



North Jersey
Resource
Conservation
and
Development

North Jersey Resource Conservation and Development Council

Area Plan 2006-2011

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Appendix A - North Jersey RC&D Area Map

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RC&D Background

Established by the Food and Agricultural Act of 1962, the Resource Conservation and Development Program (RC&D) began in 1964. The Food and Agricultural Act of 1981 reauthorized the program and then the United States Congress made the RC&D program permanent with the Food Security and Rural Investment Act of 2002.

The Act empowers the United States Department of Agriculture to provide technical and financial assistance to state and local units of government and nonprofit organizations. The Natural Resources Conservation Service (NRCS) facilitates and administers the RC&D program on authority of Congress.

The RC&D Councils are composed of volunteers appointed by the county's governing body (Board of Chosen Freeholders), soil conservation districts (Board of Supervisors) and other members of the community as determined in the individual Council's by-laws. The Council serves as the local planning and management organization that NRCS cooperates with in implementing the RC&D program. These individuals develop and implement area plans, initiate and direct the process of planning RC&D projects, and then act to maintain the plans. The approved RC&D Area Plan and Annual Plan of Work serve as the formal agreements for a council to receive RC&D program technical assistance.

There are 375 RC&D Councils across the United States serving more than 85 percent of U.S. counties and over 80 percent of the U.S. population. New Jersey has two RC&D Councils, with a third area applying for RC&D status.

About North Jersey RC&D

North Jersey RC&D was authorized in 1972 as the Sussex – Warren RC&D. The first area plan was developed and approved in 1974. In 1988 the area expanded to include the counties of Morris, Hunterdon, Somerset and Union. At this time the Council also received recognition as a U.S. Internal Revenue Service 501 (c)(3) charitable organization not-for-profit corporation. See Appendix A for the North Jersey RC&D Area map.

The North Jersey RC&D Council is comprised of 11 Council members. The county Freeholders appoint one Council member (6 total) and the county soil conservation districts appoint one Council member (5 total, Somerset-Union SCD provides one Council member).

Council members include representatives from:

- Hunterdon County Soil Conservation District
- Hunterdon County Board of Chosen Freeholders
- Morris County Soil Conservation District

- Morris County Board of Chosen Freeholders
- Somerset-Union Soil Conservation District
- Somerset County Board of Chosen Freeholders
- Sussex County Soil Conservation District
- Sussex County Board of Chosen Freeholders
- Union County Board of Chosen Freeholders
- Warren County Soil Conservation District
- Warren County Board of Chosen Freeholders

The USDA Natural Resources Conservation Service provides assistance to North Jersey RC&D in the form of a USDA RC&D coordinator to the council. The Coordinator works closely with Council to develop and implement their area plans.

North Jersey RC&D has accomplished many valuable projects during the past thirty-four years for the citizens within the six county area and looks forward to continuing to serve the region. See Appendix B for a list of past projects.

Visit us on the web at www.northjerseyrcd.org

Our Mission:

To facilitate the transition to sustainable use and protection of the region's human and natural resources through partnerships, education and innovation.

Our Vision:

North Jersey RC&D will be a universally recognized and respected leader in advancing natural resource conservation and building partnerships throughout the region.

The Region at a Glance

North Jersey RC&D is comprised of six (6) counties in northwest and central New Jersey, covering 1,425,856 acres or 2,228 square miles. From the forested ridges in the northwest, to the rolling forests and farmland in the Highlands, to the urban areas of Union County, the North Jersey RC&D area displays the great diversity offered in New Jersey, the Garden State.

Water

The quality and quantity of our water resources are of prime importance to the North Jersey RC&D. Water uses in the region include agricultural, industrial, recreational, residential, and commercial. Several major water supply reservoirs as well as the

Delaware Raritan Canal are located within the RC&D area. These public water supply sources provide clean and safe drinking water to over five million people.

Over 88% of New Jersey's trout production and trout maintenance waters are found in the 6-county North Jersey RC&D area. The classification as trout production and trout maintenance waters not only indicates suitability for the brook, rainbow and brown trout found in New Jersey, but also indicates the stream's high level of water quality for other aquatic organisms and other human uses (swimming, drinking, etc.).

Despite this, there are hundreds of stream segments listed as impaired on the State Department of Environmental Protection's 2004 Integrated List of Waterbodies in this six county area. Parameters causing these impairments within the RC&D area include: fecal coliform, phosphorus, total suspended solids, temperature, and benthic macroinvertebrates. Statewide, the NJ Department of Environmental Protection has nearly 1,200 miles of streams with Total Maximum Daily Loads (TMDL) developed for fecal coliform. Over 750 of these stream miles are located within the North Jersey RC&D area. Additionally, Eutrophic Lake TMDLs have been developed for nearly 6,000 acres, with 80% of those acres (4,776 acres) falling within the six counties of North Jersey RC&D.

The Highlands Water Protection and Planning Act was signed into law in August 2004 to protect drinking water for over 5.4 million people and help preserve New Jersey's dwindling open space. The Highlands Act documents the geographical boundary of the Highlands Region and establishes the Highlands Preservation Area and the Highlands Planning Area. It required the NJ Department of Environmental Protection to establish regulations in the Highlands Preservation Area and create a Highlands Water Protection and Planning Council that is currently developing a regional master plan for the entire Highlands Region. The North Jersey RC&D area contains 78% (325,258 acres) of the Highlands Preservation Area and 97% (428,296 acres) of the Planning Area.

