

2023 Annual Report

New Jersey Pinelands Commission



Protecting the New Jersey Pinelands

The New Jersey Pinelands Commission is an independent state agency whose mission 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.

The Commission was created by the passage of the Pinelands Protection Act in 1979.

To accomplish its mission, the Commission implements a comprehensive plan that guides land use, development and natural resource protection programs in the



Above: The Pinelands is home to vast forests, farms and towns that cover portions of seven counties in southern New Jersey. This photo was taken at the Franklin Parker Preserve in 2023.

Photo/Paul Leakan

938,000-acre Pinelands Area of southern New Jersey. The Commission's 15-member board consists of state, county and federal appointees who volunteer their time and expertise. The panel meets monthly and receives guidance from its Executive Director and staff.

Commissioners:

Laura E. Matos, Chair

Alan W. Avery, Jr., Vice Chairman

Nicholas Asselta

Daniel Christy

John Holroyd, Jr.

Jerome H. Irick

Theresa Lettman

Edward Lloyd (January - August)

Mark S. Lohbauer

Mark Mauriello

Jonathan Meade

William Pikolycky

Doug Wallner

Susan R. Grogan, Executive Director

Pinelands Commission

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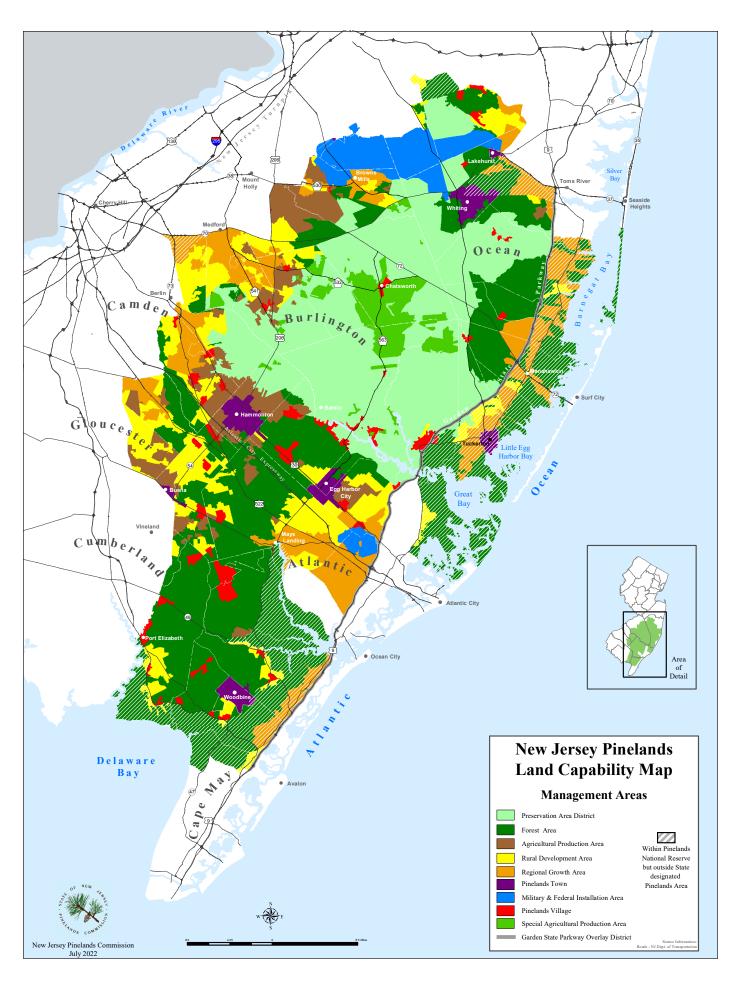
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Executive Director's Message

2023 was another busy and productive year for the Commission. I'm proud of all of our accomplishments, including many that will better protect the Pinelands for decades to come.

We welcomed two new Commission members in 2023. We also worked hard to fill numerous staff vacancies so that the Commission's goals could be advanced. Meanwhile, we greatly advanced efforts to stabilize and preserve the Fenwick Manor farmhouse, an 18th century structure that has housed Commission staff since 1980. In 2023, the Commission applied for and was awarded a significant Capital Level II grant from the New Jersey Historic Trust. The grant will allow the Commission to rehabilitate and ensure the long-term preservation of the historic building.



Above: As of June 2023, more than 51% (or 482,000 acres) of the Pinelands Area has been permanently preserved. Photo/Paul Leakan

After decades of intensive study, the Commission adopted water management rules that strengthen protections of the Kirkwood-Cohansey aquifer and the Pinelands ecology as a whole, while ensuring sufficient water supply for authorized development in the growth-oriented portions of the Pinelands Area. We also undertook a comprehensive review of Pinelands management area boundaries to identify areas designated for growth that are vulnerable to climate change, with the goal of considering zoning changes, enhanced wetlands protection and/or land preservation in the future. We continued to administer the Pinelands Development Credit Program, which has permanently preserved more than 58,070 acres in the Pinelands Area since 1982. We initiated agreements with two Pinelands municipalities to facilitate development of accessible trail improvements. We received and reviewed 142 municipal master plan and ordinance amendments and 364 new development applications in 2023. We undertook a multitude of scientific research projects, including water-level monitoring, frog and toad surveys and radio-tracking of native, rare snakes and eastern box turtles. We continued to raise awareness and appreciation of the Pinelands, educating thousands during special events and in-class programs and by sharing social media posts and responding to public inquiries.

