



APPENDIX I

RESOURCE ASSISTANCE PROGRAMS

This appendix describes a wide variety of assistance programs offered by Federal and State agencies. Programs are divided into these categories: forest, farmland, wetland, wildlife, multiple resources, and fire.

FOREST RESOURCE ASSISTANCE PROGRAMS

Cooperative Forest Management Program for New York State

The Cooperative Forest Management Program is administered by the New York State Department of Environmental Conservation to encourage private forest landowners in New York to apply sound forest management and practices to their woodlands. A professional forester evaluates the existing forest management opportunities and develops written management recommendations for private woodlands. All recommendations are based on sound forest practices. Assistance is provided for a diversity of uses that include—but are not limited to—harvest, marketing, establishing forest plantations, care for immature stands, and timber marking. Services are free to the 500,000 private landowners of 14.5 million acres of forest in New York State.

Economic Action Program

The Economic Action Program is administered by the USDA Forest Service and consists of three separate programs: Rural Community Assistance programs; Forest Products Conservation and Recycling programs; and Market Development and Expansion programs. It helps to diversify and improve local economies through the wise and more complete use of renewable forest resources, and helps to create jobs. The program strengthens the capacity of communities to develop sustainable local economies. It also stimulates job creation in ways that promote environmentally sound use of forest-based natural resources. The Economic Action Program provides technical expertise and financial assistance for sustainable economic development, including marketing, exporting, recycling, and industrial processing of wood and other forest products and services.

Forest Land Enhancement Program

This new incentive program administered by the USDA Forest Service was established in the 2002 Farm Bill. Forest owners will be provided a cost-share up to 75 percent for such practices as tree planting, wildlife habitat enhancement, water quality protection, endangered species protection, invasive weed control, forest health practices, timber stand improvement, and agroforestry.



A management plan must be in place for an owner to be eligible, and cost-share is limited by 1,000 acres of practices or up to 5,000 acres with a special waiver. Minimum acreage limits will be set on a State-by-State basis. This program also provides technical and educational support.

Forest Legacy Program

The Forest Legacy Program is a USDA Forest Service program that supports State efforts to protect environmentally sensitive forest lands threatened by conversion to nonforest uses. Forest Legacy is a voluntary program designed to encourage the protection of privately owned forest lands. The Forest Legacy Program helps the States develop and carry out their forest conservation plans. It encourages and supports acquisition of conservation easements, legally binding agreements transferring a negotiated set of property rights from one party to another, without removing the property from private ownership. Most Forest Legacy conservation easements restrict development, require sustainable forestry practices, and protect other values.

Forest Stewardship Program

The Forest Stewardship Program is administered by the USDA Forest Service and delivered on the ground through State forestry agencies. This program brings professional natural resource management expertise to nonindustrial private forest landowners to help them in developing forest stewardship plans. By providing financial support to planning efforts, the Forest Stewardship Program brings the expertise of State foresters, the Extension Service, Soil and Water Conservation Districts, Resource Conservation and Development Councils, biologists, and private consultants to private landowners, local governments, and environmental organizations. Generally, Forest Stewardship Program participants own less than 1,000 acres of land; however, there is no maximum ownership restriction. Participation is available to individuals and noncommercial landowners who agree to follow their plan recommendations for at least 10 years. The Forest Stewardship Program is not a cost-share program, but rather it provides technical and planning guidance, encouraging multiple-resource management.

Forest Tax Law Program for New York State

New York State, in cooperation with the New York State Department of Environmental Conservation, has enacted a number of laws granting tax relief for qualifying landowners to encourage the long-term ownership of woodlands for the production of forest crops and to increase the likelihood of a more stable forest economy. As early as 1912, there were provisions for tax concessions on forest lands, culminating in the present Section 480-A of Real Property Tax Law passed in 1974. Tracts of 50 contiguous acres, exclusive of portions not committed to the production of forest crops, are eligible. To be eligible, timber harvesting conducted within 3 years before application must have been done in



APPENDIX I RESOURCE ASSISTANCE PROGRAMS

accordance with a sound forest management program. Property owners must commit their land to the production of forest crops and follow a management plan prepared by a forester and approved by the New York State Department of Environmental Conservation, for the next succeeding 10 years beginning each year that a tax exemption is received. Tax savings vary considerably. If analysis shows that a tax reduction can be obtained, it is recommended that a forester be consulted to determine the approximate costs of preparing a management plan and making investments as required by the plan.

Urban and Community Forestry Program

The Urban and Community Forestry Program is administered by the USDA Forest Service and promotes conservation and management of forests and related natural resources. The program provides technical expertise and financial assistance for the planning and management of related natural resources in urban and community forests. It provides Federal funding through the State forester for community grants for the stewardship of urban and community forests including resource inventory, tree planting, proper tree care, and environmental restoration.

Watershed Forestry Program

This program is administered by the nonprofit organization called the Watershed Agricultural Council. The Watershed Forestry Program promotes good forestry by training loggers and foresters about best management practices that prevent nonpoint source pollution. The program also encourages private landowners to become good stewards of forest resources and educates the public about how forests can help protect the water supply. Funding for this partnership program comes from New York City Department of Environmental Protection and the USDA Forest Service.

FARMLAND RESOURCE ASSISTANCE PROGRAMS

Conservation Reserve Program

The Conservation Reserve Program (CRP) is a voluntary program for agricultural landowners delivered through the USDA Farm Service Agency and the USDA Natural Resources Conservation Service. The CRP provides technical and cost-share assistance for the conversion of highly erodible cropland and other environmentally sensitive cropland areas to permanent vegetative cover. “Traditional” CRP enrollments target acreages and enroll cropland through regularly scheduled, periodic national sign-ups. Through CRP, annual rental payments and cost-share assistance is offered to establish long-term, resource-conserving covers on eligible farmland. “Continuous” CRP enrollments target smaller tracts and are held at all times through the year. Continuous sign-up provides management flexibility to farmers and ranchers to implement certain high-priority conservation practices on eligible land and may increase eligibility



APPENDIX I RESOURCE ASSISTANCE PROGRAMS

for certain enhancements. Both programs have basic requirements in common: cropland must have been planted or considered planted to an agricultural commodity in 2 of the last 5 crop years, and marginal cropland must be devoted to a riparian buffer or planted to trees. Landowners must enter into a 10- to 15-year contract upon enrollment into CRP. Through the program, a landowner can be reimbursed up to 50 percent of the cost of establishing a permanent cover on approved cropland. Tree planting is the preferred practice for permanent forest cover and water quality protection. Once permanent cover is established, the landowner receives annual rental payments for 10 to 15 years depending on the cover type. Payments are based on the average value of dry land cash rent or the cash rent equivalent for the past 3 years. Additional financial incentives are available for select land use or maintenance practices.

Environmental Quality Incentives Program

The Environmental Quality Incentives Program (EQIP) is administered by the USDA Natural Resources Conservation Service and the USDA Farm Service Agency. EQIP provides technical and cost-share assistance to farmers and ranchers in priority areas to address serious threats to topsoil, water, and related natural resources. Priority areas can include watersheds, environmentally sensitive areas, or areas with significant soil and water-related natural resource concerns. Eligible landowners include only those involved in livestock or agricultural production. Livestock operations with more than 1,000 head are ineligible. Lands that are eligible include cropland, pastureland, rangeland, and forest land. A site-specific conservation plan must be developed. EQIP contracts are offered to participating landowners in 5- to 10-year durations to provide cost-share payment to implement practices detailed in conservation plans. A landowner's cost may be reimbursed up to 100 percent for no longer than 3 years for various land management practices. These practices include management of nutrients, manure, and wildlife habitat or irrigation water. Landowners' costs for conservation practices such as filter strips, grassed waterways, and wildlife may be reimbursed up to 75 percent.

