

# ***New Jersey Pinelands Commission***



## ***Annual Report 2001***

***22 years of protecting, preserving and enhancing the natural and cultural resources of the New Jersey Pinelands through cooperation, wise land-use planning and science-based resource management.***



# Mission Statement of the New Jersey Pinelands Commission

*The mission of the New Jersey Pinelands Commission is to preserve, protect and enhance the natural and cultural resources of the Pinelands National Reserve, and to encourage compatible economic and other human activities consistent with that purpose.*



*Front Cover: Tulpehocken Creek, Wharton State Forest.  
Above: Cranberry Bog in late spring.*

# New Jersey Pinelands Commission

## 2001

### Gubernatorial Appointees

Jerrold L. Jacobs, Chairman

Candace M. Ashmun  
Sally Dudley  
Linda M. Eckenhoff

Theodore Gordon  
Stephen V. Lee III  
Jay E. Mounier

### U.S. Secretary of the Interior's Appointee

Robert W. McIntosh Jr.

### County Appointees

#### *Ocean County*

Alan W. Avery Jr., Vice-Chairman

#### ***Atlantic County***

Charles Pritchard (*Jan-July*)  
Edward A. Wuillermin, Jr. (*July-Dec*)

#### ***Cape May County***

William J. Brown

#### ***Burlington County***

S. Joseph Kowalski

#### ***Cumberland County***

Leslie M. Ficcaglia

#### ***Camden County***

Norman F. Tomasello

#### ***Gloucester County***

Richard Westergaard

### Executive Director

Annette M. Barbaccia

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# Pinelands Commission Staff

***Annette M. Barbaccia, Executive Director***

***John C. Stokes, Assistant Director, Management & Planning***

***William F. Harrison, Assistant Director, Development Review & Enforcement***

## **Executive Staff**

Nadine Young, Executive Assistant to the Commission  
Terrence Moore, Senior Advisor to the Commission  
Francis Rapa, Communications Officer  
Kathleen Whitton, Supervising Executive Secretary  
Martha Williams, Executive Secretary

## **Office of Planning**

Larry Liggett, Planning Manager  
Kimberly Beidler, Principal Resource Planner  
Barry Brady, Cultural Resources Planner  
Russell Davis, Geographic Information Supervisor  
Frank Donnelly, Economic Planner  
Paul Dunne, Geographic Information Specialist  
Richard Federman, Resource Planner  
Susan Grogan, Principal Resource Planner  
Deborah Klemas, Planning Assistant  
Christine Krupka, Watershed Resource Planner  
Theresa Melodick, Office Assistant  
Elizabeth Piner, Principal Planning Assistant  
David Rickert, Geographic Information Specialist

## **Regulatory Programs Office**

Charles Horner, Regulatory Programs Manager  
April Fijalkowski, Regulatory Programs Specialist

## **Science Office**

Robert Zampella, Chief Scientist  
John Bunnell, Principal Research Scientist  
Christina Burns, Science Technician  
Andrew Du Brul, Field Technician  
Kim Laidig, Principal Research Scientist  
Nicholas Procopio, Research Scientist

## **Office of Public Programs**

Elizabeth Carpenter, Public Programs Supervisor  
William Jacoby, Education Specialist

## **Business Services**

Donna Connor, Business Services Supervisor  
Ellen Keegan, Human Resources Specialist  
Claud Jay Riches, Principal Procurement Specialist  
Patricia Spires, Business Assistant

## **Office Services**

Eartha Williams, Principal Office Assistant  
William Lowery, Clerical Assistant  
Melody Wood, Principal Clerical Assistant

## **Project Review Office**

Kathleen Swigon, Project Review Manager  
Keith Carter, Project Support Assistant  
Todd DeJesus Environmental Specialist  
Ernest Deman, Environmental Specialist  
Donna Graham, Project Coordinator  
Mary Hornor, Environmental Specialist  
Sharon Kimball, Principal Project Support Assistant  
Mary Knight, Project Support Assistant  
Branwen Lambertson, Applicant Services Representative  
Donna McBride, Supervising Environmental Specialist  
Jennifer Michalowski, Environmental Specialist  
Jean Montgomerie, Environmental Specialist  
Fredrick Seeber, Environmental Specialist  
Deborah Stranahan, Project Support Assistant  
Brian Szura, Environmental Specialist  
Rhonda Ward, Environmental Specialist  
Edward Wengrowski, Wastewater Mgmt. Coordinator  
Karen Young, Supervising Environmental Specialist

## **Management Information Systems (MIS)**

John LaMacchia, MIS Manager  
Maureen Cook, MIS Tech  
Janet Pierce, Principal MIS Specialist



## ***Chairman's Message***

It is with great pleasure that I join the entire Pinelands Commission in presenting the 2001 Annual Report. Designated a National Reserve in 1978 and afforded State protection under the Pinelands Protection Act of 1979, the million-acre Pinelands are truly a state and national treasure. Since the Pinelands Comprehensive Management Plan took effect in 1980, the Commission has worked to implement it in a way that continues to protect the Pinelands in the face of increasing development pressures and ever-changing social and economic influences.

To ensure its continued viability, the Federal and State Acts require periodic reviews of the Pinelands Plan. While the Third Plan Review officially got underway in January 2002, the Commission spent 2001 gearing up for this important endeavor. The Commission conducted two strategic planning retreats, in January and May, to outline the specific process for reviewing the Plan and to develop a vision, goals and priorities for the review. These retreats resulted in the identification of two major priority issues: Permanent Land Protection and Regional Growth Areas.

The year's work culminated in late 2001 with the attainment of two significant milestones. In December, the Pinelands Commission released a benchmark scientific study of the health of wetland and aquatic resources in the Mullica River Basin. Ten years in the making, this study provides some of the most comprehensive datasets ever assembled on watershed resources. It will prove invaluable in future efforts to manage land use and natural resources not only in the Mullica River Basin, but in all Pinelands watersheds.

Regarding Regional Growth Communities, the Commission learned in late 2001 that it was selected to receive a \$187,000 grant from the Geraldine R. Dodge Foundation to implement the Pinelands Excellence Program. This important effort will team the Commission up with two Pinelands municipalities and a planning consultant to develop prototype "smart growth" planning models for livable communities in areas that are experiencing development pressures. Our thanks go out to the Dodge Foundation for helping the Commission to improve the quality of life in the Pinelands.

Additionally, certain Regional Growth Communities had requested that, as part of an overall strategy to reduce the strain of development, the Pinelands Commission allow their government leaders and planners to reduce the housing densities prescribed under the Pinelands Comprehensive Management Plan. In 2001, after careful analysis, the Commission responded to these communities by allowing up to 30 percent density reductions for those municipalities with the greatest density requirements. The Pinelands Commission will continue to work with growth communities to plan more effectively to address future growth, and to support measures to enhance infrastructure, services, natural resources, community character and overall quality of life.

We welcomed a new Pinelands Commissioner during 2001, Ed Wuillermin, Jr., who represents Atlantic County. A farmer and licensed professional planner, Ed brings a wealth of knowledge and a common sense approach to the Commission. Ed replaced Charles Pritchard, who served on the Commission with distinction for eight years. As one of the most dedicated public servants around, Charlie stepped down from the Commission to serve the people of Atlantic County in many other capacities. We wish Charlie all the best. As Chairman, I am honored to lead 14 of the most dedicated and talented people to serve on any public board, commission or authority. This year's report provides a glimpse of each Commissioner.

I am proud to issue the 2001 Annual Report. This document serves as a testament to the hard work of the Pinelands Commission, its staff and our partner organizations, far too many to name here. The Pinelands Commission has achieved a great deal over the past 22 years, and while our work is far from complete, we know that the Pinelands Comprehensive Management Plan has served the region well in protecting one of our nation's greatest natural treasures.

Best regards,  
Jerrold L. Jacobs, Chairman  
New Jersey Pinelands Commission

## ***Executive Director's Message***

The completion and dedication of the Richard J. Sullivan Center for Environmental Policy and Education at the Pinelands Commission Office in New Lisbon is a highlight of the Commission's achievements in 2001. Thanks to the Fund for New Jersey and other generous contributors, this outstanding facility will serve as a venue for a wide range of public forums and other events to help raise awareness of the Pinelands and facilitate programs and activities aimed at achieving our goals of protecting the Pinelands environment for future generations. It will serve as a center of operations and a resource for the entire Pinelands community.

