cyclical nature of agriculture. Under income averaging, New Jersey farmers can average out yearly gains and losses over a four-year period to even out their tax liability.

Just as important is New Jersey's Right to Farm Act, which provides eligible farmers who operate responsibly with protection from overly restrictive municipal ordinances, and public and private nuisance actions. The Act, the strongest in the nation, provides increased protection to those farmers who operate in accordance with agricultural management practices that have been adopted by the State Agriculture Development Committee.

The Act gives primary jurisdiction in resolving complaints against agricultural operations to County Agriculture Development Boards, and ultimately to the State Agriculture Development Committee if decisions of the County Boards are appealed. The Committee also offers a voluntary mediation program that disputing parties can use instead of going directly to court and has the authority to review municipal actions in Agricultural Development Areas to determine their potential impact on agricultural operations.

Still, right-to-farm conflicts are typically the number one concern of farmers. Many people want to live near a farm to enjoy the rural character it provides. However, once they move in they often discover that rural character means more than pretty open spaces and traditional, small-town values. Rural character includes tractors on local roads, odors and early morning noise.

As the New Hampshire Office of State Planning points out:

"Everyone wants the calendar-photography scenes of rural character, but along with the pretty side of rural character comes a gritty side."

That gritty side can create conflict between farmers and neighbors and often municipal governments who don't understand the business of agriculture.

Many people don't want to see or live near farm worker housing. Neighbors and municipal leaders often would prefer acres and acres of open fields rather than greenhouses. Municipal officials sometimes enact overly restrictive ordinances that can hamper a farmer's ability to run a profitable farm market operation.

With increased pressures from local development, agricultural operators need a strong commitment from their municipalities. The most effective right-to-farm support must occur at the municipal level. Municipal right-to-farm ordinances that are consistent with the state's model indicate to residents that the local community supports agriculture as an industry and a land use.

In addition to right-to-farm ordinances, state, county and municipal regulations must also be sensitive to the needs of farmers. Small changes to or exemptions from certain regulations can protect agricultural operations from unnecessary costs and create a farmer-friendly environment.

State, county and local officials must be conscious of farm machinery when planning road improvements to ensure that farmers can move efficiently on local roads. One way to address this is through the delineation and special consideration of commonly traveled agricultural routes. Local officials need to be aware of changes to building and tax codes as well as fees as they relate to agricultural operations.

Counties and municipalities must also be sensitive to the negative economic impacts caused by excessive wildlife populations and support the federal, state, and local efforts to minimize the damages.

Some municipalities may take advantage of the variety of grant and loan programs offered by the U.S. Department of Agriculture's Rural Development program. Grants and loans are available in three key areas: Rural Business-Cooperative Service, Rural Housing Service and Rural Utilities Service. Unfortunately, many of New Jersey's rural municipalities may not qualify for many of the programs offered because most are unavailable to cities with more than 50,000 residents or municipalities with more than 10,000 residents. While the population criteria for these programs may make sense in a large portion of the country, they do not make sense for New Jersey.

Efforts are underway to reevaluate specific program criteria to make these programs available to New Jersey's rural communities, especially the regional centers serving the state's most rural regions.

It is also important farmers understand and participate in the U.S. Department of Agriculture's risk management programs to insure their operations against potential losses. The New Jersey Department of Agriculture, in conjunction with the U.S. Department of Agriculture, conducts farm risk management and crop insurance education programs to assist farmers in understanding what assistance is available to reduce agricultural risks.

Understanding and addressing the labor needs of the industry are also critical to sustaining viable farming operations. Without an adequate labor supply, crops cannot be harvested, livestock cannot be properly cared for, and the agricultural industry cannot continue to provide food for our tables.

The supply of farm laborers must meet demand.

When U.S. workers are unavailable to meet the demand, employers traditionally look to foreign workers for relief. Currently, nonimmigrant foreign workers can be employed temporarily in agriculture under specific provisions of the Immigration and Nationality Act. However, this process has its own set of limitations that make it unworkable for many agricultural employers.

In this effort, federal lawmakers introduced AgJOBS – the Agricultural Jobs, Opportunity, Benefits and Security Act of 2003. AgJOBS supports much needed reforms to the guest worker visa program (H-2A) and also allows for the short-term, on a one-time basis, workers with a significant work history in American agriculture to stay in the United States legally and earn adjustment to legal status.