Agriculture

Agriculture in the region includes: the production of vegetables and fruits, dairy cattle and milk, livestock, forage and field crops, equestrian racing, breeding and training, as well as farmstand and agritourism markets. Of the 316,000 acres in agricultural production, about 65%, is in cropland production, primarily corn and soybeans. The second largest acreage class is forage production, which comprises about 25% of the region's agricultural land.

Throughout the North Jersey RC&D area trends in agricultural land use are similar to those of the rest of the northeastern United States. Large scale dairy and cattle production continues to diminish creating a niche for small-scale direct-marketed livestock operations. Many farms once known as "traditional farms" are being retrofitted to house, breed, and train a growing equestrian clientele, including owners, specialists, trainers and/or breeders. Some large grain farmers, who once routinely used herbicide, pesticide and insecticide, are now either utilizing integrated crop management or are converting to full or partial organic production. Due to the proximity of farms to their suburban neighbors, opportunities now exist to diversify their operations to include Agri-Tourism.

While this may be a viable option for some farmers, other sustainable practices and markets need to be developed and promoted for other operations.

Although there is a continuing decrease in large scale production by traditional farming, direct marketing of niche and value added products have great potential. In certain areas of the RC&D region agricultural producers have experienced great success with pick-your-own, cheese, wine, ethnic markets, horticulture and community supported agriculture.

The region has a strong farmland preservation program through which farm owners sell their development rights, but maintain ownership of the property and must continue agricultural operations. Since the program began in 1983, 54,226 acres of farmland have been preserved in the North Jersey RC&D area (see table below).

Counties	Number Of Farms	Acres	Total Easement Cost
Hunterdon	204	19,316	\$132,660,823
Morris	84	5,446	\$82,123,323
Somerset	64	6,062	\$60,202,769
Sussex	72	9,960	\$28,030,293
Warren	113	13,441	\$58,517,092
Total	537	54,226	\$361,534,300

Forests

The forested landscape in the North Jersey RC&D remains the largest percent of any other land use type. Over 40% of the six county area, approximately 590,000 acres, remains in forest cover. Of those forested acres, 184,787 acres or 31%, is publicly preserved as federal, state, county or local open space. The predominate forest type is deciduous hardwood forests.

Some areas of the RC&D region are seeing new forest acres. These new forests comprise conservation easements, buffers, and stormwater facilities on developments. When from farms, these new forests are abandoned crop fields and pasture. Most, if not all, of these forests are young successional forests, which often include invasive species which are ecologically less valuable.

An RC&D study conducted by United States Geological Survey (USGS) in Warren and Sussex County determined that water quality improves as the percentage of forest land increases. Land use in the watersheds above each water quality sampling point was evaluated. USGS looked for correlations between the nine sampled constituents and land use upstream. Of these nine constituents, seven of these had a positive correlation to forest cover.

People

As of the 2000 Census the total population of the North Jersey RC&D area was 1,658,835. Based on the 2020 Census projections, that number will rise 18% to nearly 2 million people. The table below details the current and projected population for each of the six counties.

COUNTY	ACRES	POPULATION EST. 2020	POPULATION 2000	POPULATION CHANGE 2020-2000	POPULATION CHANGE 2000-1980
HUNTERDON	280,121	147,700	121,989	25,711	34,628
MORRIS	307,398	540,800	470,212	70,588	62,582
SOMERSET	195,128	384,600	297,490	87,110	94,361
SUSSEX	343,446	176,700	144,166	32,534	20,545
UNION	67,405	579,800	522,541	57,259	18,447
WARREN	232,358	128,300	102,437	25,863	18,008

Source: US Census 2000

There are 154 municipalities within the six county North Jersey RC&D region.

Of nonfarm payroll employment, the majority of employment opportunities in the region are in the service sector (88%), the remaining 12% are in the goods producing sector (mining, manufacturing, and construction). In the six county RC&D area projections for the greatest employment growth include occupations such as: retail sales, cashiers, registered nurses, combined food prep and serving workers including fast food, child care workers, and customer service representatives.

Recreation & Open Space

In addition to providing immeasurable social benefits to millions of recreational users, the recreation attributes of the North Jersey RC&D area are important to the local, regional and state economies. Scenic mountains and valleys, mature forests, numerous lakes and high quality trout streams provide a superior setting for boating, hiking, fishing, swimming and many other natural resource dependent recreational activities. It is the natural beauty of the region that draws tourists.

According to the Longwood Study for “Travel & Tourism in New Jersey: A Report on the 2000 Travel Year” prepared by the NJ Commerce and Economic Growth Commission for the Skylands Region, an estimated 15.8 million trips were taken in 2000. The Skylands Region includes all of Warren, Sussex, Hunterdon, Morris and Somerset Counties (5 of 6 North Jersey RC&D counties). Of the 15.8 million trips taken in 2000 throughout the Skylands Regions, 3.8 million were estimated as overnight trips and 12.0 million were estimated as day trips.