The type and pace of Commission accomplishments in unprecedented for an organization of its size. The protection of Pinelands water resources continues to be a major emphasis of the Commission. The advancement of the Kirkwood-Cohansey Study legislation, completion of the Mullica River Basin Study, completion of the Alternate Design Wastewater System AdHoc Report and kickoff of the Mullica Watershed Planning Project are major initiatives that will promote better understanding and long-term protection of Pinelands water resources and dependent habitats.

During 2001, the Pinelands Commission staff began preparation of the Third Progress report on Plan Implementation, a comprehensive document that outlines changes in conditions as well as initiatives of the Pinelands Commission during the past 22 years, and since the last review in 1991. The report, submitted to the Commission in January 2002, is serving as an invaluable reference document that provides historic and baseline data to the Commission and all parties involved in the review, as possible changes to the Pinelands Comprehensive Management Plan are evaluated. Based on work conducted at two Pinelands Commission retreats in 2001, the Commission has identified the issues of permanent land protection and regional growth areas as priorities for the review.

Another milestone in 2001 was the cooperative effort between the Pinelands Commission and the State Agricultural Development Committee (SADC) to advance farmland preservation in the Pinelands. The SADC and Pinelands Commission entered into an agreement to share the cost of purchasing the deed restrictions or "easements" on Pinelands farms. This arrangement, along with a revised SADC formula for appraising the value of Pinelands farms, resulted in 32 Pinelands farms, totaling more than 3,000 acres, being slated for preservation at an estimated cost of \$3.6 million to the Pinelands Development Credit Special Purchase Program.

In addition to the SADC-Pinelands farmland preservation partnership, the Pinelands Commission is striving to advance the permanent preservation of land through other collaborative efforts. In 2001, the DEP Green Acres Program, based on joint efforts with the Commission, acquired 2,734 acres of critical Pinelands habitat through the federally-funded "Section 502" Pinelands acquisition program. Green Acres also purchased 5,579 acres in 2001 through a State-funded Pinelands acquisition program. The Pinelands Development Credit Program, a partnership between the Pinelands Commission and the New Jersey Department of Banking and Insurance, was responsible for permanently protecting 9,476 acres during 2001. Looking ahead, 2002 promises to see the first open space acquisition payments under a unique funding agreement among the Pinelands Commission, The Nature Conservancy and Cape May County Municipal Utilities Authority.

In presenting the 2001 Annual Report, I want to acknowledge the dedication and accomplishments of staff as well as State, county and local agencies and governing bodies that have been partners in implementing the important mission of the Pinelands Commission. I also want to recognize the environmental and business communities for their efforts in assisting the Commission in deliberating on important Pinelands matters. I look forward to working with everyone on the review of the Pinelands Comprehensive Management Plan during 2002.

Sincerely,  
Annette M. Barbaccia, Executive Director  
New Jersey Pinelands Commission









**Stephen V. Lee III**, a gubernatorial appointee since 1982, is partner in Lee Brothers, Inc., an 1,800-acre cranberry and blueberry farm in the heart of the Pinelands. He also serves on the Board of Directors of Ocean Spray Cranberries, Inc. Mr. Lee served for 16 years on the Board of Trustees of Burlington County College, including seven years as Chair. He served as Chairman of the Burlington County Planning Board, as a member of the County Farmland Preservation Committee, and on the Pinelands Environmental Council, an agency which preceded the Pinelands Commission. Mr. Lee chaired a local farm credit bank and served as a founding chair of the parish pastoral council of the Holy Eucharist Catholic Church. He holds a degree in Electrical Engineering from Rutgers and served in the US Air Force and NJ Air National Guard, attaining the rank of Lieutenant Colonel.



**Robert W. McIntosh**, is the appointee of the U.S. Secretary of the Interior. He has served as a member of the Commission since 1995. Mr. McIntosh is the Associate Regional Director for Planning, Resource Stewardship and Science for the Northeast Region of the National Park Service. Prior to his current position, he served as General Superintendent of the Gateway National Recreation Area in New York and New Jersey, and as Regional Director of Heritage, Conservation and Recreation Services. In addition, he has held various National Park Service policy and management positions in Washington, Philadelphia, Albuquerque and San Francisco.

**Jay E. Mounier**, a gubernatorial appointee serving since 1995, operates a hay and livestock farm in Franklinville. He has served since 1985 on the Franklin Township Environmental Commission, including ten years as Chair. Mr. Mounier has served on the Township Planning Board since 1990, and as Chairman since 1998. He also served as a Trustee and Treasurer of the South Jersey Land Trust for the past ten years, and is a founding member of the South Jersey Astronomy Club and Upper Maurice River Watershed Association. A hobbyist beekeeper, Mr. Mounier is a former president of the South Jersey Beekeepers Association. He holds a degree in Mechanical Engineering from Lehigh University.





**Edward A. Wuillermin** began serving as the Atlantic County appointee in July 2001. A farmer and licensed professional planner, Mr. Wuillermin formerly served with the Atlantic County Planning Department and a professional planning firm. In the latter role, he was responsible for the preparation of the Hammonton Town and Monroe Township master plans as part of the initial CMP compliance process. He and his brother own and operate a 250-acre truck farm in Hammonton, specializing in high-quality vegetables. He is a former member of the Atlantic County Agricultural Development Board, where he has served as Chairman. He is the Director of the NJ Tomato Council Cooperative and past Director of the Vineland Produce Cooperative Auction. Mr. Wuillermin was a charter member of the Hammonton Planning Board and is a member of the Atlantic County Transportation Authority.



### *Executive Director*



**Annette M. Barbaccia** is responsible for managing the daily operations of the Pinelands Commission and its staff of 59. She reports to and advises the members of the Commission on all matters before them. Before joining the Commission in August 2000, Ms. Barbaccia served as director of the New York City Mayor's Office of Environmental Coordination. She previously directed the Environmental Assessment and Review Division at the New York City Department of City Planning. Prior to working in the governmental sector, Ms. Barbaccia worked with a Long Island environmental consulting firm on water quality and Pine Barrens-related issues. She holds a master's of science degree in urban policy and a bachelor's degree in political science, both from the State University of New York at Stony Brook.

## *In the Pines: Pinelands Water*



**An abandoned cranberry bog along Deep Run, a tributary to the Batsto River in Shamong Township.**

The 17.7-trillion-gallon Kirkwood-Cohansey Aquifer underlies the entire Pinelands and much of southern New Jersey. This shallow aquifer varies in thickness from a thin veneer to several hundred feet, and largely defines the unique ecology of the Pinelands. The aquifer feeds the region's vast network of slow-moving streams, impoundments, wetlands and vernal ponds. It is the shallow water table of the Kirkwood-Cohansey that many Pinelands plant and animal species depend on for their survival. For example, the Pinelands represent a global stronghold for the endangered Swamp Pink (*Hellonias bullata*), which has been eliminated from much of its forested wetland habitat in the eastern United States. In addition to the ecological importance of the Kirkwood-Cohansey, the aquifer is an important source of clean, potable water for many of the more than 600,000 residents of the Pinelands National Reserve. In agriculture, the aquifer provides water for the irrigation of crops, and makes possible the cultivation of blueberries and cranberries, which require wetland-like conditions and high water tables.

Both the federal and state governments recognized protection of the Kirkwood-Cohansey Aquifer as one of the important reasons for the creation of Pinelands Protection laws in the late 1970s. In fact, a State law, passed in 1981 prohibits the transport of water more than 10 miles outside of the Pinelands National Reserve. In 2001, a law was passed that will fund a comprehensive study of the hydrology and ecology of the Kirkwood-Cohansey aquifer, to be conducted by the US Geological Survey, US Fish and Wildlife Service, NJ Department of Environmental Protection, Pinelands Commission and Rutgers University. The law designated the Pinelands Commission to lead the study.

