

CHAPTER 6: NATURAL RESOURCE CONSERVATION

There are numerous entities, both public and private, which administer, fund, and provide technical guidance for Hunterdon County farmers relative to natural resource conservation. These entities are in place to assist farmers with natural resource conservation issues, and are assets for farmers to assist in the management of the land and water upon which their farms depend.

Natural Resources Conservation Service

Farmers, Ranchers, and other conservation-minded agricultural producers, rely on the NRCS for assistance through conservation programs and technical information to help them protect the natural resources on their land. Since 1935, the Natural Resources Conservation Service (originally called the Soil Conservation Service) has provided leadership in a partnership effort to help America's private land owners and managers conserve their soil, water, and other natural resources. NRCS employees provide technical assistance based on sound science and suited to a customer's specific needs. They provide financial assistance for many conservation programs. Their science and technology activities provide technical expertise in such areas as animal husbandry and clean water, ecological sciences, engineering, resource economics, and social sciences. They also provide expertise in soil science and leadership for soil surveys and for the National Resources Inventory, which assesses natural resource conditions and trends in the United States.

The local NRCS office serving Hunterdon County is located in Franklin Township. Hunterdon County farmers may utilize this local NRCS office for technical assistance with conservation issues. NRCS will also reach out directly to landowners if they know of a farmer who is in need of assistance, or can use the guidance of the NRCS staff. The local NRCS office also helps to prepare Conservation Plans for Hunterdon County farmers. An approved Conservation Plan is required to be in place within one year of signing the deed of easement for those farmers who sell a development easement via any state farmland preservation program, or apply for natural resource conservation program grants such as the WHIP and EQIP. The local NRCS office administers these conservation program grants, which offer financial incentives to support Conservation projects, including stream riparian buffers and wildlife habitat.

Soil Conservation Districts

The Hunterdon County farm community is served by the Hunterdon County Soil Conservation District (SCD) located in Franklin Township.

Some of the technical services that the SCD provides Hunterdon farmers include animal waste management, design and construction of erosion control structures and Intergrated Pest Management.

Hunterdon County Farmers who are interested in developing farm conservation plans apply to local Soil Conservation Districts, which assist in developing farm conservation plans and ensure projects are necessary and feasible. Applications are forwarded to the N.J. State Soil Conservation Committee, which recommends projects to the SADC for funding approvals. The Hunterdon County Soil Conservation District gives final approval on all Conservation Plans and program contracts.

Within one year of the signing of the Deed of Easement on a Preserved Farm through the County Easement and Municipal PIG programs the landowner must obtain an approved Farm Conservation Plan from the Hunterdon County SCD.

Although an approved Conservation Plans within a year of the preservation of a farm is

required for all farmland preservation programs, implementation of the plan is not mandatory. According to the Hunterdon County SCD, approximately 25% of these plans are implemented. Although the services of the NRCS for the implementation of the Conservation Plan is cost free to the farmer, the services of the SCD may be needed to complete the implementation of the plan and this work is billable as the SCD is a separate entity from the NRCS. Funding for approved soil and water conservation projects are available from the SADC for up to 50% reimbursement. The farmland preservation program has an ongoing program that ensures annual monitoring of preserved farmland. In Hunterdon County, the Soil Conservation District handles this responsibility. The District routinely monitors the preserved farms once a year to ensure compliance with the deed of easement due to the manpower involved. The SCD then reports back annually to the CADB with the status of all property.

Natural Resource Protection Programs

Listed below are several natural resource protection programs available for Hunterdon County farmers. Announcements are made during CADB meetings to discuss availability of funding for the below programs as money is made available.

SADC Soil and Water Conservation Grant Program

This program provides grants to eligible landowners to fund up to 50 percent of the costs of approved soil and water conservation projects. There has been a lack of available funding for this program that has corresponded with the lack of funding

Federal Conservation Programs

Environmental Quality Incentive Program (EQIP): This program provides technical, financial, and educational assistance to farmers/producers for conservation practices that address natural resource concerns, such as water quality. Practices under this program include integrated crop management, grazing land management, well sealing, erosion control systems, agri-chemical handling facilities, vegetative filter strips/riparian buffers, animal waste management facilities and irrigation systems.

Conservation Reserve Enhancement Program (CREP): Under CREP, farmers voluntarily remove cropland along streams, lakes and wetlands from agricultural production and convert the land to native grasses, trees and other vegetation to provide buffers. These conservation buffers slow and absorb runoff, sediment, nutrients, and chemicals from cropland while also creating beneficial wildlife habitat for many species in need.

Farm and Ranch Lands Protection Program (FRPP): The Farm and Ranch Land Protection Program provides matching funds to help purchase development rights to keep productive farm and rangeland in agricultural uses. Working through existing programs, USDA partners with State, tribal, or local governments and non-governmental organizations to acquire conservation easements or other interests in land from landowners. USDA provides up to 50 percent of the fair market easement value of the conservation easement. The preservation of several Hunterdon County preserved farms have been partially funded through this program.

Other Programs

The **Rutgers Cooperative Extension Service** continues to assist Hunterdon's farmers in facing the challenge of operating a business in a heavily regulated environment, while enhancing market potential and using integrated management systems that help provide for environmentally sound best management practices.

New Jersey Department of Environmental Protection administers the **Landowner Incentive Program (LIP)**. This program is designed to help landowners improve, manage and protect the habitat on their property for threatened and endangered species. This allows the NJDEP to ensure that some agricultural lands are utilized for the protection of threatened and endangered species. Many Hunterdon County farmers utilize delayed mowing schedules to allow for the creation of ideal habitat in the off-growing season.