According to “New Jersey’s Common Ground Report of 1994-1999, New Jersey Open Space and Outdoor Recreation Plan Summary”, tourism has become a major industry in the state generating over \$22 billion in annual revenues thus making it the state’s largest employer. It is the second largest industry in the state. According to NJ Fish and Wildlife

reports, Warren County anglers contributed \$20 million dollars annually to the local economy. The impact of recreational resources on the local economy is enormous.

Federal

One of the more well-known areas of recreational interest is the Delaware Water Gap National Recreation Area. Located in both New Jersey and Pennsylvania, the New Jersey portion lies within the North Jersey RC&D area. The Delaware Water Gap National Recreation Area is the ninth most visited in the National Park System. It encompasses 70,000 acres of ridges, forests, lakes and rivers on both sides of the Delaware River in both states. The 40-mile section of the Delaware River that runs through the recreation area in New Jersey had been placed in the National Wild and Scenic River System in 1978.

State

Notable state parks and forests include: High Point State Park, Stokes State Forest, Swartswood State Park, Worthington State Forest, Kittatinny Valley State Park and Hopatcong State Park. Hopatcong State Park is located at the southwest corner of Lake Hopatcong within Morris, Sussex and Warren Counties; the park is about 110 acres. The park includes Lake Hopatcong and manages Lake Musconetcong. Within Hunterdon County is the Delaware & Raritan Canal State Park, Bull's Island Recreation Area; Round Valley Recreation Area; Spruce Run Recreation Area and Voorhees State Park. In Warren County is the Pequest Trout Hatchery and Natural Resource Education Center

County

Four of the six counties in the RC&D area have an established park system to manage and over-see the open space areas located with their county. The counties that have an established county park system include Hunterdon, Somerset, Morris and Union.

The table below details the total acreage of preserved County open space in the RC&D area.

COUNTY	ACRES
HUNTERDON	7,300
MORRIS	17,200
SOMERSET	9,500
UNION	5,600
WARREN	1,632

Although Warren County does not have an established park system, they do have numerous publicly accessible open space areas. Among the most popular are the Merrill Creek Reservoir and Environmental Preserve and the White Lake Natural Resource Area. The White Lake Natural Resource Area is extremely important due to occurrences of globally rare elements of flora and fauna and its unique geologic features. Sussex County does not have any County owned open space, but do have vast acres of state and the federal parkland within county limits.

Local

A number of local municipalities have their own open space program and have purchased land for preservation and recreational uses. Additionally, there are several not for profit land trusts who are active in the region and have preserved thousands of acres of open space.

Needs and Opportunities:

The area's needs and opportunities, as they relate to the North Jersey RC&D mission, were compiled utilizing public input solicited through recent stakeholder meetings held by Council sponsors. Many of the counties in the North Jersey RC&D area have recently developed strategic growth plans. Through those planning efforts public input was sought and prioritized. RC&D has also been involved with several watershed management projects through the area, which included extensive stakeholder involvement and needs identification. Additional input from the agricultural community was collected at a series of Pasture Picnics held statewide in 2005 and through ongoing projects in which RC&D serves the agricultural community.

Land Conservation

Northwestern NJ streams have suffered from decades of damage as natural land cover has been changed to agriculture and development, wetlands have been filled, and stormwater runoff has increased. Numerous groups within the region have documented these impacts and have identified the damages to streams and their riparian areas as a critical issue in the region.

Recent work by watershed associations, water supply utilities and soil conservation agencies shows that stream damage occurs everywhere. Bank and channel erosion, loss of aquatic habitat, stream channelization, vegetation clearing and development along streams, waste dumping along and in streams, and scouring from stormwater discharges are all common. Evidence to date shows that a majority of the streams are at least somewhat impaired.

Water Management

The region's stream corridors are in need of coordinated planning efforts to identify, prioritize and implement restoration programs. According to state statute, local municipalities must adopt zoning ordinances and the necessary environmental ordinances to protect water quality. Coordinated efforts, such as watershed planning and management, are useful tools to address water quality concerns across local political boundaries.

As the population of the North Jersey RC&D area continues to climb, ever increasing pressures are being put on water resources to provide clean and plentiful water for

commercial, industrial, residential and agricultural uses. While the current number of irrigated cropland acres is a small percentage of overall agricultural acres, the demand for agricultural irrigation is growing.

As suburban communities expand into agricultural areas, identifying the causes of water quality impairment becomes increasingly difficult. As a result, there is a tremendous need to utilize advanced technologies such as microbial source tracking to identify the sources of impairment. There is also a need to educate residents about accepted farming practices and how farmers are serving as stewards of the land. Certification programs, such as River-Friendly Farm, provide an opportunity for farmers to be rewarded for being environmentally sensitive as well as provide additional technical resources to assist farmers who would like to meet the certification criteria.

As the area of urban/rural interface continues to grow, management of manure on an increasing number of small farms is becoming more difficult. Many small farm operators do not have cropland to dispose of their manure and are often having the manure hauled offsite and disposed of in a landfill or are stockpiling the manure in locations that may pose environmental risk. One option to address this issue is to create regionalized manure composting facilities. By doing so a potential problem is converted into a resource that can be used by residents in the community. These facilities would provide a sustainable option for small farms, especially small livestock operations, to address their manure management.