# *ments 2001 Activities & Achievements 2001 Act*

## **MAJOR POLICY INITIATIVES & RULE AMENDMENTS**

### ***Guidelines for Management Area Changes***

In February of 2001, the Commission adopted important amendments to the Pinelands Comprehensive Management Plan (CMP) which incorporate guidelines to be used by the Commission when reviewing municipal proposals for management area changes. (See page 20 for a primer on Pinelands management areas.) The new guidelines also help to determine whether certification of a proposed management area change or the adoption of a formal amendment to the CMP would be the more appropriate means of accommodating a municipality's request.

The adopted amendments, which took effect in April, 2001, set forth a list of attributes which are indicative of a management area change that may warrant the adoption of an amendment to the CMP. These include:

- changes which create certain freestanding management areas or new Pinelands Villages;
- changes which have such a large cumulative or net effect that they substantially alter the character of a municipality's overall Pinelands zoning plan;
- changes which increase development potential for an area which predominantly includes lands with environmental limitations, lands which are permanently protected or included in a defined Pinelands acquisition area or lands included in an Agricultural Development Area that has been identified by a County Agriculture Development Board;
- changes which decrease development potential for an area which predominantly includes lands not appropriate for such a decrease due to their land tenure and use patterns, community and environmental character, accessibility to infrastructure or role in the Pinelands Development Credit Program;
- changes which have such a large cumulative or net effect that they substantially change the character of a municipality's overall Pinelands zoning plan;
- changes which could result in the establishment of a new precedent that represents a significant departure from past Commission policy and is expected to have region-wide implications; and
- changes which are inconsistent with the goals and objectives for the relevant management areas set forth in the CMP.

### ***Reduction of Regional Growth Area Densities***

In December of 2001, the Commission adopted amendments to the CMP which provide those municipalities with assigned Regional Growth Area densities of 3.0 or 3.5 units per developable acre an opportunity to reduce those densities to as low as 2.5 units per developable acre, if certain conditions are met. These conditions include a requirement that appropriate opportunities for the use of transferable development rights, called Pinelands Development Credits (see page 13), continue to be provided to ensure the continued protection of environmentally sensitive and agricultural lands elsewhere in the Pinelands Area. Further, to demonstrate the feasibility of proposed densities, municipalities which choose to implement the density reduction will be required to provide the Commission with a description of those ongoing and future efforts, projects and other measures they intend to implement or

recommend be implemented by other agencies to address needs and objectives related to infrastructure, utility service, recreation, conservation, economic development, housing and community development. The purpose of the amendments is to facilitate a more appropriate pattern of development in the highest-density growth areas while providing municipalities with increased flexibility in the design of zoning plans that may help to better achieve local objectives, better recognize areas with natural or cultural resource constraints and accommodate the use of Pinelands Development Credits. Although the amendments apply to a total of 12 municipalities, the Commission anticipates that only four (Egg Harbor and Hamilton Townships in Atlantic County and Jackson and Manchester Townships in Ocean County) will adopt revised master plans and land use ordinances to implement the density reduction due to the substantial presence of vacant lands.

### ***Pinelands Excellence Program***

In November 2001, the Commission was awarded a \$187,000 grant from the Geraldine R. Dodge Foundation to fund the Pinelands Excellence Program, a new program to help address development-related issues faced by regional growth communities. The pace of development and the lack of financial resources for comprehensive planning and infrastructure development have made it difficult for certain towns to accommodate growth and has had an impact on the overall quality of the growth that is taking place. Along with a professional planning and design consultant, the Commission will work with two Pinelands Regional Growth Area communities to develop long-term strategic visions to foster "livable" communities and address critical community development and design issues. Depending on the needs of the communities chosen for the program, draft ordinances, proposed design standards, principles for infrastructure investment and other types of products may be developed to address issues such as development design, mixed use centers, affordable housing, transportation and circulation, stormwater management, historic and cultural identity, and protection of open space and scenic and natural features. The Commission plans to share the work generated by the program with other Regional Growth communities and expects that such ideas and products will be transferable to other developing municipalities throughout New Jersey.

### ***Review of Municipal Ordinances***

All municipalities and counties in the Pinelands Area are required to revise their master plans and land use ordinances in order to implement the objectives and standards of the CMP. In 2001, the Commission certified the master plan and land use ordinances of Berkeley Township. As a result, 52 of the 53 municipalities with land in the state-designated Pinelands Area and all seven Pinelands counties have now had their master plans and land use ordinances certified by the Commission. Of the 927,000 acres located within the Pinelands Area, all but 360 acres are now governed by certified municipal plans and ordinances.

Amendments to certified master plans and land use ordinances must also be submitted to and reviewed by the Commission. During 2001, the Commission reviewed and certified 100 such ordinances and master plans from 30 different Pinelands municipalities. Notable among these were ordinances which implemented ten percent reductions in residential zoning capacity in the Regional Growth Areas of Egg Harbor and Hamilton Townships. A number of farm-related rezonings were certified as well, including the expansion of an existing Agricultural Production Area in Mullica Township and the establishment of two new Special Agricultural Production Areas in the Town of Hammonton. These rezonings were adopted to reflect the existing uses of the affected parcels and to allow the landowners to take advantage of the State Agricultural Development Committee's new program to purchase farmland easements in Pinelands agricultural areas.

## *In the Pines: Pinelands Agriculture*

The Federal and State Acts which created the Pinelands National Reserve and State Pinelands Protection Area recognized not only the importance of protecting the region's unique natural resources, but also cultural and agricultural resources. Agriculture plays both a vital economic and cultural role in the Pinelands. With about 20 percent of the Pinelands Area actively farmed, the region's agricultural industry is highly diverse, including vegetables, row crops, turf, dairy, livestock, ornamental nurseries, viticulture/wine-making and other crops. Travelers to the Jersey Shore are quite familiar with the many roadside produce stands that dot the Pinelands landscape, offering the freshest fruits and vegetables, such as the revered Jersey Tomato. The region is especially known for its blueberry and cranberry farms which, combined, cover nearly 11,000 acres. The Highbush Blueberry was first developed as a cultivated food crop in 1916 by Elizabeth White at Whitesbog in the Pinelands. In 2001, Pinelands farms produced 57 million pounds of cranberries and 38 million pounds of blueberries.



With about 7,500 acres in blueberry production, this summertime favorite is a major component of the Pinelands agricultural industry. Above, an Atlantic County blueberry farm in full blossom.

### ***Agricultural Resource Extraction***

In August of 2001, the Commission amended the CMP by revising and adopting standards and application requirements for agricultural resource extraction. The amendments define those resource extraction activities which are accessory to agricultural operations and clarify the circumstances under which soil may be excavated and removed from a farm without triggering the need for a development application to be filed with and reviewed by the Pinelands Commission. Working with an Agricultural Excavation Task Force created by the New Jersey State Board of Agriculture in 1999, the Commission developed these amendments in response to a number of instances in which material was excavated and removed from a farm and where significant amounts of soil and sand were proposed to be removed and sold from a property in support of an agricultural use, even though questions existed as to whether the excavation and soil removal activities were truly necessary for the agricultural use. The rules also set thresholds for how much soil can be removed before a permit is required. In cases where agricultural soil removal activities require application by virtue of their magnitude, they will be judged by agricultural standards, rather than standards intended for commercial mining operations. This allows the Pinelands Commission to review these cases to determine whether they are indeed necessary for agricultural purposes.

## **PERMANENT LAND PROTECTION PROGRAMS AND INITIATIVES**

### ***Farmland Preservation***

In 2001, the Commission teamed up with the State Agricultural Development Committee (SADC) to preserve farmland in the Pinelands through the implementation of a special Pinelands-dedicated round of farms. The utilization of the farmland easement program is the most effective mechanism for permanent protection of farmland, since it has additional deed restrictions not included in the general Pinelands Development Credit Program. Under a Memorandum of Agreement with SADC, the Pinelands Commission agrees to purchase the PDCs associated with the properties, while the SADC pays the balance of the price calculated by an SADC formula. This agreement complements a revised valuation formula developed by the SADC that changed the way farmland easement values are calculated in the Pinelands. Prior to 2001, only six privately owned farms, out of a total of about 750 in the State Farmland Preservation Program, were located within the Pinelands Area. Not only does this agreement make participation in the program a more attractive option for landowners, but it also helps to ensure that the current agricultural land use is continued in perpetuity.