Farmland Assessment Act of New Jersey

To preserve open space, the people of New Jersey passed the Farmland Assessment Act of 1964, to be administered by the New Jersey Forest Service. The Act was amended in 1986, requiring woodland owners with 5 acres or more of woodlands to develop and implement a State-approved forest management plan written by an approved forester to qualify for reduced property taxation. Under the current Farmland Assessment Program, woodland owners, in addition to the forest management plan, must also have annual gross sales of forest products averaging \$500 for the first 5 acres, plus \$0.50 for every additional acre. The woodlands must be actively devoted to carrying out the forestry recommendations as prescribed in the approved forest management plan. To ensure that woodland owners are complying with the law, the New Jersey Forest



APPENDIX I RESOURCE ASSISTANCE PROGRAMS

Service is required to inspect each woodland every 3 years. The Farmland Assessment Act has been successful in preserving open space and protecting privately owned woodlands.

Farmland Preservation Program of New Jersey

The Farmland Preservation Program is administered by the New Jersey State Agriculture Development Committee (SADC), which coordinates with County Agriculture Development Boards, municipal governments, nonprofit organizations, and landowners in the development of plans that best meet the needs of individual landowners. The program targets the purchasing of woodlands and farmlands, especially stewardship properties being managed for environmental benefits and is limited to owners of farmland. Farms or development easements that are acquired through the Farmland Preservation Program will forever be protected for agricultural use. The SADC also provides grants to counties, municipalities, and nonprofit groups to fund the purchase of development easements; directly acquires farms and development easements; and offers grants to landowners in the Farmland Preservation Program to fund up to 50 percent of the cost of soil and water conservation projects. It also administers the Right to Farm Program, oversees the Transfer of Development Rights Bank, and operates the Farm Link Program—which matches farm sellers with potential buyers.

Farmland Protection Program of New York State

The New York State Department of Agriculture and Markets administers two matching grant programs focused on farmland protection. The first program was designed to assist county governments in developing agricultural and farmland protection plans to maintain the economic viability of the State's agricultural industry and its supporting land base. The second program was established to assist local governments in the implementation of local farmland protection plans that focus on preserving the land base by purchasing the development rights on farms using a legal document called a conservation easement. Agricultural conservation easements must be held, monitored, and enforced in perpetuity. State assistance payments for farmland protection projects may be authorized under the New York State Environmental Protection Fund to cover up to 50 percent of the costs for counties to develop agricultural and farmland protection plans, and up to 75 percent of the costs for the purchase of development rights on farms.



WETLAND RESOURCE ASSISTANCE PROGRAMS

Wetlands Reserve Program

The USDA Natural Resources Conservation Service administers and delivers Wetlands Reserve Program. The primary objective of the program is to provide technical and cost-share assistance for the voluntary removal of marginal agricultural lands from production in order to restore and protect them as wetlands. The three eligibility options for program enrollment are permanent easement, 30-year easement, and restoration cost-share agreement. The restoration cost-share requires a minimum commitment of 10 years. The benefits received by an enrolled landowner depend on the program option. Permanent easement for wetland restoration pays up to 100 percent of the cost. A 30-year easement pays 75 percent of the cost. If the landowner enters into a restoration cost-share agreement, no reimbursement is offered for protection of the wetland restoration site, but 75 percent of the wetland costs are reimbursed.

WILDLIFE ASSISTANCE PROGRAMS

Harbor Estuary Program

The U.S. Environmental Protection Agency established the New York – New Jersey Harbor Estuary Program in 1988 out of a growing public concern for the health of the New York – New Jersey Harbor and Bight ecosystem, and designated the estuary an “Estuary of National Significance.” The Harbor Estuary Program focuses on the following issues: habitat loss and degradation, toxic compounds, dredge material management, pathogens, nutrients and organic enrichment, and floatable debris. The program pulled together representatives from the private and public sectors, including government, industry, business, and environmental interest groups, as well as elected officials from counties in the area into a partnership known as the Management Conference. The mission of the conference was to develop a plan to protect and restore the estuary. Large portions of the New Jersey Highlands and a small part of the New York Highlands are part of the New York – New Jersey Harbor Study Area Program. The Harbor Estuary Program could serve as a model for protecting portions of the Highlands as an area of national significance through a partnership effort.

Partners for Fish and Wildlife

The U.S. Fish and Wildlife Service’s Partners for Fish and Wildlife Program provides funding for voluntary habitat restoration in cooperation with private landowners. This program could be particularly effective in the Highlands, where large portions of open space lands are in private ownership. This voluntary cost-share program’s goals are to protect, enhance, and restore important fish and wildlife habitats on private lands through partnerships. In New York and New Jersey, this program has restored wetlands and grasslands, and several threatened and endangered species habitats.



APPENDIX I RESOURCE ASSISTANCE PROGRAMS

In New Jersey, the Bring Back the Natives Program, administered through the Partners for Fish and Wildlife Program, is a cooperative effort between the National Fish and Wildlife Foundation, U.S. Fish and Wildlife Service, Bureau of Land Management, USDA Forest Service, Bureau of Reclamation, and Trout Unlimited, to restore native aquatic species and their habitats through local and regional partnerships. The U.S. Fish and Wildlife Service's New Jersey Field Office implements this program throughout New Jersey and in the Highlands region. Under Bring Back the Natives, the National Fish and Wildlife Foundation matches Federally funded challenge grants with contributions from private foundations, corporations, individuals, State and local governments, and nonprofit organizations for conservation projects.

Wildlife Habitat Incentives Program

The objective of the USDA Natural Resources Conservation Services' Wildlife Habitat Incentives Program (WHIP) is to provide technical and cost-share assistance to establish and enhance wildlife and fish habitat. Eligibility for the WHIP is fairly broad as long as landowners can demonstrate ownership or control of the land they want to enroll. A wildlife habitat plan must be developed and implemented over a 5- to 10-year period. WHIP will pay up to 75 percent of the landowner's cost of installing wildlife habitat practices recommended in the wildlife habitat development plan. New wildlife practices may be implemented with cost-share payments, or the payments may be used to replace practices that failed for reasons out of the landowner's control. A maximum of \$10,000 can be paid to defray costs per contract. The landowner also receives a professionally prepared wildlife habitat development plan with recommendations to improve wildlife habitat on their land.

MULTIPLE RESOURCE ASSISTANCE PROGRAMS

"Cooperative Extension" Program

The Cooperative State Research, Education, and Extension Service (Cooperative Extension) provides a link between research developed at universities and delivers this knowledge to local communities. Cooperative Extension operates nationwide through each State's land grant university. In New Jersey, the land grant university is Rutgers University. In New York, the land grant university is Cornell University. Cooperative Extension has forestry extension and research programs, and competitive grants programs available to communities across the country. In New York State, Cornell Cooperative Extension improves quality and sustainability of human environments and natural resources through an Environmental Outreach Council and a Water Quality Programming Project. In New Jersey, Rutgers Cooperative Extension helps consumers, agriculture, and other businesses develop and implement practices that maintain a balance among the environment, human health, and economic benefits, through a Pest Management Office, Harmful Plants Gallery, and a Drought Web site. All of these programs are available to Highlands residents and organizations.