Community Development

Many of the communities in the North Jersey RC&D area do not have access to sanitary sewage treatment systems. These communities rely on onsite wastewater disposal systems (septic systems). The conversion of seasonal housing to year-round housing, carbonate geology (e.g. sinkhole prone limestone), and the influx of urban residents to rural communities all combine to create a great need for septic education and management programs.

The carbonate rock geology, which can be found extensively in several of our counties, provides unique challenges to homeowners, municipal officials, planners and engineers. The North Jersey RC&D has developed a limestone model ordinance for these communities and continues to offer technical assistance relating to this issue.

As the most densely populated state in the country, New Jersey is experiencing many challenges now that will not be faced by the rest of the nation for years to come. The pressures on natural resources, water supply, and the conflict arising from incompatible adjacent land uses present countless opportunities for education and outreach. In most of the region's municipalities local elected officials are volunteering to serve in these unpaid positions in addition to holding a full time job elsewhere. Training to help these leaders make better informed decisions is a critical need.

Training and capacity building opportunities are also needed for the many of the nongovernmental organizations and citizen action groups. Training on project design, funding and management are in demand.

Despite our tremendous statewide population density, there are many rural communities within the North Jersey RC&D area that are reliant on individual groundwater wells for their water supply. In those areas water supply for fire protection is a critical issue. Dry hydrants have been used by some fire departments, however the cost and environmental regulations associated with installation deter many groups from installing them.

Land Management

Over 54,000 acres of farmland have been preserved in the region through the purchase of development rights. Additional acreage must be preserved to create a large enough base to sustain the agricultural industry. On these preserved farms opportunities exist to implement best management practices that reduce nonpoint source pollution as well as protect fish and wildlife habitats.

As developmental pressure increases throughout the region, open space acquisitions and agricultural land preservation efforts have become popular tools in land use management within a "smart growth" initiative. As additional demand has increased the popularity for these land and easement acquisitions, open space taxes have raised millions in additional local and county dollars to augment existing programs.

As the stewards of these newly acquired lands, various agencies face several unforeseen challenges. Open space and other lands where agriculture ceases can quickly become overgrown with red cedar, thistle, and multiflora rose, among others. In addition, wildlife management practices may become prohibited on land that was once actively hunted. Left unchecked, these wildlife populations interrupt natural forest regeneration and other ecological processes. Furthermore, lands adjacent to these preserved parcels will quickly exhibit damage and economic loss tallied in agricultural production costs, reduced harvests, vehicle insurance claims, or other property losses.

Proactive land and natural resource management is essential for the protection and enhancement of the region's many resources. The potential for unmanaged preserved areas attracting or offering habitat for nuisance, injurious or invasive terrestrial and aquatic plants and animals, as well as associated diseases, are of particular concern.

Goals, Objectives and Strategies

The Goals, Objectives and Strategies were developed utilizing a facilitated visioning process conducted over a two year period. Individuals involved in this process brought to the table their knowledge of regional needs and opportunities. The facilitated process allowed the RC&D Council to identify these countless needs and opportunities and then prioritize those with the greatest need that fit the RC&D mission. These following seven Program Emphasis areas and related goals were identified for the 2006-2011 Area Plan.

1. Agricultural management for water quality
2. Water Resource Protection
3. Stream Restoration
4. Agricultural sustainability
5. Onsite Wastewater Treatment Systems
6. Public land management
7. Community Capacity Building

Additional strategies will be identified and implemented during the time period covered by this area plan. The RC&D Council's Annual Plan of Work will contain these strategies to achieve the Council's goals and objectives. Understanding that the Goals, Objectives and Strategies may address more than one of the four "Needs and Opportunities" areas (listed above) we have identified under each Goal which area is addressed.

Goal 1: Improve water quality through use of appropriate agricultural best management practices

Needs Area met: Water Management and Land Conservation

Objective 1.1: Promote the use and adoption of Integrated Crop Management (ICM) annually with 15 farmers by 2011

Strategies

1.1.1: Set up displays about the RC&D ICM program at County fairs, agricultural meetings/events

1.1.2: Assist Hunterdon County SCD and other service providers in the expansion of ICM program services to underserved areas within the Council region. Work with Highlands Council to expand services into the Highlands region

Objective 1.2: Certify 50 farms as River-Friendly by 2011

Strategies

1.2.1: Implement all action items identified in the two existing River-Friendly Farm grant programs

1.2.2: Build partnerships and seek stable funding sources to expand the River-Friendly Farm program throughout the RC&D area and the State

Objective 1.3: Complete one regional livestock manure composting project by 2011

Strategies

1.3.1: Conduct focus group meetings with interested parties to develop a project design

1.3.2: Work with agricultural agencies and support organizations to identify areas where regional composting facilities would be feasible

Objective 1.4: Develop a comprehensive riparian restoration plan for agricultural lands in the Raritan Basin watershed by 2008

Strategies

1.4.1: Secure funding and implement project plan as outlined in the 2006 NRCS, Cooperative Conservation Partnership Initiative, *Riparian Restoration Plan for Agricultural Lands in the Raritan Basin*

Goal 2: Improve water quality and quantity in the region

Needs Area met: Water Management and Community Development

Objective 2.1: By 2011 complete water quality testing, implement strategies, and remove 2 stream reaches or lakes from the integrated list of impaired waterbodies

Strategies:

2.1.1: Implement all action items identified in the *Watershed Restoration and Protection Plan for the Musconetcong Watershed – Hampton to Bloomsbury* and the *Watershed Restoration and Protection Plan for the Neshanic Watershed* grant programs

2.1.2: Continue and expand nonpoint source pollution reduction programs such as the riparian restoration, integrated crop management, prescribed grazing, and educational workshops for municipal officials and residents

2.1.3: Implement all action items identified in the *Protection of Critical Source Areas for Achieving Long-term Sustainability of Water Resources* project

2.1.4: Utilize Total Nutrient TMDL data to target River-Friendly Farm outreach and BMP implementation in the Raritan Basin

Objective 2.2: Expand the range of information and tools available to officials in 25 municipal or county governments relating to land use impacts on water quality

Strategies:

2.2.1: Work with groups such as the Association of NJ Environmental Commissions, Rutgers Cooperative Research and Extension, Soil Conservation Districts and the Municipal Land Use Center to develop and disseminate resources

2.2.2: Through presentations and mailings, educate municipal officials and professional planners about the RC&D model limestone ordinance

2.2.3: Complete and disseminate the Wetland Easement Resource toolkit

2.2.4: Implement all action items identified in the *Protection of Critical Source Areas for Achieving Long-term Sustainability of Water Resources* project

2.2.5: Through the *Watershed Restoration and Protection Plan for the Musconetcong Watershed – Hampton to Bloomsbury* work with municipalities in that watershed to inform them of current water quality status and the relationship to land use in the community

2.2.6: Conduct Web Soil Survey workshops

Objective 2.4: Serve as a stormwater management resource to 50% of the RC&D municipalities

Strategies:

2.4.1: Work through the 6 County planning boards to identify areas where municipalities could use RC&D assistance in meeting their stormwater management plan

2.4.2: Continue working with Raritan Township, Hunterdon County to make improvements to the Walnut Brook, which has been identified as a stormwater mitigation site in their municipal stormwater plan.

2.4.3: Work with the Raritan Basin Alliance Coordinating Committee to host a Stormwater conference

2.4.4: Work with Rutgers Cooperative Extension, Water Resources Program to implement rain gardens on agricultural land

Goal 3: Protect and improve riparian corridors through the implementation of stream restoration techniques

Needs Area met: Land Conservation, Water Management and Community Development

Objective 3.1: By 2011 successfully implement 2 miles of stream restoration projects

Strategies:

- 3.1.1:** Implement all action items identified in the *Protecting and Improving Wildlife Habitat through Riparian Restoration* grant program
- 3.1.2:** Secure funding and implement all action items identified in the *Walnut Brook Riparian Restoration* project proposal
- 3.1.3:** Secure additional funding to continue restoration efforts in Mine Brook Park, Raritan Township, Hunterdon County
- 3.1.4:** Serve as a technical resource for landowners interested in stream restoration and help guide them to the appropriate funding source for their project
- 3.1.5:** Coordinate between different groups to implement projects and secure project funding
- 3.1.6:** Reassess and evaluate past projects for maintenance plan implementation and success of techniques used to aid in future project designs
- 3.1.7:** Work with local Fire Departments to implement a dry hydrant program so that buffers can be installed at sites that are currently being used for fire truck access to water supply
- 3.1.8:** Work with the Hackettstown Economic & Industrial Development Commission to develop a plan and funding mechanism for the creation of a walking promenade along Bowers Brook.
- 3.1.9:** Implement all action items identified in the Morris Canal Rehabilitation Project proposal

Objective 3.2: By 2008 define the scope of restoration and protection needs and priorities for the Upper Delaware, Wallkill and Raritan Basin Watersheds

Strategies:

- 3.2.1:** Update the Riparian Health Assessment Model for these three watersheds utilizing the 2002 land use / land cover, as well as other update data sources
- 3.2.2:** Continue to participate in the Raritan Basin Watershed Alliance Stream Restoration Initiative
- 3.2.3:** Secure funding and develop a comprehensive riparian restoration plan for agricultural lands in the Raritan Basin Watershed as outlined in the 2006 Cooperative Conservation Partnership Initiative project plan
- 3.2.4:** Continue dialogue with DEP to streamline permit requirements for beneficial stream restoration projects.
- 3.2.5:** Through the Musconetcong and Neshanic Watershed Restoration and Protection projects, identify through visual assessments and air photo interpretation sites for stream restoration
- 3.2.6:** Implement action items identified in the Paulins Kill Watershed Restoration and Protection Plan

Objective 3.3: Educate 200 landowners, professionals, and local government officials on stream corridor protection and restoration techniques

Strategies:

- 3.3.1:** Continue to host the Restore Our Streams workshop for concerned citizens and environmental groups
- 3.3.2:** Host a workshop targeting environmental commissions, planning boards, and local and county elected officials to disseminate information on land use regulations available to protect stream corridors and funding opportunities available for restoration projects
- 3.3.3:** Host field training sessions during construction of the Walnut Brook Riparian Restoration Project
- 3.3.4:** Educate NJ high school students on stream corridor management and other aquatic life issues through participation in the NJ Envirothon

Goal 4: Sustain the agricultural industry by implementing programs which enhance farming operations and economic viability

Needs Area met: Land Conservation, Land Management, and Community Development

Objective 4.1: Improve marketing options for agricultural producers in 3 watershed areas by 2009

Strategies:

- 4.1.1:** Develop River-Friendly Farm branding options for certified farms
- 4.1.2:** Develop pilot farm stands at community day events in Westfield, Summit, Plainfield
- 4.1.3:** Creation of an Agricultural “Direct Marketing” outlet store, potentially partially funded through Union County Economic Development, that includes organic, free range, and grass fed products
- 4.1.4:** Promote resources such as the Food Innovation Center to producers interested in value added or direct marketing of their products.
- 4.1.5:** Work with partners to determine the need and feasibility of a shared USDA certified kitchen for value added food processing.