In the Spring of 2001, an application round dedicated solely to Pinelands Farms resulted in 84 farms applying to the program. In the fall of 2001, the SADC conducted a second round of Pineland applications through County Agriculture Boards, resulting in an additional 30 Pinelands farms applying. Landowners were required to obtain, from the Pinelands Commission, a Letter of Interpretation (LOI) in order to identify the number of PDCs allocated to their farms. Of these, 32 farms totaling more than 3,000 acres are slated for preservation through joint PDC/SADC funding. Other farms will be included in future funding rounds.

During the 2001 Legislative Session, two bills were signed into law to provide Garden State Farmland Preservation Trust Fund money to purchase easements on the Pinelands farms. Assembly Bill 3629, approved on July 26, 2001, appropriated \$9 million for the purchase of easements on 32 farms, totaling 3,269 acres. Assembly Bill 3966, approved on January 2, 2002 appropriated \$5.5 million to preserve 27 farms totaling 3,928 acres. The Commission continues to work with the SADC to identify funding sources for the preservation of the additional Pinelands farms that applied to the program in 2001.

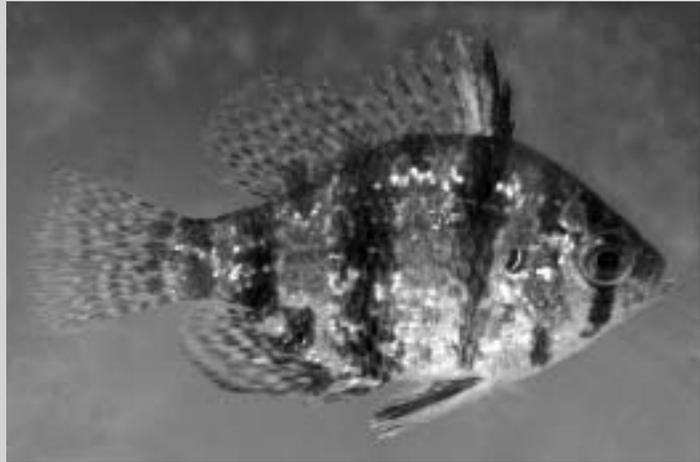
### ***Pinelands Development Credits***

Pinelands Development Credits (PDCs) are allocated to landowners in the Preservation, Agricultural and Special Agricultural Production Areas (known as sending areas) for not developing their land. These credits can then be purchased by developers owning land in Regional Growth Areas (known as receiving areas) and used to increase the densities at which they can build. Once credits are "severed" from a sending area property, the property is permanently protected by a conservation deed restriction and the credits on the property can then be sold. Credits are bought and sold in units called "rights." Four rights are equal to one credit. During 2001, 1,068 rights were severed, protecting over 9,467 acres. This brings the total land area protected through the severance of PDCs since 1982 to 34,048 acres.

While credits have been traditionally sold on the private market, the State Special Purchase Program was begun in 2000, which allows landowners to sell their credits directly to the State. While the prices paid by the State are below the private market value, the process is typically less complicated for sellers and allows them to sell as many credits in one transaction as they wish. And unlike when credits are sold on the private market, the State permanently retires the credits it purchases so they cannot be used by developers, thereby reducing potential development pressures in Regional Growth Areas. In 2001, the State purchased and retired 502 rights, permanently protecting 3,673 acres. (This is included as part of the 34,048 acres previously mentioned.)

## *In the Pines: Pinelands Fish*

The highly acidic water found in the Pinelands supports plant and animal communities that are quite different than those outside of the Pinelands. Of the nearly 100 fish species found in the Pinelands, only 13 are considered to be truly characteristic of unaltered acid streams found in the core Pinelands areas. Of these, the Banded Sunfish (*Ennaecanthus obesus*) and the Blackbanded Sunfish (*Ennaecanthus chaetodon*) are virtually restricted to the Pinelands in New Jersey. Most species found in the interior Pinelands tend to be small in size, typically feed on insects, and are well adapted to slow-moving, vegetated waters. The American Eel (*Anguilla rostrata*), which can spend up to ten years living in Pinelands Streams, migrates to the Sargasso Sea in the middle of the Atlantic Ocean to spawn. The Tadpole Madtom (*Noturus gyrinus*), actually a species of catfish, can sting predators (and people who handle the fish) with a toxic venom emitted through poison glands in its spiny fins. Another unique species of Pinelands fish is the Pirate Perch (*Aphredoderus sayanus*). While not a true species of Perch, the Pirate Perch is the only species in its Genus and is believed to date back to ancient times. The Eastern Mud Minnow (*Umbra pygmaea*) is tolerant of water with low dissolved oxygen. It can survive for long periods stranded in standing water or puddles by gulping air bubbles or oxygen-rich surface water.



**The Blackbanded Sunfish thrives in Pineland waters.**

### **Limited Practical Use Program**

The Limited Practical Use (LPU) Program offers owners of small properties in the Pinelands (less than 50 acres), whose application for a Waiver of Strict Compliance (a variance from normal Pinelands zoning or environmental standards) has been denied by the Commission, the opportunity to sell their land to the State of New Jersey. In 2001, 27 parcels of land constituting 53 acres were declared eligible for this acquisition program by the Commission, bringing the total number of parcels declared eligible since the inception of the program in 1995 to 376, constituting 1,370 acres.

To date, more than \$1.3 million has been spent to buy and permanently protect 235 of these parcels totaling 993 acres, using a combination of Green Acres funds and federal reimbursements. Acquired land may be subsequently transferred to Pinelands municipalities, other government agencies and conservation organizations. All of the purchased parcels are permanently deed restricted to ensure they remain undeveloped.

### **Pinelands License Plates**

In 1998, Pinelands specialty license plates became available to New Jersey motorists who wanted to demonstrate their support for the Pinelands while helping to protect open space in the region. After reimbursement of the Division of Motor Vehicles for expenses associated with the plates, proceeds from the application and renewal fees are deposited in the Pinelands Preservation Fund for acquisition of ecologically sensitive land in the Pinelands. The fund is

managed by the Department of the Treasury and acquisitions are administered by the Department of Environmental Protection. During Fiscal Year 2001, 1,118 new sets of Pinelands plates were issued and 2,525 sets were renewed. The fund balance at the close of Fiscal 2001 stood at over \$166,500.

### ***Evesham Land Protection***

A Memorandum of Agreement (MOA), established early in 2001 between the Pinelands Commission and Evesham Township Municipal Utilities Authority, will result in significant land protection. The MOA provides for the continued discharge of treated wastewater from the Kings Grant development into groundwater recharge basins and through spray irrigation in the Pinelands Rural Development Area. In addition, a series of conservation easements and other protection measures will be carried out by Evesham Township. The Township will acquire easements on 700 acres associated with the Kings Grant project precluding development of 244 additional dwelling units. The 212-acre parcel targeted for recharge and spray irrigation will likewise be protected, and the Township will acquire and permanently preserve a 133-acre lot in its Rural Development 2 zoning district.

### ***Other Permanent Land Protection Initiatives***

Pinelands Commission staff was engaged in a variety of research and planning activities during 2001 in support of the Commission's ongoing efforts to permanently protect environmentally critical lands in the Pinelands. The first several in what should become a wide ranging collection of specific "target area" maps were begun in 2001, identifying possible sites for greenways, wildlife corridors, and the like, while providing specific parcel-level information as a tool for land protection planning efforts.

## **PERMITTING, PROJECT REVIEW & REGULATORY AFFAIRS**

### ***Project Review***

The Pinelands Commission Project Review Office has oversight authority of municipal and county permitting decisions and development approvals to determine potential impacts on the Pinelands environment, including water quality, plants and animals. In cases where the Commission determines that a local approval is inconsistent with CMP standards, it has "call-up" authority to modify or overturn the approval.