Resource Conservation and Development Program

USDA Natural Resources Conservation Service administers the Resource Conservation and Development (RC&D) Program, initiated in 1962 to help people care for and protect their natural resources to improve an area's economy, environment, and living standards. The program provides a way for local residents to work together and plan how they can actively solve environmental, economic, and social problems facing their communities. The program consists of 277 authorized RC&D areas nationwide (two in New Jersey and one in New York) that deliver coordinated resource conservation and rural development assistance to communities around the county. RC&D pulls together communities, various units of government, and grassroots organizations and helps them to establish direction for the local program.

The North Jersey RC&D Council operates in several communities of the New Jersey Highlands region. The Council facilitates the protection of the region's human and natural resources by working with communities and regional partnerships to do the following: address issues related to water quality, water resource protection, and sustainable farming; build local community capacity; and manage natural hazards that impact community planning. Staff at the North Jersey RC&D Council have coordinated and implemented riparian forest buffer programs in 20 watersheds; provided technical assistance to farmers; assisted local communities with project start-up, coordination and training for regional initiatives; and acted as regional coordinator of watershed management, characterization, and assessment for the Upper Delaware watershed.

Rivers, Trails and Conservation Assistance Program

The Rivers, Trails and Conservation Assistance Program is an outreach program of the U.S. Department of Interior's National Park Service that provides technical assistance to help local groups plan greenways, conserve rivers and watersheds, and develop new trails through voluntary partnerships that emphasize local initiatives and involvement. The National Park Service lends skills in planning, design, and organizing to a community. Rivers, Trails and Conservation Assistance works in partnership with landowners, local business owners, agencies, and private groups. Program staff helps to define goals, resolve issues, and reach agreement on how important areas should be improved and protected. This program could be particularly useful to local communities in planning for protection of the conservation focal areas identified in the Conservation Values Assessment of the Highlands study update.

Wild and Scenic Rivers Act

The National Park Service's Wild and Scenic Rivers Act (1968) established a program that preserves selected rivers in their free-flowing condition, to protect water quality and to fulfill other vital national conservation purposes. The program provides a model for regional conservation and resource protection. The goal is to preserve the character of a river as a "living landscape," where uses compatible with the management goals of a particular river are allowed and where change is expected to happen.



APPENDIX I RESOURCE ASSISTANCE PROGRAMS

Three sections of the Musconetcong River, the only river in New Jersey that falls entirely within the Highlands, have been determined eligible for designation under the Wild and Scenic Rivers Program. The National Park Service and the Musconetcong Watershed Association have sought and gained resolutions of support from the municipalities within the river corridor as well as from the four counties that fall within the Musconetcong watershed. The Musconetcong is expected to receive Wild and Scenic status by December 2003, which would make it one of only three New Jersey rivers to achieve this designation.

An example of a designated Wild and Scenic River outside the Highlands region is a nearby 67-mile stretch of the Lower Delaware River along the border of eastern Pennsylvania and western New Jersey, which includes three Pennsylvania tributaries. The river's designation as a Wild and Scenic River is the result of a cooperative effort between the National Park Service and the Delaware River Greenway Partnership. Similar to the Highlands region, the lower Delaware River region contains immense resource diversity, with a high population density and a wealth of natural, cultural, and historical resources and recreational opportunities

FIRE ASSISTANCE PROGRAMS

Volunteer Fire Assistance Program

The purpose of the Volunteer Fire Assistance Program, formerly known as the Rural Community Fire Protection Program, is to provide Federal financial, technical, and other assistance to State Foresters and other appropriate officials to organize, train, and equip fire departments in rural areas and rural communities, to prevent and suppress wildland fires. A rural community is defined as having a population of 10,000 or less. This population limit for participation in the Volunteer Fire Assistance Program facilitates distribution of available funding to the most needy fire departments. More than 500,000 volunteer firefighters serve and protect rural residents nationwide. Volunteer Fire Assistance Program funds are provided to the State forestry agencies through the USDA Forest Service, and most grants are \$5,000 or less.



APPENDIX J

HISTORY OF CONSERVATION SUCCESSES IN THE HIGHLANDS

1. 1937 – Palisades Interstate Park Commission (PIPC) established

The commission was established by bi-State compact and approved by the U.S. Congress. This bi-State agency could participate in land acquisition and land management in the New York – New Jersey metropolitan region (see item 12).

2. 1961 – New Jersey Green Acres Program established

The Green Acres Program was created to meet New Jersey's growing recreation and conservation needs. Since its inception, 74,900 acres have been protected and \$170 million has been spent through State acquisition, 25,000 acres have been protected and \$130 million spent through local programs, and 4,000 acres have been protected and \$12 million spent through nonprofit programs in the Highlands.

3. 1989 – Skylands Greenway Task Force created

New Jersey Governor Kean signed Executive Order 224 creating a Skylands Greenway Task Force to identify a greenway. Included were names of the jurisdictions managing certain natural resources, an inventory of all public and private land, and actions needed to implement the greenway (see items 8, 9).

4. 1990 – New York – New Jersey Highlands Study authorized

Congressman Kostmayer (PA) included the Sterling Forest Provision in the 1990 Farm Bill (HR 3950), authorizing a study of the New York – New Jersey Highlands, located in the States of New York, New Jersey, and Pennsylvania, including the Sterling Forest in Orange County, NY (see item 7).

5. 1991 – Hudson River Valley Greenway Act

The Hudson River Valley Greenway includes portions of the New York Highlands, and is a State-sponsored program created to develop a voluntary regional strategy for preserving scenic, natural, historic, cultural, and recreational resources while encouraging compatible economic development.

6. 1992 – The New Jersey Highlands: Treasures at Risk report released

The New Jersey Conservation Foundation released a report that provides a natural resources inventory of the Highlands (see item 14).

**APPENDIX J HISTORY OF CONSERVATION SUCCESSES****7. 1992 – New York – New Jersey Highlands Regional Study published**

The USDA Forest Service completed this study as provided by the 1990 Farm Bill. The study supported land stewardship and watershed-based planning activities; identified conservation easements and land purchases as a voluntary, nonregulatory means to protect important areas; fostered citizen-level awareness of the region's natural resources; and identified priority conservation areas for protection and management (see items 9, 21).

8. 1992 – Skylands Greenway: A Plan for Action report released

The Skylands Greenway Task Force was created by Executive Order 224 in New Jersey. It recognized the need for a regional planning entity and improvements to land use planning and natural resource management in the Highlands. It called for the designation of a Highlands National Stewardship Area, and the establishment of a Federally authorized Highlands Regional Council (see item 9).

9. 1992 – The New York – New Jersey Highlands Work Group Report released

The Highlands Work Group, chaired by Christopher Daggett, former New Jersey Department of Environmental Protection Commissioner, and staffed by Regional Plan Association (RPA) with the assistance of the USDA Forest Service, was created in spring 1992 when the former members of the New York – New Jersey Highlands Regional Study, the Skylands Greenway Task Force, and other interested citizens joined together to promote swift and concerted public action to protect the Highlands of New York and New Jersey. The report called for the designation of a Highlands National Stewardship Area in cooperation with the USDA Forest Service, and the establishment of a Federally authorized Highlands Regional Council within the stewardship area (see item 25).

10. 1993 – Highlands Trust Advisory Board created

New Jersey Governor Florio signed Executive Order 82 creating the Highlands Trust Advisory Board to make recommendations on lands most suitable for preservation, as well as to examine efforts to identify natural habitats, greenway corridors, cultural resources, scenic roads, and landscapes.

11. 1993 – Morris County, New Jersey Open Space Farmland and Preservation Trust Fund established

Morris County's open space acquisition funding program has led to the acquisition of 7,000 acres, and has spent \$47 million in the Highlands since 1993. The purchase of 3,400 acres is pending, and nearly \$20 million are encumbered for future land acquisitions. As of June 2002, all seven New Jersey Highlands counties offer an open space funding program for land acquisition.