Objective 4.2: Decrease manure disposal costs on 10 farms by 2011

Strategies:

- 4.2.1:** Complete a regional livestock manure composting facility that will take waste from participating farms
- 4.2.2:** Work with Santini Farms to find funding to convert methane gas from their on-farm anaerobic digester to electrical energy

Objective 4.3: Assist farmers in attaining compliance with federal, state, and local regulations

Strategies:

4.3.1: Assist landowners in developing nutrient management plans to comply with state regulations

Objective 4.4: Work with 15 municipalities to promote the agriculture industry in their community

Strategies:

4.4.1: Promote the creation of farm markets in urban areas

4.4.2: Develop an exchange program that brings either the farm to the inner city and/or inner city residents to the farm

4.4.3: Work with Sylvia Kovacs to secure funding for the development of a Highlands Healthy Farm and Food Network feasibility study

4.4.4: Work with Sylvia Kovacs to secure funding for the development of a Highlands Native Plant Nursery feasibility study

4.4.5: Investigate the potential for biofuel production and use.

Goal 5: Promote the proper use and maintenance of onsite wastewater treatment systems, including alternative designs and use of new technologies

Needs Area met: Community Development and Water Management

Objective 5.1: Establish a working relationship to provide technical assistance to 20 municipalities by 2011

Strategies:

5.1.1: Compile a technical document with 5 alternate treatments available

5.1.2: Distribute educational materials on septic management

5.1.3: Offer septic management workshop sessions to communities included in our watershed management planning projects

5.1.4: Work with Jefferson Township, Morris County, to implement their septic management outreach program

Objective 5.2: Complete 1 pilot project, establishing a community septic management program by 2011

Strategies:

5.2.1: Through partners and our outreach efforts, identify a community interested in moving forward with a septic management program

5.2.2: Secure funding to implement the program through sources such as the NJ DEP 604b grant program

5.2.3: Continue working with Jefferson Township, Morris County, to implement their septic management outreach program

Goal 6: Promote natural resource management on publicly owned land

Needs Area met: Land Management

Objective 6.1: Work with 1 county on the active management of their open space by 2011

Strategies:

6.1.1: Continue working with White Lake team to implement management plan developed for that project

6.1.2: Meet with county to discuss needs and opportunities for open space management

6.1.3: Secure funding to conduct a feasibility study and develop a business plan for North Jersey RC&D to provide stewardship planning services for public open space.

Goal 7: Improve the region's ability to maximize the use of its human and economic resources

Needs Area met: Community Development

Objective 7.1: Work with 30 groups to improve their ability to design projects, obtain funding and successfully manage those projects by 2011

Strategies:

7.1.1: Conduct needs assessment, grant writing, and grants management training for local groups

7.1.2: Provide funding search assistance and grant proposal review services to local groups

7.1.3: Work with Sylvia Kovacs to secure funding for the development of a Highlands Healthy Farm and Food Network feasibility study

7.1.4: Work with Sylvia Kovacs to secure funding for the development of a Highlands Native Plant Nursery feasibility study

7.1.5: Work with the Hackettstown Economic & Industrial Development Commission to develop a plan and funding mechanism for the creation of a walking promenade along Bowers Brook.

Objective 7.2: Provide support to 20 rural communities to improve their rural fire protection capacity by 2010

Strategies:

7.2.1: Install 20 dry hydrants in the 6 county region

7.2.2: Create a GIS coverage detailing all rural fire protection water sources

Objective 7.3: Provide training to 20 agriculture support agency staff to improve their ability to provide assistance to the farm community by 2009

Strategies:

7.3.1: Apply for grant funding through SARE to develop and implement a training program that could include topics such as: integrated crop management, whole farm planning, and integrated pest management

Objective 7.4: Successfully host the 2008 Mid-Atlantic RC&D Association Conference in September 2008

Strategies:

7.4.1: Finalize conference program and secure speakers

7.4.2: Finalize sites for project tours

7.4.3: Determine staffing needs for the actual conference (registration table, silent auction, moderators, etc.) and develop a schedule for volunteers and staff

7.4.4: Develop a list of local attractions including opportunities for attendees arriving on Sunday and options for Monday – Wednesday for spouses

7.4.5: Host Mid-Atlantic RC&D Conference

Objective 7.5: Improve the organizational capacity of the North Jersey RC&D

Strategies:

7.5.1: Continue development of the fundraising plan and complete the first draft

7.5.2: Complete Annual Report and distribute

7.5.3: Conduct performance appraisals on all Council Employees

7.5.4: Work with accounting firm to conduct annual audit

7.5.5: Prepare Council budget for each fiscal year

7.5.6: Review employee benefits package to ensure Council is providing comparable benefits to other small non-profits

7.5.7: Update RC&D website

7.5.8: Develop and publish brochure

7.5.9: Update Council Display

7.5.10: Finalize Personnel Manual

7.5.11: Review Council By-Laws and Constitution and make revisions as needed

Objective 7.6: Serve as a resource to ten businesses, schools, and/or local units of government relating to sustainable energy by 2011

Strategies:

7.6.1: Provide technical assistance to farm operations looking to incorporate native grasses as a heat source

7.6.2: Work with EnSave to conduct on farm Energy Audit Training

7.6.3: Provide information on Carbon Trading opportunities to farms in our service area.