During 2001, the Pinelands Commission's Project Review office received 1,405 new applications and had active files on 3,573 applications. This compares with 1,507 applications received and 3,559 active files in 2000. In 2001, Atlantic County led in new applications with 560 received, followed by: Burlington, 348; Ocean, 245; Camden, 127; Gloucester 59; Cape May, 40; and Cumberland, 25.

Of the 1,822 local permits that were handled by the Pinelands Commission in 2001, 1,375 or 75 percent were processed through the faxed permit procedure. Under the faxed permit procedure, a local code or health official can telefax a construction or septic application to the Commission prior to issuing the permit. The file is then reviewed and the municipality or county is notified within two days as to whether the issuance of a permit will raise any regulatory issues with the Pinelands Commission. The permit can then be issued or the applicant advised of a problem to be addressed or corrected. This process dramatically reduces the 15-day review period provided under the Pinelands Protection Act.

The Project Review Office administers other streamlined procedures such as Memoranda of Agreement (MOA) with municipalities to authorize certain activities with proper notification to the Commission. In a continuing effort to improve its coordination with Pinelands

Area municipalities, the Pinelands Commission entered into nine Memoranda of Agreement with municipalities to streamline the Commission's application process for certain minor development activities. These activities generally involve development that disturbs less than 5,000 square feet.

Another streamlined procedure is the Local Review Officer (LRO) Program, which allows participating municipalities to process applications for single-family dwellings on conforming lots with no substantial issues. Of the 847 private and public applications for development that were completed in 2001, 240, or 28 percent, were through the MOA or LRO streamlined procedures.

### ***Forestry Applications***

Based on a 1996 amendment to the Pinelands Comprehensive Management Plan forestry regulations, the Commission continues to jointly review most private forestry applications in the Pinelands Area in partnership with the New Jersey Department of Environmental Protection, Forest Service under the auspices of the New Jersey Forest Stewardship Program. In addition to private forestry applications, the Commission also reviews forestry applications that are submitted by public agencies. The Pinelands Forestry Advisory Committee, which advises the Commission on forestry matters involving public lands, met one time in 2001 to review seven forestry proposals and to discuss forestry management issues.

### ***Wetland Permitting***

In addition to the other initiatives that the Commission has instituted to streamline its permitting processes, the Commission has also been delegated the responsibility for issuing New Jersey Department of Environmental Protection (DEP) Freshwater Wetlands General Permits in the Pinelands Area. In 2001, the Commission issued 15 such permits on behalf of the DEP.

### ***Violations***

The Pinelands Commission continues its efforts to provide increased assistance to municipalities in pursuing and resolving violations of the local land use ordinances and the CMP. Reflective of those efforts, during 2001, Commission staff participated in site inspections with municipal officials and provided support and expert testimony in municipal court proceedings and Superior Court in Camden County, and pursued multiple violations of local land use ordinances and the CMP.

### ***Alternate Septic Systems***

In March 2000, the Commission formed a special committee to investigate alternate septic system technologies that would better meet the stringent water quality requirements of the Pinelands Comprehensive Management Plan. The Ad Hoc Committee on Alternate Septic Systems included representatives of the Pinelands Commission, the Pinelands Municipal Council, the Pinelands Preservation Alliance, and the New Jersey Builders Association. Working with a consultant and in close coordination with the Department of Environmental Protection, the Committee conducted extensive research and assessed the performance of various septic technologies.

The Ad Hoc Committee on Alternate Septic Systems wrapped up its work in August 2001 with the release of a final report. The report summarized the activities and findings of the Committee, and detailed recommendations for a program to approve the use of alternative on-site systems on an interim (at least three years) basis. The committee recommended that five technologies be approved for use on unsewered lots under 3.2 acres in size. The Committee also recommended implementation of a periodic testing program and other safeguards to

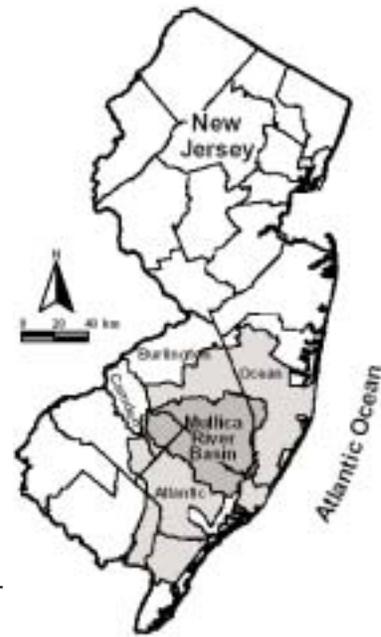
ensure that systems are properly installed, operated, and maintained. The Commission held a public forum in November 2001 to present the recommendations to the public. In December, the Commission formally proposed an amendment to the CMP to initiate a pilot program for the use of alternate on-site wastewater treatment systems.

Other activities of the Ad Hoc Committee during 2001 include the hiring of a consultant to prepare detailed cost estimates of the five technologies selected. Funding was also secured for development of the interim program, including hiring of a full-time wastewater coordinator.

## **SCIENCE & RESEARCH**

### ***Mullica River Basin Study***

In late 2001, the Pinelands Commission released the findings of a study that characterizes water quality and ecological resources within the 569-square-mile Mullica River drainage basin. The study correlates the scientific data with the various types and levels of land-use development within the watershed area regulated by the Pinelands Comprehensive Management Plan. Funded in large part by the National Park Service under



Location of the Mullica River Basin relative to the boundaries of the Pinelands National Reserve.

## ***In the Pines: Pinelands Plantlife***

Noted by botanists the world over, the Pinelands are home to many rare and unusual plants, including nearly 30 wild orchid species and several insectivorous species. Some 109 species of southern plants and 14 species of northern plants reach their respective geographic limits in the Pinelands. Other species, such as Knieskern's Beaked Rush (*Rhynchospora knieskernii*), a wetland plant in the sedge family, are currently found nowhere outside the Pinelands. Due to the region's high propensity for wildfires, Pinelands upland areas are dominated by Pitch Pine and other fire adaptive plant species. In fact, the 15,000-acre Pine Plains region is dominated by a four- to ten-foot high race of "pygmy" Pitch Pine, that is dependent on forest fires to release its seeds.



The delicate climbing fern (*Lygodium palmatum*) is one of 54 threatened and endangered species afforded special protection under the Pinelands Comprehensive Management Plan.

the Commission's long-term environmental monitoring program, Pinelands scientific staff spent nearly ten years gathering data for the Mullica report. The report examines populations of hundreds of species of plants, fish, frogs and toads, as well as the health of dozens of Pinelands habitat types at over 500 monitoring locations throughout the watershed. This information is then compared with existing water quality attributes and land use patterns to show how land use activities impact vegetation, wildlife, habitat and water quality.

While the Mullica watershed is diverse in terms of land use, ranging from fully developed to pristine forests, it is 85 percent forested and undeveloped and only 15 percent is developed and farmed. Within this study, a clear picture emerges of the relationship between development, human activity and the type, quality and health of the resources. The study found that degraded surface water quality and non-native plant and animal species were common in the stream basins with higher percentages of developed land and upland agriculture. With most developed land and upland agriculture located in the headwaters of the western drainage basins, water quality and biological integrity generally improved downstream, as streams passed through vast forested areas. Several major stream systems in the watershed, including the Batsto, Wading, Oswego and Bass Rivers demonstrate superior water quality and native Pinelands biological communities. The abundance of high water quality and native species found in the Mullica watershed is reflective of the largely natural-preserved state of the Basin.

The Mullica River Basin study also characterizes the scientific parameters for defining water quality in Pinelands water systems which have high-acid and low-nutrient chemistry. Therefore, the results from this study can be applied to other watersheds in the Pinelands region. Other key findings of the Mullica River Study include:

- Based on an evaluation of aerial photography and satellite imagery, land-cover composition of the Mullica River Basin changed little between 1979 and 1991, with development occurring in the appropriate Pinelands management areas.
- There was a slight increase in Atlantic White Cedar cover between 1930 and 1991, and hardwood replacement of cedar swamps is not a certain outcome of cedar-swamp succession, as has been widely believed.