**12. 1995 – Jurisdiction of PIPC expanded**

New Jersey S137 acknowledged the importance of the Highlands Region by expanding the jurisdiction of the Palisades Interstate Park Commission, so that this bi-State agency could participate in land acquisition and its management within this region (see item 15).

13. 1995 – Hudson Highlands Lands acquired

Since 1995, New York has acquired 26,777 acres in the Hudson Highlands area, which includes the 794-acre Wonder Lake State Park (Putnam County), 5,197 acres of additions to Clarence Fahnestock State Park (Putnam County), 2,458 acres to create Schunemunk Mountain State Park (Orange County), a 53-acre addition to High Tor State Park (Rockland County), and 231 acres of additions to Hudson Highland State Park (Putnam County). New York used \$9,515,000 in Environmental Bond Act funds and \$16,410,000 in Environmental Protection Fund dollars for these acquisitions.

14. 1996 – RPA Third Regional Plan—A Region at Risk and Building a Metropolitan Greensward released

The Regional Plan Association plan identifies the Highlands as one of 12 region-shaping open spaces and calls for its conservation. “The Treasures of the Highlands” lists the top 12 critical sites out of about 75 originally identified through a survey of Highlands Coalition members and public officials.

15. 1997 – Sterling Forest Park purchased

New Jersey S1672 provided funds to the Palisades Interstate Park Commission (PIPC) to purchase Sterling Forest in New York and New Jersey. Approximately 20,000 acres have been protected since 1990 with the following funding: 2,000 acres purchased for \$9.2 million in 1990; 15,280 acres purchased for \$55 million in 1998; 1,350 acres purchased for \$7.89 million in 2000; 659 acres purchased for \$860,000 in 2000; and 209 acres purchased for \$610,000 in 2000.

16. 1997 – New York City Watershed Memorandum of Agreement signed

This agreement unites watershed communities, including portions of the New York Highlands, New York City, New York State, the U.S. EPA and environmentalists in support of an enhanced watershed protection program for the New York City drinking water supply. The Agreement defines the three elements of this watershed protection program, including land acquisition and stewardship, watershed protection and partnership, and watershed regulations.

17. 1997 – New Jersey’s Watershed Management Area Planning begun

Twenty watershed management areas are being studied in New Jersey through grants provided by the New Jersey Department of Environmental Protection from its Watershed Protection Fund. The projects began in 1999 and 2000, and were



APPENDIX J HISTORY OF CONSERVATION SUCCESSES

to have a 4-year life. The projects have two phases: Phase 1 is characterization and assessment, and Phase 2 is planning, which will develop a watershed area management plan. Five watershed management areas include lands within the Highlands region. The Department of Environmental Protection is reassessing the program to determine the extent to which the overall approach should be modified.

18. 1998 – New York State Farmland Protection Program established

Approximately 6,500 acres of productive farmland have been protected in the New York Highlands.

19. 1999 – Highlands Trail designated a Millennium Legacy Trail

The Highlands Trail project was begun in 1995 with the assistance of the National Park Service and the New Jersey Conservation Foundation. It is a cooperative effort of the New York – New Jersey Trail Conference, conservation organizations, State and local governments, and local businesses. When completed, the trail will extend over 150 miles from Storm King Mountain on the Hudson River in New York south to Phillipsburg, New Jersey, on the Delaware River. The Millennium Legacy Trail designation is one of only 50 in the United States, giving it singular status among New Jersey's natural and historic pathways, in addition to making it eligible for extensive financial aid.

20. 1999 – Establishment of a Highlands National Forest requested

Sponsored by Assemblyman Paul DiGaetano, New Jersey Assembly Joint Resolution No. 76 requested the President and Congress to establish Highlands National Forest in New Jersey and to provide for its administration and management as a "Preserve."

21. 2000 – Update of New York – New Jersey Highlands Regional Study authorized

Federal legislation sponsored by Senator Torricelli and Congressman Frelinghuysen provided \$750,000 to update the 1992 New York – New Jersey Highlands Regional Study (see item 26).

22. 2000 – First Highlands Preservation Summit convened

Congressman Gilman (NY) convened the first Highlands Preservation Summit, leading to the establishment of a Highlands Preservation Initiative Working Group in 2001. Its purpose is to draft Federal legislation to protect the environmentally sensitive areas, historical heritage, and biodiversity of the Highlands, while ensuring economic prosperity and opportunity for the States, counties, municipalities, and businesses in this region (see item 12).

**23. 2001 – New Jersey State Plan recognized Highlands**

The New Jersey Planning Commission identified the New Jersey Highlands as the first Special Resource Area in the State. A Special Resource Area is a region with unique characteristics or resources of Statewide importance that are essential to the sustained well-being and function of its own region and other regions, and to quality of life. The State Plan recommends several planning and implementation strategies in the Highlands.

24. 2001 – New York Open Space Plan identified Highlands

The New York State Department of Environmental Conservation's Open Space Plan identifies the Highlands as a unique physiographic region. The plan recommends developing a greenway corridor comprised of State parks, forests, and other lands that span the length of the New York Highlands. In addition, the Department of Environmental Conservation's Hudson River Valley Biodiversity Manual cites the need for additional inventory work to prevent continued conversion and fragmentation of Highlands area forests and wetlands.

25. 2002 – Highlands Stewardship Act introduced

Congressman Gilman introduced this bill to Congress. It recognizes the national significance of the Highlands region by defining it as the nation's first "Stewardship Area." The measure is broken into two provisions: Land Conservation and the Office of Highlands Stewardship. The land conservation provision will ensure funds for land preservation purposes. The Office of Highlands Stewardship is designed to provide technical and financial assistance to States, communities, and private landowners—including farmers and individuals.

26. 2002 – New York – New Jersey Highlands Regional Study: 2002 Update completed

The USDA Forest Service Highlands Study update provides comprehensive, updated information on the land, water, and people of the region; detailed analyses of watershed condition, forest fragmentation, and biological diversity; identifies focal areas for protection and management; and outlines potential conservation strategies. A separate technical report, to be available on compact disc and through a Web site, provides more detailed information (methodology, data files, maps) on the study update.



APPENDIX K

LAND CONSERVATION PROJECTS

To help demonstrate how information on the regional importance of Highlands resources can help shape positive local decisions, the USDA Forest Service funded the Land Conservation Projects Program. This program, undertaken through the offices of the Regional Plan Association, provided matching funds for pilot initiatives in New Jersey and New York communities that would demonstrate these program goals:

- Encourage the local use of comprehensive resource information, especially information regarding regional values or characteristics of natural resources in the Highlands.
- Promote collaborative land use decisionmaking and natural resource management, including cooperation among localities, among localities and State and regional agencies, and among government and private individuals and organizations.

The need for such a program has been documented many times, including in the listening sessions conducted in spring 2001 as part of the resource assessment for the Highlands study update.

Municipal and county governments, State and local park agencies, land trusts and other nonprofit organizations and private landowners were eligible for the grants. Thirteen applications totaling \$280,000 were received. Through a competitive process, \$90,000 was allocated to these four projects on a 50/50 cost-share basis:

- Updating the Comprehensive Plan and Zoning Ordinance for Philipstown, New York;
- Regional Greenway Plan for Southeastern Sussex County, New Jersey;
- Conservation Initiative for the Watersheds of Spruce Run Reservoir in New Jersey; and
- Setting the Standards for Water Quality Protection in the Highlands (Morris County, New Jersey)

This appendix describes these four projects (Figure K-1). They demonstrate how local government, private water purveyors, and nonprofit organizations can use the resource assessment in this report and similar Geographic Information System (GIS) information to protect drinking water and recreational resources, and to reconcile local and regional needs and responsibilities for conservation and development. Completion of the specific projects is expected by spring 2003; however, the overall program will continue to be a model for how the USDA Forest Service and other entities can provide financial and technical resources to Highlands communities to help safeguard regional resources.