Partnerships for Implementation

The following groups have been identified as existing or potential partners to assist the RC&D Council in implementing this Area Plan.

Federal Government

- United States Department of Agriculture
 - Farm Service Agency
 - Forest Service
 - Natural Resources Conservation Service
 - Rural Development
- United States Department of Interior
 - Fish and Wildlife Service
 - United States Geological Survey
- United States Environmental Protection Agency

State Government

- New Jersey Department of Agriculture
- New Jersey Department of Corrections
- New Jersey Department of Environmental Protection
 - Division of Watershed Management
 - Division of Fish and Wildlife
 - Division of Parks and Forestry
 - Green Acres
 - NJ Geological Survey
- New Jersey Farm Bureau
- New Jersey Water Supply Authority

County/Local Government

- County Agriculture Development Boards
- County Boards of Agriculture
- County Government
- Local Municipal Environmental Commissions
- Local Municipal Fire Departments
- Local Municipal Governing Bodies
- Soil Conservation Districts

Education Institutions

- New Jersey Institute of Technology
- Rutgers Cooperative Extension, Water Resources Program
- The Municipal Land Use Center, The College of NJ

Nonprofit/Private Organizations

- AmeriCorps Watershed Ambassadors
- Association of NJ Environmental Commissions
- Boy and Girl Scouts of America
- Delaware River Basin Commission
- Foodshed Alliance
- Garden State Grazing Coalition
- Heritage Conservancy
- Highlands Coalition
- Highlands Council
- Hunterdon Land Trust Alliance
- Land Conservancy of New Jersey
- Mountain Lake Watershed Association
- Musconetcong Watershed Association
- New Jersey Audubon Society
- New Jersey Youth Corps
- Northeast Organic Farming Association of New Jersey
- Paulins Kill - Pequest Watershed Association
- Pohatcong Creek Watershed Association
- Private Environmental Consulting Firms
- Raritan Basin Watershed Alliance
- Ridge and Valley Conservancy
- South Branch Watershed Association
- Stony Brook Millstone Watershed Association
- Swartswood Lake and Watershed Association
- Trout Unlimited
- Upper Raritan Watershed Association
- Wallkill River Watershed Management Group
- Warren County Rod and Gun Club

Staffing Plan

To fully implement this Area Plan, North Jersey RC&D has developed the following staffing plan. Some of the staff positions are already in place. Currently, the North Jersey RC&D Council employs 4 full-time staff members and 1 part-time staff member.

Staff Years	Project/Program
1	Integrated Crop Management, Pasture Management, Manure Management
1 ¼	River friendly farm program
¼	Manure composting program
1	Watershed Management work to reduce phosphorus and fecal and remove streams from the impaired list

½	Septic management
½ -1	Stormwater management technical assistance (depending on demand)
1	Public land management

Area Plan Adoption

The North Jersey RC&D Council agrees that the RC&D Program will be conducted in compliance with the nondiscrimination provisions as contained in Title VI and VII of the Civil Rights Act of 1964 as amended, the Civil Rights Restoration Act of 1987 (Public Law 100-259) and other nondiscrimination statutes; namely, Section 504, of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975 and in accordance with the regulations of the Secretary of Agriculture (7CFR-15, Subparts A and B) that provide that no person in the United States shall, on the ground of race, color, national origin, age, sex, religion, marital status, or handicap/disability be excluded from participation in, or be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving Federal financial (or technical) assistance from the U.S. Department of Agriculture or any agency thereof.

The North Jersey RC&D Council agrees that the signing of this document constitutes agreement to comply with Federal laws concerning restrictions on lobbying, a drug-free workplace, and responsibilities for nonprocurement, suspension, and debarment, and State review.

The North Jersey RC&D Council hereby adopts this RC&D Area Plan and agrees to use effectively the assistance provided by the U.S. Department of Agriculture to realize the goals and objectives outlined herein.

North RC&D Council, New Jersey

By: _____ Date: _____ Chair

This action authorized at an official meeting of the North Jersey RC&D Council on June 7, 2006

Attest: _____ Council Secretary

U.S. Department of Agriculture - Natural Resources Conservation Service

The State Conservationist hereby acknowledges the attached Area Plan of North Jersey RC&D as meeting the requirements under Public Law 97-98 to receive assistance from USDA.