### ***Kirkwood-Cohansey Legislation***

Legislation signed into law in July 2001 directs the Pinelands Commission to assess and prepare a report on the key hydrologic and ecological information necessary to determine how the current and future water supply needs within the Pinelands Area may be met while protecting the Kirkwood-Cohansey aquifer system and avoiding any adverse ecological impact on the Pinelands Area. The law directs the Commission to conduct the study in cooperation with the NJ Department of Environmental Protection, Rutgers University, the US Fish and Wildlife Service, and the US Geological Survey. The legislation appropriated \$5.5 million to fund the study. Initial planning for this major initiative has begun.



**Pinelands Commission scientists continually monitor many species like the Pine Barrens Treefrog, this one in Waterford Township.**

### ***Rancocas Creek Basin Study***

The Pinelands Commission, in 2001, surveyed sites in the Rancocas Creek watershed for Pinelands-specific disturbance-indicator plants, fish, and anurans (frogs and toads), to assess the ecological status of surface waters in the drainage system. The indicator approach is based on the results of extensive sampling conducted in the Mullica River study, and provides the Commission with a large amount of information with less sampling. Over the course of the year, Commission staff monitored 67 water quality sites for pH and specific conductance, 45 stream vegetation sites, 67 anuran sites and 58 fish sites, including streams and impoundments. Reports on the results of the surveys are being prepared for release in 2002.

### ***Water-level Monitoring***

The third of a series of research papers describing the vegetation, soils and hydrology of pitch pine lowlands was published in the October 2001 edition of the Journal of the American Water Resources Association. In the paper, titled "Using reference sites and simple linear regression to estimate long-term water levels in coastal plain forests," Pinelands Commission scientists developed statistical models used to predict long-term water table levels at Pitch Pine lowland sites with short-term water level records.

A report published by the Commission in 2001, titled *Characteristics of selected Pine Barrens treefrog ponds in the New Jersey Pinelands*, summarizes the chemical, physical, hydrologic and vegetative characteristics of Pine Barrens Treefrog habitat. The report is one of the most detailed habitat summaries of its kind ever assembled. During 2001, water levels continued to be monitored at 13 ponds where Pine Barrens treefrogs breed.

### ***Cranberry Agriculture & Wetlands***

Work continued in 2001 on a study of selected aquatic communities and landscapes in the Rancocas Creek and Mullica River basins and their relationship to past and present cranberry agriculture. Funded by a Wetlands Development Grant from the US Environmental Protection Agency, the study will look at hydrology, drainage, water quality and natural communities in streams with active and abandoned cranberry bogs and streams with no bogs. Commission staff is implementing the cranberry study as recommended by the Pinelands Commission's Science Advisory Committee. In 2001, staff monitored stream discharge and water levels at 12 gaging sites and collected pH, specific conductance, and dissolved oxygen data at 28 stream sites. Stream vegetation was surveyed at over 100 points and fish at 18. The landscape/stream pattern analysis was also initiated.

### ***Littoral Communities***

During 2001, the Commission received a Wetlands Development Grant from the US Environmental Protection Agency to fund a new study, titled "Monitoring the ecological integrity of Pinelands wetlands: the effect of watershed disturbance on the littoral communities of stream impoundments." (Impoundments are waterbodies - including lakes, ponds and bogs - that are created by the impounding or damming of streams or rivers.) Results from this study will represent a significant contribution to the Commission's long-term environmental-monitoring program by providing additional information on the relationship between land use and aquatic and wetland resources in the Pinelands. The results will allow the existing baseline inventory of Pinelands vegetation, fish and anuran communities to be expanded to include impoundments. The study will also test the applicability of the Commission's established stream bio-assessment methodologies to impoundment habitats, and provide an opportunity to expand the list of disturbance-indicator species. In 2002, Science Office staff will conduct study-site reconnaissance and site selection.

## *In the Pines: Pinelands Land Use Management Areas*

While many people associate the Pinelands with wild and largely undeveloped areas, the 927,123-acre State-designated Pinelands Area has a population (2000 U.S. Census) of about 277,000 people living in a wide range of communities from rural villages to small cities and suburban enclaves. There are nine different land management area designations under the Pinelands Comprehensive Management Plan, each allowing different levels of development and housing densities. The Preservation Area District (293,833 acres) is the heart of the Pines, where virtually no development is allowed, except strictly limited development in small infill areas. In the Forest Area (245,591 acres), only low density residential development and limited roadside retail development are permitted. The Special Agricultural Production Area (36,817 acres) is where berry farming and limited development related to berry farming is allowed. The Agricultural Production Area (67,492 acres) permits development associated with upland farming operations. In the Rural Development Area (112,856 acres), moderate-density residential and business development is permitted. The Regional Growth Area (77,610 acres) is where moderately high residential, commercial and industrial development is encouraged. The transfer of development rights, using Pinelands Development Credits, provides opportunities for increased development in the Regional Growth Areas in exchange for protecting land in Preservation and Agricultural Areas. In addition, there are Military and Federal Installation Areas (46,088 acres), and 54 designated Pinelands Towns (21,544 acres) and Pinelands Villages (25,292 acres), existing settlements where development is allowed consistent with the character of the communities.



**The quiet community of Browns Mills in Pemberton Township lies in the Regional Growth and Rural Development Areas of the Pinelands. Mirror Lake, shown above, is one of several the community is centered around.**

### ***Timber Rattlesnake Research***

In 2001, the Pinelands Commission and the NJ Department of Environmental Protection (DEP) Endangered and Non-Game Species Program entered an agreement to study and monitor the timber rattlesnake population in the Pinelands over a three-year period. The Pinelands Commission's research activities are focused on a rattlesnake population in southern Evesham Township, while the DEP researchers are studying rattlesnakes throughout the Pinelands. The research will help the agencies to better understand rattlesnake behavior and habitat requirements. During the 2001 field season, six snakes were implanted with transmitters and radio-tracked by Pinelands Commission staff. Commission scientists periodically check the snakes and record their locations with a global positioning system. The study will provide important information on the reclusive species' movement, home ranges, breeding and denning, as well as the impact of development on local populations.

***Richard J. Sullivan Center for Environmental Policy and Education  
Dedication Ceremony - November 27, 2001***



Clockwise from top left: (1) The Sullivan Center is designed to blend well with its bucolic surroundings; (2) "The Pinetones," a vocal group comprised of Pinelands Commission staff, perform God Bless America; (3) Dr. Clement Price, President of the Fund for New Jersey delivers remarks; (4) Guest of Honor Richard J. Sullivan addresses the assembly. Seated (left to right), former Pinelands Commission Executive Director Terrence Moore, State Senator William E. Schluter, State Senator Martha W. Bark and Dr. Clement Price; (5) Pinelands Commission Chairman Jerrold Jacobs (r) and Executive Director Annette Barbaccia (c) present Richard Sullivan with ceramic tile artwork commemorating the dedication of the Center; (6) a full house enjoys the dedication festivities.

## **PLANNING & SPECIAL PROJECTS**

### ***Mullica Watershed Planning Project***

In September 2000, the Pinelands Commission entered into a contract with the DEP to work with other organizations and individuals to develop a management plan for the Mullica River Watershed. Also known as Watershed Management Area No. 14, the Mullica Watershed encompasses part or all of 24 municipalities in four counties (Atlantic, Burlington, Camden, and Ocean), and has a population of approximately 84,000 people. The primary purpose of this effort is to assess existing water-related issues in the watershed and develop strategies to maintain, restore or enhance water quality, water quantity and ecosystem health.

A public "kickoff" meeting for the project was held in April 2001, at which participants offered their ideas about priority issues and goals in the watershed. This laid the foundation for the first Steering Committee meeting in August 2001. The Steering Committee represents a broad variety of interests in the Mullica watershed, including environmental and business groups, academia, local government, and agricultural and recreational interests. The Committee guides the project with input from the general public and key stakeholder groups in the watershed. Tasks undertaken by the Steering Committee during 2001 include: establishment of ground rules to guide the operation of the committee; development of a statement describing the group's collective future vision for the watershed; formation of several Technical Focus Groups to examine specific issues in detail; and evaluation of Action Now project ideas. Action Now projects are short-term projects aimed at improving water quality and advancing overall watershed goals. Examples include educational programs, stream cleanups, storm water management, land acquisition, development/implementation of best management practices, and technical studies concerning water quality, quantity and/or ecosystem health.