APPENDIX K LAND CONSERVATION PROJECTS

201

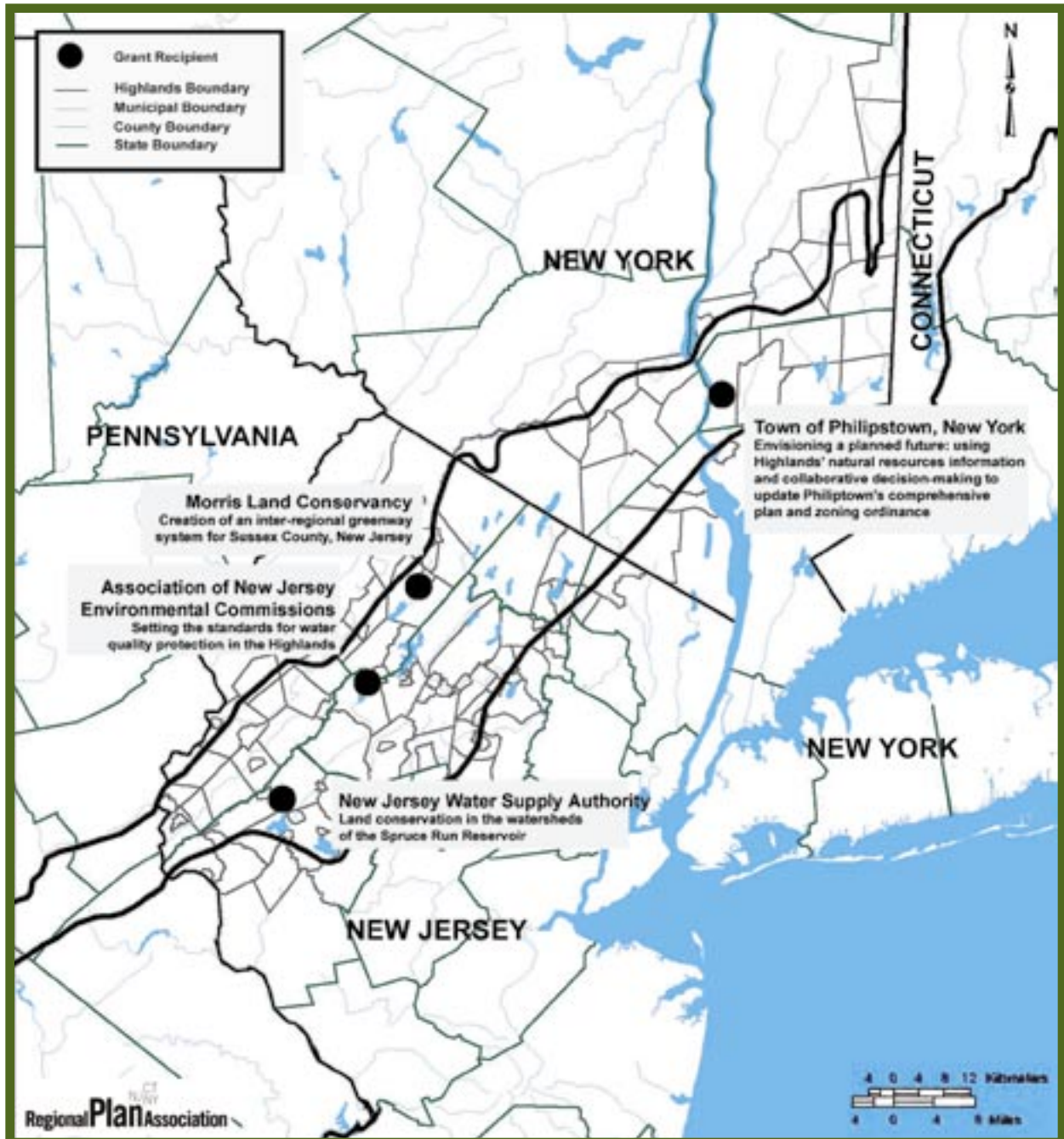


Figure K-1. Land conservation projects. Four projects being administered by the Regional Plan Association received USDA Forest Service grants. These projects show how the information in this Highlands study update and collaborative decisionmaking can be used to meet local needs and to protect regionally important resources.



UPDATING THE COMPREHENSIVE PLAN AND ZONING ORDINANCE FOR PHILIPSTOWN, NEW YORK

Project Sponsor: Town of Philipstown

Project Location: Town of Philipstown, Putnam County, New York

Philipstown is engaged in a comprehensive planning process. A special board of 15 residents was convened in early September 2001 and was charged with preparing the Comprehensive Plan. The Board has been meeting regularly, with a target completion date of March 2003.

The Land Conservation Project grant ensures that the comprehensive resource information presented in the Highlands resource assessment as well as other data from a variety of partners will be used to inform the update of Philipstown's Comprehensive Plan and zoning ordinance. To encourage collaborative decisionmaking, town-wide planning forums and educational information sessions will continue throughout the drafting of the Comprehensive Plan and the revising of land use policies and zoning ordinances. The data gathering and GIS mapping is being managed for the Town by the Hudson Highlands Land Trust, a nonprofit organization based in Philipstown.

The resource assessment, as well as information from The Nature Conservancy, make it clear that Philipstown has forests that are a significant part of the Highlands region. Other important information has been gathered from Putnam County, the Hudson River Greenway Conservancy, the New York – New Jersey Trail Conference, The Open Space Institute, and Scenic Hudson Land Trust.

The open space work group of the special board is defining a process to formulate conservation goals. Natural resource features are being characterized as serving one of four functions: public health (water quality), community character, recreation and habitat. The work group is using GIS maps of these features and functions to get a better grasp of the natural resources in town to identify how to preserve them, and to determine needed changes to zoning and land use regulations. The entire special board will draft implementation measures that integrate the comprehensive plan objectives.

Expected final products include a comprehensive plan update showing open space priority areas, as well as large-scale GIS maps showing Philipstown's natural resource features, including steep slopes, aquifers, wetlands and waterways, hiking trails, habitats, current zoning, remaining undeveloped large tracts, preserved lands, and elements required by law (Figure K-2).

One of the important outcomes of this project will be how to balance conservation of natural resources within the framework of a comprehensive plan. Because the work is being done as part of a broader community-based vision, this Land Conservation Project takes into account other community objectives, such as affordable housing and commercial development. The success of this project will rely on presenting an integrated plan to the community that addresses the broad array of issues.