Wildlife Habitate Incentives Program (WHIP) provides technical and financial assistance for creating, enhancing, and maintaining wildlife habitat. The State Technical Committee for WHIP in New Jersey awards project contracts for designated wildlife habitat categories. Since its inception in 1998, WHIP has been a popular program for non-federal landowners interested in wildlife habitat management in New Jersey. (*NRCS Conservation Programs*)

North Jersey Resource Conservation & Development Council (RC&D), in partnership with the Natural Resources Conservation Service, Rutgers Cooperative Extension, County Soil Conservation Districts, and the NJ Department of Agriculture has successfully leveraged federal monies to help farmers employ land management practices that reduce chemical inputs without compromising yields.

Farmers in Hunterdon County have also received technical and financial assistance through provisions in Farm Bill Legislation and the Conservation Technical Assistance Program.

Water Resources

Supply Characteristics

With the onset of prolonged periods of dry weather and reduced rainfall over the last decade, water supply conditions have become an increasingly important statewide concern. Hunterdon County's drinking water supply comes from surface and ground water sources. More than 70% of the households in Hunterdon County depend on ground water from individual wells for their water supply. In addition to individual residential wells, there are permitted public-community wells as well as non-community wells (for example, schools, offices, restaurants, institutions, etc.).

According to the New Jersey Statewide Water Supply Plan (NJSWSP, August 1996), Hunterdon County has a total water supply availability of 117 million gallons per day (MGD). This includes 66.7 MGD from surface water supplies (most of which is transferred out of the county via the D&R Canal) and 50.3 MGD of ground water supplies for in-county use. New figures, both on availability and current and projected water use should be included with the release of the next statewide Water Supply Plan. The Round Valley and Spruce Run Reservoirs are two additional water supplies located in Hunterdon County, with a storage capacity of 55 and 11 billion gallons respectively, making them two of New Jersey's largest reservoirs.

New Jersey's farmers face increasing water supply restrictions. The present water demands of



agriculture represent approximately 6% of the total water demand in the state. Although residential water supply and potable water quality continue draw the attention of the media, the long-term water needs of New Jersey's agricultural community must be equally considered during the Water Supply master planning process.

Agricultural Demand & Supply Limitations

Recent agricultural trends in Hunterdon County tend towards higher water use for irrigation as well as increased use of temporary and permanent greenhouses. Both uses contribute to loss of ground water recharge. Water allocation is a rising problem as well within the county. With the increasing growth that the county is seeing there is potential for water resources to become scarce.

Conservation & Allocation Strategies

The draft 2007 County Growth Management Plan recommends that the County Agriculture Development Board works with agricultural organizations and those that work with the farm community such as the Hunterdon County Board of Agriculture and North Jersey RC&D to promote funding opportunities for agricultural water conservation practices, such as the federally funded EQIP program and Conservation Reserve Program.

In addition, Hunterdon farmers have worked with various agencies to help to improve water quality in our streams. North Jersey RC&D, in partnership with the Natural Resources Conservation Service, Rutgers Cooperative Extension, County Soil Conservation Districts, and the NJ Department of Agriculture has successfully leveraged federal monies to help farmers employ land management practices that reduce chemical inputs without compromising yields. By 1999, some 14,000 acres, including acreage in Hunterdon County, were using best management practices on their lands through this program, such as advocating water re-use where practical, the use of drip irrigation to minimize water waste, contour and no till farming and as well as other techniques designed to minimize pesticide use. The draft County Growth Management Plan recommends that these success stories need to be actively marketed.

Although in past years, Hunterdon County farmers had relatively few problems having their water allocation requests approved, recently there has been a trend towards reduced allocations. There have also been some additional delays in getting permits approved by the NJDEP. The trend in Hunterdon County is for more intensive, irrigation dependent such as Nursery and specialty crop operations. There are some recent concerns that farmland viability may be impacted by this recent pattern of reduced water allocation and additional delays of permit approval. With the increasing demand for irrigation farming in the County there is a concern that farmland viability may be impacted if the trend towards lower water allocations continue.

It is expected that this trend may continue when the New Jersey Water Supply Plan is expected to be adopted later this year. This plan is expected to propose base water allocation upon a calculation of consumptive and depletive water uses within HUC11 sub-watersheds. This approach will have to address the potential economic viability impacts on individual farms that have a need for additional water allocations due to their dependence on irrigation farming.

Waste Management Planning

The NJ DEP has put out rules governing animal waste management that farmers must adhere to. The NJ Department of Agriculture also has guidelines that structure self-certified animal waste management plans. The Hunterdon County Soil Conservation District offers technical assistance for Hunterdon County farmers in the area of Animal Waste Management.

The County can provide farmers with technical assistance concerning the disposal of tires including locations for disposal and also other recycling opportunities. The County is looking for ways to expand its role in helping County residents and farmers alike recycle and handle recyclable materials.

Alternative energy planning

Hunterdon County farmers have started to develop alternative energy sources for the operation of their farms. A notable example of this is the Blew Farm in Franklin Township which has recently installed a solar panel energy system to provide all of the energy requirements for their farm. There are various firms located in Hunterdon County that work directly with landowners to acquire funding to make the initial investment into alternative energy solutions less burdensome on the landowner. Sun Farm Network is one such business located in downtown Flemington. The State Agriculture Development Committee has taken the stance that alternative energy is an acceptable use on preserved farms, as long as the energy production does not adversely impact and is used to support the agriculture operation.

Outreach and Incentives

The Draft Growth Management Plan recommends that the CADB reach out to agricultural organizations and those that work with the farm community to promote funding opportunities for agricultural water conservation practices such as through EQIP and the Conservation Reserve Program.