Other major project activities to date include the creation of a brochure, website ([www.nj.gov/pinelands/mullica](http://www.nj.gov/pinelands/mullica)) and other materials describing the project and facilitating additional public input and communication. A second general public meeting was held in October 2001 to discuss project progress and solicit Action Now project ideas. Commission staff also participate regularly in activities with other watershed organizations in the region, and have received funding for an Action Now project to develop an on-site wastewater management program. The Mullica Watershed Management contract sets forth a number of ambitious goals that will be met over the course of several years, culminating with the completion of the Watershed Management Plan by April 2005.

### ***Long-Term Economic Monitoring***

The 2001 Long-Term Economic Monitoring Report, released in September, culminated the first five years of the program. The Annual Report updates the Commission's ongoing program to track economic conditions in the Pinelands by monitoring indicators (some dating back to 1980) in three overall areas: property values and residential development; economic growth; and municipal finance. While no significant departures from prior economic activity were detected, the 2001 report did include new data from the 2000 Census, which was analyzed at the census block level for the first time using Geographic Information Systems.

In addition to preparing the Annual Report, work continued on two special studies: a joint effort headed by Cook College, Rutgers University, to develop value-added products for the blueberry industry; and an examination of the health of Pinelands municipalities with respect to certain social, economic, physical and fiscal conditions. The Municipal Health Study is being conducted in close coordination with the Pinelands Municipal Council. Commission staff met with officials from 36 Pinelands municipalities during the early part of 2001. Mayors, administrators and financial officers were asked to complete a survey on what factors or constraints most severely impact the fiscal health of Pinelands municipalities. The survey results

were compiled and an analysis is underway that could lead the Municipal Council to prepare legislation granting need-based funding to Pinelands towns.

The study of vacant land values continues. Commission staff are compiling tax parcel, real estate and other data for the 171 municipalities in the study representing political units both inside and outside the Pinelands. Data collection continued throughout 2001 of current and historical records dating back to 1989.

### ***Historic Preservation***

At the invitation of Lakehurst Borough, Pinelands staff researched and wrote a nomination to the National Register of Historic Places for the downtown business district and surrounding historic residences. The nomination was submitted to the New Jersey Historic Preservation Office in March 2001 and comments were received back in November. The staff is currently addressing those comments and expects to have a revised, final nomination in summer 2002.

Mullica Township officials requested the assistance of the Commission in early 2001 in seeking measures to ensure the long-term preservation of Pleasant Mills, a New Jersey and National Register site along the banks of Lake Nescochague, near Batsto Village. The Pinelands Commission had drafted the successful Register nomination in 1994 for this ruinous, but picturesque, site of textile and paper milling operations dating back to 1752. Pleasant Mills has been deteriorating more recently, which prompted the Township's request for help in finding a new owner or caretaker to see to its upkeep.

### ***Lower Camden County Wastewater Management Planning Project***

Pinelands staff met with officials and technical experts from Waterford Township, Winslow Township, Chesilhurst Borough and the Camden County Municipal Utilities Authority on several occasions in 2001 to map out a conceptual plan for addressing the impacts associated with inter-basin transfer of wastewater from the three municipalities to areas outside the boundaries of the Mullica Basin. A draft "action plan" was tentatively agreed to by all parties and initial steps begun to implement that plan.

### ***Southern Ocean Landfill***

In 2001, significant progress was made toward the environmentally sound closure of the Southern Ocean County Landfill in Ocean Township. A Memorandum of Agreement executed in 2000 between the Department of Environmental Protection (DEP) and the Pinelands Commission facilitated the closure of the 14-acre lined portion of the landfill. Closure of this section got underway in June 2001, and is expected to be completed in 2002. Work also continued in 2001 on the closure plans for the 42-acre unlined portion of the landfill. Legislation signed into law in June 2001 appropriated \$15 million to Ocean County to fund the closure of this portion. The Pinelands Commission is working with Ocean County and the DEP to ensure that the closure plan is fully consistent with the environmental standards of the Pinelands Comprehensive Management Plan.

### ***Scenic Byway Initiative***

Planning began in 2000 for the designation of a Scenic Byway through the central southern portion of the Pinelands by the state and federal governments. The recommendation to designate such a byway resulted from the Commission's Rural Economic Development Pilot Program, which was completed in late 1999. During 2001, Commission staff worked with municipal representatives to delineate a proposed route through 16 communities that reaches from Tuckerton Borough, Bass River and Washington Townships in the north to Woodbine Borough, Dennis and Maurice River Townships in the south. In the future, spur routes may be

added that will link with other natural and cultural highlights in nearby areas to the core byway route.

Parallel and coordinated Scenic Byways programs are administered by the NJ Department of Transportation and the US Department of Transportation and offer incentives for designation in the form of directional signage and inclusion of the route on tourism maps and materials, as well as seed money for comprehensive planning, promotional materials, marketing, capital improvements and other needs. The process for designation of a byway route is fairly involved and requires establishment of a corridor committee and submittal of nomination packages to state and federal transportation agencies. Pinelands Commission staff is helping municipalities along the route and working closely with the NJ Department of Transportation to revise that Department's requirements for designation in order to ease the up-front burden on small communities and facilitate access to federal funds.

## **PUBLIC EDUCATION, OUTREACH & PARTICIPATION**

### ***Richard J. Sullivan Center for Environmental Policy and Education***

The Richard J. Sullivan Center for Environmental Policy and Education opened in November 2001. The 12,450-square-foot facility was constructed at a cost of \$2 million. Of that cost, \$615,000 was provided by The Fund for New Jersey, a New Brunswick-based philanthropic foundation that supports efforts to solve problems and improve the quality of life in New Jersey. The Center is named in honor of Richard Sullivan, who served as the Chairman of the New Jersey Pinelands Commission from 1988 to 1998.

In addition to providing much-needed office space to Pinelands Commission staff, the Center features a library, lecture/public meeting hall and a technology resource center that, when fully equipped, will provide public access to project review applications, Geographic Information Systems and other database information. Importantly, the Sullivan Center will also provide a central venue for forums on topical issues, public hearings and other outreach and interpretive activities. A business and marketing plan is being developed to guide the use of the center as a educational, community and public policy resource.

### ***12th Annual Pinelands Short Course***

The Pinelands Short Course is a day-long adult educational opportunity that has been held on the first Saturday in March each year since 1989. In 2001, the venue for the Short Course was moved to The Richard Stockton College of New Jersey in Galloway Township, after being held at Rutgers University for eleven years. Co-hosted by Stockton College's Division of Natural Sciences and Mathematics, the 2001 Short Course was attended by 265 people. Opening remarks by United States Senator Jon Corzine highlighted the importance of protecting the natural resources of the Pinelands National Reserve. Senator Corzine also spoke of the importance of raising public awareness and appreciation of the Pinelands as a means of protecting the resource. The 2001 course offered 18 sessions on a wide range of topics, including wetland hydrology, history, Atlantic White Cedar swamps, soils, owls and hawks, outdoor photography and cranberry agriculture. The event has been supported by the New Jersey Education Association's Professional Development Institute since its inception.



**Buena Vista Township Mayor Charles Chiarello served his sixth year as Chairman of the Pinelands Municipal Council during 2001.**

### ***Professional Development Provider Status***

The Pinelands Commission became registered as a New Jersey Department of Education Professional Development Provider in 2001. In 2000, this Department mandated that teachers complete 100 hours of continuing professional development every five years from a registered provider. The Pinelands Short Course and the Pinelands Curriculum Guides, which contain lessons keyed to the state Core Curriculum Content Standards, are ideally suited to professional development.

### ***Local Public Officials Seminar***

Each year, the Pinelands Commission holds an orientation session for newly elected and newly appointed local officials to familiarize them with the Pinelands environment and the Pinelands Comprehensive Management Plan. The program is well attended by Mayors, municipal council/committee members, planning and zoning board members as well as members of municipal environmental commissions. While it is intended to serve as an orientation, the half-day session is also a great refresher for any local official on Pinelands issues. The 2001 session was held in Mays Landing in February and was attended by 65 local officials from 22 municipalities.