Acknowledged By: _____ Date: _____
State Conservationist

Appendix A

North Jersey RC&D Area Map

North Jersey Resource Conservation & Development Council Project Area



Appendix B

Past project list

North Jersey RC&D Completed Projects 1999-2005

A Collaborative Approach Toward Reducing Agricultural NPS Pollution in the Raritan Basin and Upper Delaware Tributaries: 1998-2001

The project targeted the Raritan and Upper Delaware watersheds where large contiguous areas of farmland exist. The resources provided by this grant focused on managing 6,000 acres of farmland using integrated farming approaches, and also provided additional technical assistance to farmers to support the planning and adoption process of these best management practices. The project also included outreach and education activities for both the farming community and the general. Following up on work begun through this project, RC&D staff is continuing to provide Integrated Crop Management Services to the farm community on a fee-for-service basis.

Musconetcong Stream Restoration Project: 1999 –2001

Through this project the water quality of the Musconetcong River was improved with the installation of stream restoration measures such as the establishment of riparian areas, streambank stabilization and instream fish habitat improvements. The necessary tools and equipment needed for volunteer groups and organizations to implement stream restoration projects was compiled in the stream restoration trailer. An aggressive education and outreach program for high school teachers, students, and state regulatory and agency personnel was developed and implemented to increase their familiarity with stream restoration techniques and practices.

Within Our Watershed: Mobilize for Action in the Upper Delaware River Watershed Management Area #1: 2000-2004

RC&D was the project facilitator for the implementation of a watershed management and planning initiative in the Upper Delaware River watershed. In partnership with numerous organizations RC&D conducted a watershed public education and outreach process, completed a watershed characterization and assessment, developed tools to assist in open space preservation, and identified priority sites for best management practice implementation.

A Watershed Approach to Riparian Restoration for the Musconetcong and Pohatcong Watersheds: 2000-2005

Through this project, RC&D worked to protect water resources in Musconetcong River and the Pohatcong Creek watershed by installing four riparian restoration projects. Educational outreach efforts were conducted for local governments, citizens, and school children. Area high school students assist in the planting of the four buffer sites. The project also targeted assistance to two communities interested in improving their local land use regulations for better water resource protection within the watersheds.

Addressing Sprawl – Innovative Community Forestry Strategies: 2001-2003

Through this project a strategy was developed and implemented to help communities address the impacts of developmental sprawl on their forest resources. Four educational workshops were hosted and the Building Greener Communities Planning for Woodland Conservation manual and CD were developed and distributed.

Wallkill Internet Mapping Service: 2002

In order to better assist local decision makers with land use planning in their community, several computer models were developed for the Wallkill Watershed in Sussex County. These models included the Water Resource Evaluation System and the Riparian Health Assessment Model. An Internet Mapping Service was developed to enable interested parties to access this GIS model information from a computer with no special software required. The Internet Mapping Service hosted data for both the Wallkill and Upper Delaware Watersheds.

Helping New Jersey Become RiverSmart: A media campaign for Northern New Jersey Watersheds: 2003

With a grant from River Network, RC&D was able to run print newspaper and television ads promoting river protection during the month of October 2003. Television ads aired on CBS in Philadelphia and New York and the print ads ran in 3 local newspapers. The ads highlighted the importance of water conservation and protection.

White Lake: A Resource to Treasure and Protect: 2003

RC&D coordinated and facilitated the development of a management plan for White Lake Natural Resource Area in Warren County. With the assistance of local and county officials and conservation organizations, the ‘White Lake Partnership Management Agreement’ was created and presented to the appropriate groups and partners for approval to properly manage this natural resource.

Water Resource Evaluation System for the Central Delaware Tributaries: 2003

RC&D staff developed the Riparian Health Assessment model for the Mercer/Monmouth portion of the Central Delaware Tributaries watershed and coordinated with the Center for Remote Sensing and Spatial Analysis (CRSSA) to acquire the Hunterdon County riparian model. The riparian and groundwater recharge models were then combined and the final Water Resource Evaluation System model developed for this area.

Septic Management Workshop Grant: 2004

Participants from two counties heard presentations about how their communities can establish a septic management program to protect the environment and improve property values. Participants received a comprehensive handbook which included education and outreach materials, as well as model septic management ordinances and other guidance for implementing community septic management.

Mine Brook Park Stream Restoration: 2004 –2005

With financial assistance from numerous partners, including the National Fish & Wildlife Foundation, the ecological restoration of about 200 feet of Walnut Brook was completed. The project included in-stream stabilization and bio-engineering techniques, enhancement of in-stream fish habitat, and establishment of a riparian buffer in areas along stream where it was needed.

Tools for Community Resource Protection: 2004- 2005

RC&D hosted workshops in Warren and Sussex Counties to inform community decision makers about natural resource protection tools available. The workshops focused on the new Internet Mapping Service developed by RC&D and hosted by Sussex County. The workshop participants learned what tools and resources were available, how to access them through the internet and how to incorporate that information into their environmental resource inventories, master plans, and land development regulations.

Stream Trunk Teacher Training: 2004- 2005

Three workshops for educators of middle and high school aged students from Hunterdon, Morris, Sussex and Warren Counties were held. The goal was to teach the concepts of stream ecology, aquatic ecosystems, and chemical and biological monitoring. Participants were introduced to the stream ecology teaching trunks, developed by RC&D, that are made available for their use.

Raritan Highlands Farmland Water Quality Enhancement Program: 2004-2005

Through this program, RC&D partnered with the New Jersey Water Supply Authority and the Natural Resources Conservation Service to develop conservation plans for four farms in the Raritan Highlands as part of an effort by the New Jersey Water Supply Authority to fund farmland preservation.