Although vital to agriculture, hired farm workers continue to be one of the most economically disadvantaged groups in the United States, with low wages, seasonal employment and limited participation in the non-farm labor market. More can be done to ensure a well-trained farm labor workforce and to improve farm worker living and working conditions.

Housing and training opportunities need to be considered. Quality housing, along with an educated workforce, will improve the quality of life for farm workers and enable them to perform even more efficiently.

A comprehensive, ongoing worker safety program is also critical to improving working conditions and retaining experienced workers. Farm owners and employees need to implement proper safety measures to prevent injury and death. Ongoing worker training includes lessons on: Safe handling of pesticides; safe handling of power tools; safe operation of farm vehicles, and appropriate emergency response protocols.

From training the farm worker to equipping future agriculturalists to lead and manage the state's food, agricultural and natural resource industry, agriculture education takes on many forms.

High school agriculture, food and natural resources education programs provide classroom laboratory instruction, work-based learning, and career and leadership development for FFA members and other students considering one of over 300 careers in the science, business and technology of agriculture.

The national Agriculture in the Classroom program helps to make K-12 students aware of the importance of agriculture. 4-H is an informal, practical educational program for youth, while the New Jersey Agricultural Society's Agriculture Leadership Program provides young professionals in agriculture with leadership development skills and opportunities. While these programs are valuable, it is imperative they are coordinated to eliminate duplication of effort and to maximize educational opportunities for New Jersey's next generation of agricultural managers and leaders while providing yet another tool to welcome new people into agriculture.

Bringing Classroom Agriculture Alive

Hans Toft has gone down to Great Sound every day for the past 35 years. Each day he learns something new. That is what he is passing on to his Agriculture and Natural Resources students at Cape May County Technical School.

More than 1,000 students have passed through Toft's classroom over three decades, and in the past 10 years the program has turned toward aquatic farming – or aquaculture, the growing of fish and shellfish. Students learn to grow and catch clams and oysters, grow tilapia and trap crabs.

"It is important that students understand their connection with the land and the water," said Toft. "They are better able to understand that connection when they grow and then eat their food. When they know where their food has come from they can see that they must help keep the water and the land clean."

More than 2,200 students in 46 school districts around the state are enrolled in agriculture, food and natural resource education programs. The programs consist of three parts: class/lab instruction, field work, and FFA, a national youth organization, which prepares its members for leadership careers in science, business and technology of agriculture.

For agricultural education programs to be effective, it's important the industry's leadership and employment needs are identified and communicated to decision makers and educators preparing young people for careers in agriculture. Students need to be ensured of new opportunities and seamless transition from secondary to post secondary education programs in Agriculture, Food and Natural Resources.

Educational programs in agriculture must be offered as an optional and viable opportunity for the youth and adults of New Jersey who are interested in pursuing such careers. Education in agricultural production and business practices for those currently involved in agriculture is just as important as programs for those who have an interest in changing to or initially choosing a career in agriculture.

Objectives & Strategies

Create an environment that is supportive of agriculture to maintain the profitability of the industry.

- Sustain tax incentives like Farmland Assessment to keep land in farms, and encourage the development or extension of other abatements and exemptions for the agricultural industry.
- Recognize agriculture as a priority when making policy decisions regarding regulations, taxation and financial incentives at all levels of government.
- Develop agricultural management practices for agri-tourism, farm markets, greenhouse operations, equine operations and other activities as needed to ensure Right to Farm Act protection for these operations.
- Provide additional and continuing outreach to better equip County Agriculture Development Boards and encourage counties and municipalities to participate in the Agricultural Mediation Program when right-to-farm disputes arise.
- Work with all levels of government to create and advocate for appropriate public policies that support the food and agricultural industry.
- Work with producers and farm managers to help them best make use of risk management tools such as crop-loss insurance.
- Encourage municipalities with significant agricultural resources to adopt a Right to Farm ordinance that provides the same level of protection as the state's model, including regular notices to all residents and landowners.
- Work with the Department of Environmental Protection's Fish and Wildlife Program, counties and municipalities to implement wildlife control strategies on privately and publicly owned land.
- Promote and develop tools that municipalities and counties can use to strengthen and support agriculture.
- Investigate potential innovative tax incentive programs to enhance preservation efforts and coordinate conservation initiatives.