### ***Pinelands Municipal Council***

The Pinelands Municipal Council, created under the Pinelands Protection Act of 1979, is comprised of Mayors or their designees of the 53 municipalities in the Pinelands Area. The Council is empowered to review any changes to the Pinelands Comprehensive Management Plan, and advises the Pinelands Commission on any matters of interest regarding. During 2001, under the chairmanship of Buena Vista Township Mayor Chuck Chiarello, the Council met three times and provided important guidance and oversight to the Commission on a number of key issues.

## **ADMINISTRATIVE, FINANCE & TECHNICAL SUPPORT OPERATIONS**

### ***Information Technology***

The Commission launched a streamlining initiative in 2001, a major objective of which is to provide a greater level of information to municipalities, applicants, environmental organizations, developers, residents, and the public at large. As part of this initiative, the Commission's automated development review system that both tracks permits and maintains key historical data will be redesigned, with the hope of creating a platform upon which direct access by municipalities and the public can be provided. Information from the Commission's geographic information and zoning information systems will be integrated, thereby making site-specific data more readily available to all users of the new system. Ultimately, it is the Commission's hope that applications for development will be able to be filed on-line and that information on the status of applications and other important permitting information will likewise be accessible to applicants and local officials on the website.

### ***Geographic Information Systems (GIS)***

The Pinelands Commission continued to enhance its GIS by entering into a contract with a spatial data consultant, BAE Systems ADR, to digitize tax parcels for 30 municipalities, comprising 180,000 parcels within the Pinelands Area. This project was coordinated with the New Jersey Office of Information Technology to ensure consistency and standardization throughout the state, and will be complete by June 2002.

The Pinelands Commission's GIS laboratory continues to work closely and share data with County Planning Offices and the NJ Department of Environmental Protection's GIS Office. This has enabled the Commission to enhance its databases and analytical capabilities. For example, during 2001, the GIS lab performed spatial calculations for the farmland preservation program in the Pinelands and created a database of land protected through the severance of Pinelands Development Credits.

### ***Budget and Spending***

The Pinelands Commission's operating budget for Fiscal Year 2002 (July 2001 through June 2002) is \$5.80 million. Of this, \$3.43 million, or 59 percent, is budgeted for personnel expenses. The 2002 Fiscal Year budget anticipates new revenues of \$5.60 million, projects expenditures of \$5.80 million, and the use of \$200,000 from the Commission's fund balance.

Revenue sources include \$735,600 in federal grants, a \$2.85 million State appropriation and \$1.55 in State supplemental funding, including a one-time appropriation of \$798,000 to fund the Commission's permit streamlining initiative, which was begun in Calendar Year 2001.

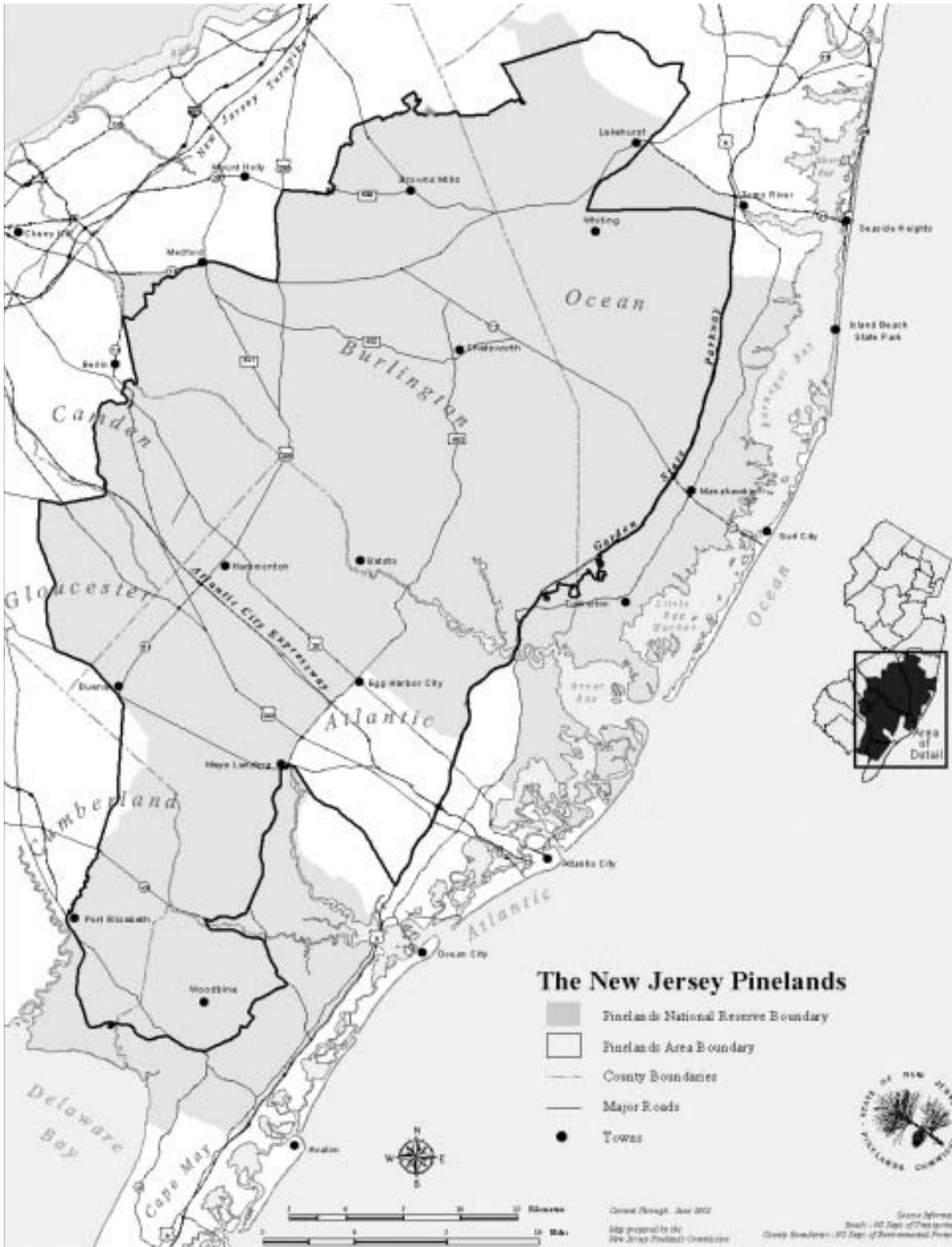
In light of the State government revenue shortfall, the Pinelands Commission is supportive of the Administration's policies to reduce spending. Given this, the Commission has sought to reduce spending by \$325,000, which is 5.6 percent of the Fiscal 2002 operating budget.

In addition to the operating budget, the Commission had budgeted \$1.77 million in Fiscal Year 2002 for the capital construction and furnishing/equipping of the Richard J. Sullivan Center for Environmental Policy and Education. The Fiscal 2002 budget for the Pinelands Development Credit Special Purchase Program was \$20.21 million, and \$1 million was budgeted for the Commission's commitment to the special land acquisition program funded through the Cape May County Municipal Utilities Authority.

The Kathleen M. Lynch-Van de Sande Fund for the Reforestation of the New Jersey Pinelands is funded by private contributions, and the balance totaled \$12,300 at the end of Fiscal Year 2001. During Fiscal 2001, \$2,500 was disbursed from the fund to provide scholarships to college-bound seniors at Pinelands area high schools.



**A typical Pinelands sand road splits off into different directions. Navigating the vast and complex network of Pinelands trails can be tricky at best.**



### The New Jersey Pinelands

- Pinelands National Reserve Boundary
- Pinelands Area Boundary
- County Boundaries
- Major Roads
- Towns



Created Through: April 2012  
 Map prepared by the  
 New Jersey Pinelands Commission  
 Source Information:  
 Beach - 10 Days of Pinelands  
 Camp Grounds - 10 Days of Environmental Protection