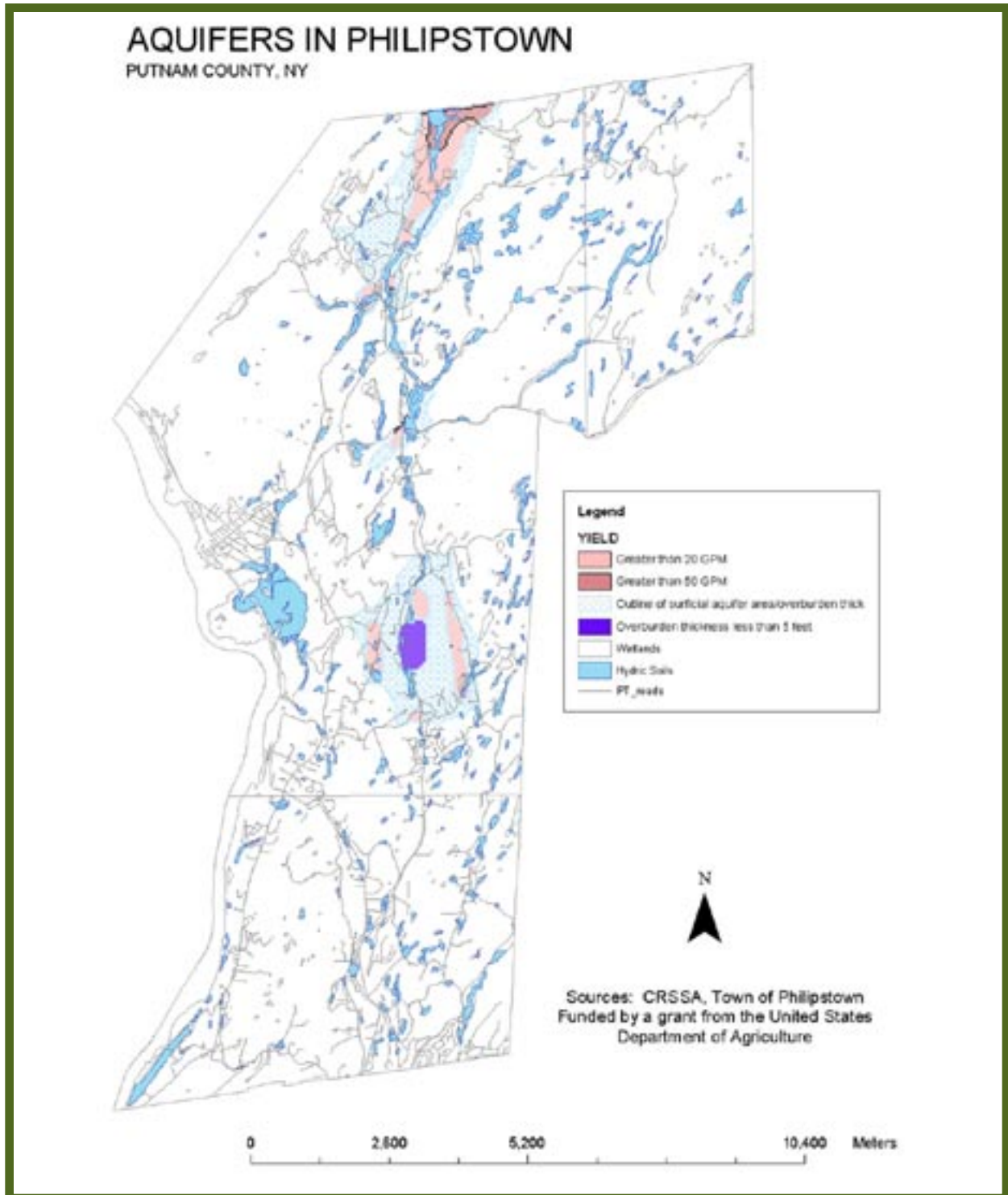


Figure K-2. Water resources in Philipstown. Water quality is one of the natural resource functions that will be addressed in conservation goals for Philipstown, Putnam County, New York.



APPENDIX K LAND CONSERVATION PROJECTS

**REGIONAL GREENWAY PLAN FOR SOUTHEASTERN SUSSEX COUNTY,
NEW JERSEY**

Project Sponsor: Morris Land Conservancy

Project Partner: Rutgers University Center for Remote Sensing and Spatial Analysis

Project Location: Byram, Sparta and Andover Townships, Hopatcong, Stanhope and Andover Boroughs (Sussex County, New Jersey)

Morris Land Conservancy and the Department of Landscape Architecture at Rutgers University jointly prepared a plan creating a system of open space linking Byram, Hopatcong, Stanhope, Sparta, Andover Township, and Andover Borough. Titled the “High Lakes Greenway,” the plan started with the Lubbers Run Greenway, a centerpiece of the open space program in Byram Township. Recent land conservation work in Byram Township has led to a municipal Open Space and Recreation Plan and township-wide trail map. The township is pursuing permanent preservation of a riparian corridor along the banks of Lubbers Run to link the town’s neighborhoods, scenic areas, and recreation and municipal facilities.

Morris Land Conservancy met with local planning boards, governing bodies, and administrative staff to present the regional greenway vision and identify the individual towns’ significant natural features, sites, and priorities for open space preservation and land acquisition. Local land trusts, State park managers, and trail groups were also contacted for project areas and land acquisition priorities. Using both the local information and Statewide data available through the Center for Remote Sensing and Spatial Analysis at Rutgers University, the students identified critical areas and developed a site inventory of the six communities in the study.

Using the CEDAR greenway analysis from the Green Space Design Institute, the students mapped the cultural, ecological, developmental, agricultural, and recreational (CEDAR) components of the six communities on one map. Overlaying the priorities of the local communities (trail connectivity and protection of water resources), the students created overall greenway designs linking the six communities (Figure K-3). The greenway vision demonstrates how open space can act as a system to preserve sensitive water supplies and provide corridors between communities. The natural resources and priorities for each town form the basis of the greenway plan and will guide the recommendations of the final report.

The report and summary brochure outline ways local governments can use their master planning and zoning to work with private and public landowners to protect their forest land and conserve natural resources. Involvement of the local communities in this important region of New Jersey is critical to the preservation of sensitive environmental corridors.