- Coordinate public outreach activities among various agricultural organizations, such as New Jersey Farm Bureau and Rutgers University's Cook College, to educate New Jersey residents about the business of agriculture and the need to maintain a vibrant agricultural industry in order to retain farmland.
- Encourage adoption by the New Jersey Legislature of income averaging legislation introduced in March 2003

Examine and address farm labor training and housing needs.

- Work with the U.S. Department of Agriculture's Rural Development program to reexamine program criteria to enable New Jersey's rural communities to qualify for more programs.
- Link neighborhood revitalization efforts with housing opportunities for farm workers and, where appropriate, establish on-farm housing, to ensure a safe and stable workforce.
- Develop and promote comprehensive and ongoing training opportunities for farm workers.
- Work with the New Jersey Department of Labor, Rutgers Cooperative Extension and others to provide farm safety training.
- Join other agricultural stakeholders in supporting ongoing efforts at the federal level to streamline and modernize the immigration process.

Equip the next generation to lead and manage the industry and welcome new people into agriculture.

- Collaborate with Cook College and Rutgers Cooperative Extension to promote research and provide training and educational programs for New Jersey agriculture professionals and educators.
- Promote professional development training for high school agriculture teachers.
- Work with the USDA and Farm Credit in promoting and implementing new-farmer programs.

Support the State Agriculture, Food and Natural Resource Education program as it seeks to enhance local program delivery of classroom/laboratory instructions, structured learning experience and FFA.

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- Promote educational programs that train and equip people for careers in natural resource conservation and the food industry.
- Provide program improvement grants for secondary agricultural education programs.
- Identify educational, financial and support opportunities for small farmers, new farmers and farmers with limited resources.
- Create and promote labor training programs focusing on increasing the productivity of the farm workers, managers and producers.
- Support efforts by Rutgers Cooperative Extension to educate small farm owners and support small farm operations.
- Promote the U.S. Department of Agriculture's Farm Service Agency program for limited resource farmers.
- Create opportunities to welcome newcomers into the agricultural industry.
- Promote Advanced Agricultural Science Education to serve greatest needs of student population.
- Strengthen and build new partnerships between Cook College and all secondary approved agricultural, food and natural resources education programs.

By creating an environment that is supportive of agriculture, addressing the needs of farm laborers and equipping the next generation to lead and manage the industry, New Jersey demonstrates its commitment to agriculture as a business and not just a source of pretty open space. Strategies to sustain the industry married with preservation and planning efforts, strong educational programs, economic development activities and natural resource conservation practices, position New Jersey agriculture for a profitable, strong and bright future.



CONCLUSION

“Agriculture contributes to the quality of life in our communities in many ways, providing natural buffers against sprawl, enabling us to enjoy fresh, locally grown food and other farm products, and helping to ensure a traditional way of life for current and future generations of hard-working farm families. By preserving our farms and ensuring that agriculture is profitable, we can retain our farms and keep our farmers on the land.”

Agriculture Secretary Charles M. Kuperus,

January 2003

This Agricultural Smart Growth Plan provides realistic and practical approaches to ensuring that as New Jersey continues to grow, its agriculture industry remains strong.

It details the contributions productive farmland makes to the quality of life for Garden State residents and outlines the critical role agriculture plays in the state's smart growth efforts.

This plan provides the basic framework for planning for agriculture at all levels and establishes common principles to be used to guide preservation and development activities throughout the state.

Chief among these principles is the importance of maintaining land values for New Jersey's farmers.

This Agricultural Smart Growth Plan needs to be embraced and implemented by the agriculture community in its entirety. Ensuring the industry's continued success is a collaborative effort, already supported by the successful open space referendums in more than 200 municipalities and counties statewide.

New Jersey is proud to be the nation's leader in farmland preservation, but we cannot depend on that alone to keep the agriculture industry strong and viable. We must plan for the needs of our communities and recognize the agricultural industry's important role in maintaining a balance that enhances the quality of life in New Jersey and across the region.

By considering agriculture as a key component of its overall Smart Growth Plan, New Jersey can take a leadership role in the national fight against sprawl. Understanding how a viable and productive agricultural industry is integral to all regions of the state – urban, suburban and rural – is an important first step in that effort.

It is hoped that this plan may be used as a starting point for agricultural leaders in neighboring states to embark on a collaborative and cooperative process to develop a similar plan for the entire Northeast region.

We all rely on a strong food and agriculture industry. By preserving our farmland and helping our farmers achieve economic success, we can retain our farms and the quality of life in our communities, and position the industry for a bright future.