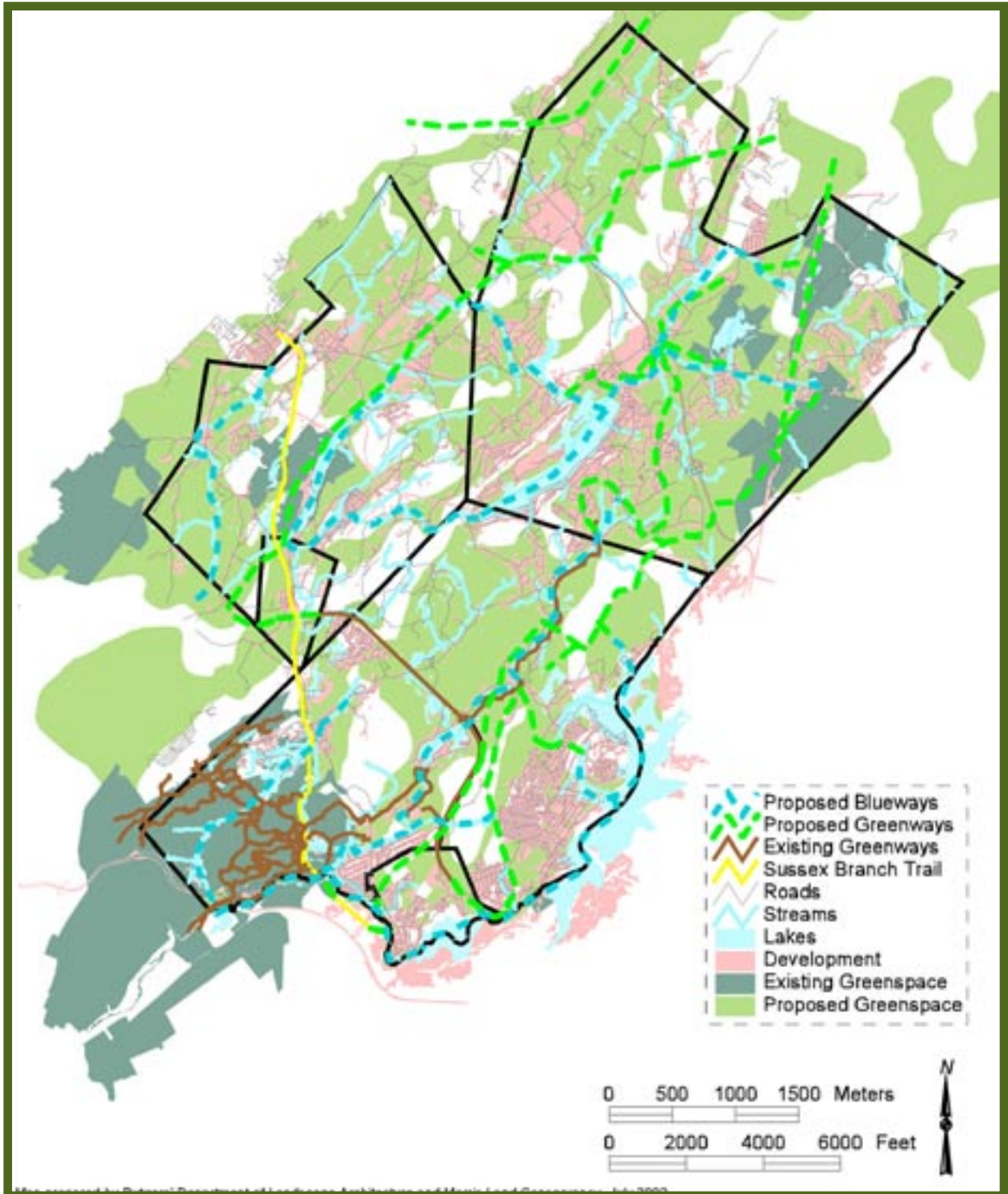


Figure K-3. Morris Land Conservancy's greenways and blueways. The greenways proposed for the High Lakes Greenway in Sussex County, New Jersey, would provide open space corridors between communities, and blueways would preserve sensitive water supplies.



CONSERVATION INITIATIVE FOR THE WATERSHEDS OF SPRUCE RUN RESERVOIR IN NEW JERSEY

Project Sponsor: New Jersey Water Supply Authority

Project Partners: New Jersey Department of Environmental Protection—Division of Parks and Forestry, New Jersey Department of Environmental Protection—Division of Fish and Wildlife, Hunterdon County Planning Department, the South Branch Watershed Association, and the six local municipalities

Project Location: Bethlehem, Lebanon and Union Townships, Glen Gardner and High Bridge boroughs, and Washington Township (Hunterdon and Morris counties, New Jersey)

The New Jersey Water Supply Authority operates the Spruce Run Reservoir, a critical part of the Raritan Basin water supply system and the only reservoir in the State that is fed directly and solely by natural streamflow. Due to increasing development in the area, wastewater levels have increased, water-supply carrying capacity is under stress, and nutrient levels in the Spruce Run Reservoir are rising.

The Spruce Run Initiative is an effort to permanently protect the Spruce Run Reservoir and to reverse existing stresses as much as possible. The initiative includes land acquisition, land management, and remedial efforts, and will take several years to complete.

Under the Land Conservation Project, the New Jersey Water Supply Authority will satisfy one component of the initiative by working with local governments to accomplish the following:

- Identify land acquisition targets,
- Coordinate land development activities to increase ecological value of dedicated open space from clustered development,
- Identify appropriate changes to municipal zoning and development ordinances in the reservoir watershed, and
- Educate the general public and government officials about the process, rationale, and results of the initiative.

The townships of Bethlehem, Lebanon, and Union, and the boroughs of Glen Gardner and High Bridge have adopted Memoranda of Understanding with the Water Supply Authority for their involvement in the Spruce Run Initiative. Funds are being provided from the Land Conservation Project grant to the three townships so that their professional planners can be involved in the process. All three townships have authorized this activity. Through May 2002, the municipalities' planners provided detailed information on current zoning and ordinances relating to natural resource conservation issues such as clustering, as well as recent development not shown on New Jersey Department of Environmental Protection's land use/land cover maps. Land use in the Spruce Run watersheds in 1995 is shown in Figure K-4. The Water Supply Authority selected Morris Land Conservancy, an open space planner, to provide expert support to the process. Meetings have focused on development of open space priorities using an interactive GIS-based process.



APPENDIX K LAND CONSERVATION PROJECTS

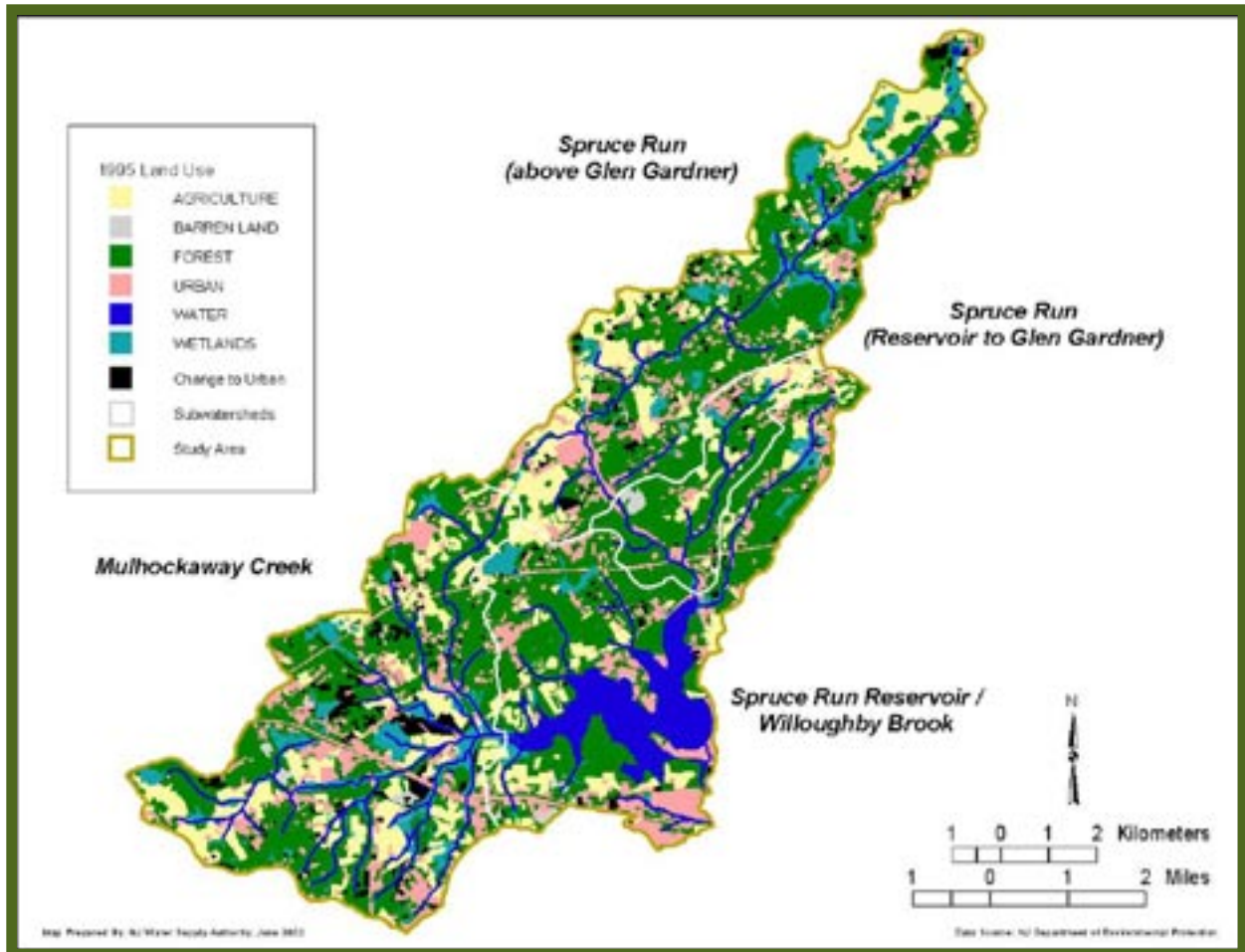


Figure K-4. Study area for the Spruce Run Initiative. Increasing urban development in the Spruce Run watersheds in Hunterdon and Morris Counties, New Jersey, is having a negative effect on water quality. Land use is shown for 1995.

The Spruce Run Initiative members developed a Critical Areas Preservation Plan, incorporating both acquisition priorities and subdivision control measures to ensure the maximum contiguity and extent of permanent forest cover in the watersheds. Six large concentrations of undeveloped lands have been targeted for preservation efforts in the watershed. If all parcels could be preserved, dedicated open space in the watershed would increase by approximately 5,800 acres, more than doubling the existing amount. To the extent that targeted parcels are developed, the plan specifies methods of ensuring preservation of as many critical features on those properties as possible. Finally, the plan identifies some useful additions to existing land use ordinances to preserve critical areas.



APPENDIX K LAND CONSERVATION PROJECTS

**SETTING THE STANDARDS FOR WATER QUALITY PROTECTION
IN THE HIGHLANDS**

Project Sponsor: Association of New Jersey Environmental Commissions (ANJEC)

Project Location: Mount Olive and Roxbury Townships, Morris County, New Jersey

The purpose of this project was to assess the impacts of development on headwaters of the Raritan River, identify the critical factors in water quality degradation, and develop the methods and derive the standards and sample ordinances to protect potable water supply and aquatic habitat environments. The project assessed watershed conditions and resulting impacts on biological diversity.

In addition to the Land Conservation Project grant, this project was also supported with volunteer staff and in-kind services from the Environmental Commissions of Mount Olive and Roxbury townships.

This project focused on the aquifer system underlying Budd Lake in Mount Olive and the Drakes Brook watershed in Mount Olive and Roxbury (Figure K-5). Both areas are under intensive development pressure, and the depletion and degradation of the aquifer system and watershed are concerns. They are also representative examples of Highlands geology, water supply, and development patterns.

Budd Lake is a major recreational resource located in Mount Olive Township. The lake is surrounded by development that depends on a regional aquifer system consisting of surficial glacial material, limestone formations, and granitic bedrock for its water supply.

Drakes Brook runs from Mount Olive into Roxbury Township. It is a trout maintenance stream that is upstream of trout production streams, potable water supply reservoirs, and major production wells.

Educational materials and a regional workshop were provided for 70 Highlands stakeholders in April 2002. This “lessons learned” workshop provided a summary of the methods and findings of this and the other Land Conservation Projects. This regional workshop was a public forum open to all Highlands stakeholders for discussion and networking, to improve communication and cooperation on a regional basis.

The outcomes include a study of the impact of development on the headwaters, identification of critical factors in water quality degradation, methods to derive water quality standards, and sample ordinances that protect potable water supply and aquatic environments.



APPENDIX K LAND CONSERVATION PROJECTS

209

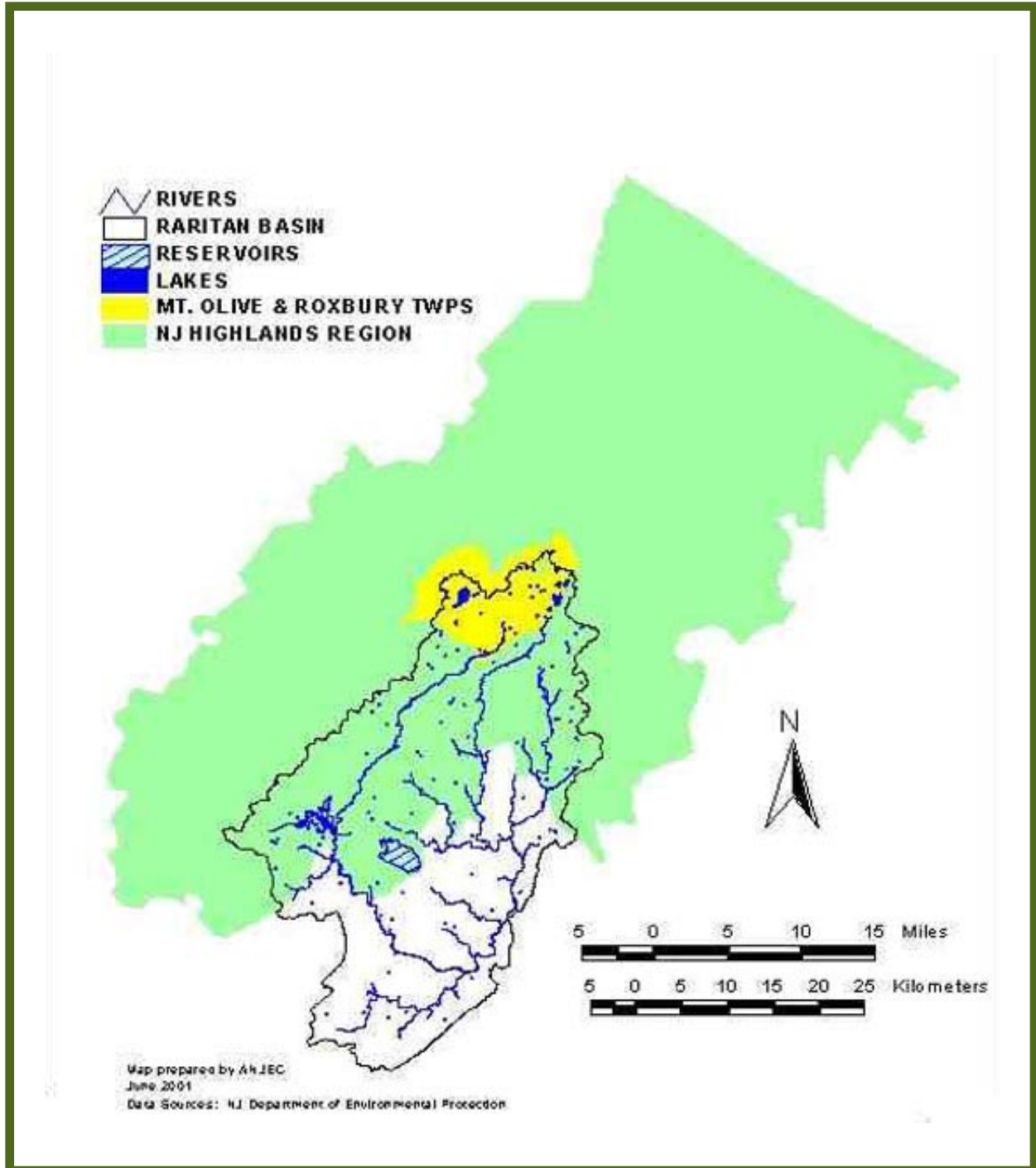


Figure K-5. Land preservation and water supply project area. In Morris County, New Jersey, Budd Lake and the underlying aquifer in Mount Olive Township, and Drakes Brook in Roxbury Township, are representative examples of Highlands resources that are under intensive development pressure and need to be protected.