Sadly, we lost one of the strongest, most effective advocates for Pinelands protection when Commissioner Ed Lloyd passed away on August 5th. Ed volunteered countless hours of his time and considerable expertise in environmental law as a Commissioner for more than 20 years. We miss him as a champion for the Pinelands and as a friend.

This was a challenging year, but we can look back and be proud of our efforts to protect this special part of New Jersey for current and future generations.

Susan R. Grogan
Executive Director

In Memoriam: Pinelands Commissioner Ed Lloyd

The Pinelands Commission lost one of its powerful advocates for environmental protection in 2023, as longtime Commissioner Ed Lloyd passed away on August 5th.

"The loss of Ed Lloyd will be deeply felt by New Jersey's environmental community, especially those of us here in the Pinelands," said Pinelands Commission Chair Laura E. Matos. "His dedication to the environment and preservation efforts was always at the forefront during his storied career, and he will be greatly missed."

Mr. Lloyd joined the Pinelands Commission on November 8, 2002 after being appointed by then-Gov. James E. McGreevey. He was a Clinical Professor of Environmental Law at Columbia Law School. He previously served for 15 years as Director of the Rutgers University Environmental Law Clinic. Mr. Lloyd also served as General Counsel and past Executive Director of the New Jersey Public Interest Research Group. He served on the New Jersey Supreme Court Committee on Environmental Litigation, and he testified before Congressional and legislative committees on issues such as energy conservation, solar power, clean water standards and regulations, freedom of information, water supply planning and conservation, and solid waste. A graduate of Princeton University, Mr. Lloyd held a Juris Doctor from the University of Wisconsin.

Mr. Lloyd was a highly active member of the Pinelands Commission, having served on the agency's Policy and Implementation, Climate, Permanent Land Protection, Public and Governmental Programs, Agriculture, Plan Review, Memorandum of Agreement and Personnel and Budget committees.

During Mr. Lloyd's tenure on the Commission, the agency:

■ Established the Pinelands Conservation Fund, which has since helped to permanently preserve nearly



Above: This photo was taken when Ed Lloyd took the oath of office as a Pinelands Commission member in 2002. File photo

9,000 acres of land in the Pinelands and has financed numerous Pinelands research, planning and education and outreach projects;

- Adopted significant amendments to the Pinelands Comprehensive Management Plan (CMP), the rules that govern land use, development, and the protection of resources in the Pinelands. Among these amendments were requirements for the clustering of residential development throughout much of the Pinelands Area, enhanced standards for stormwater management, a pilot program for vegetation management in electric transmission rights-of-way, and siting standards for solar energy facilities;
- Completed numerous scientific studies, including a multi-year study of the Kirkwood-Cohansey aquifer system that lies beneath the Pinelands and contains trillions of gallons of water;
- Established and implemented a highly successful pilot program to test the ability of advanced wastewater treatment technologies to meet stringent Pinelands water quality standards;
- Approved changes to the Pinelands Land Capability Map that reduced the size of development-oriented

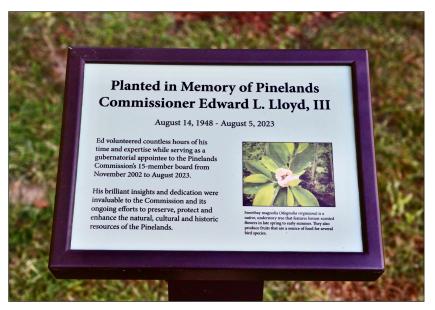
management areas and resulted in greater protections to nearly 14,000 acres of land; and

■ Increased its focus on education and outreach by designing, building and opening the new Candace McKee Ashmun Education Exhibit at its headquarters and by expanding its educational offerings with annual Pinelands-themed World Water Monitoring events.

Members of the Pinelands Commission adopted a resolution honoring Mr. Lloyd for his service on August 11, 2023.

In addition, Commissioners and the agency's staff unveiled a newly planted, native sweetbay magnolia and sign honoring Mr. Lloyd during a special ceremony at the Commission's headquarters on October 13, 2023.

Mr. Lloyd's wife, Janine G. Bauer, and two children,



Above: Commission staff installed a memorial plaque next to a native sweetbay magnolia tree that they planted at the agency's headquarters in memory of Commissioner Ed Lloyd in October 2023.

Photo/Paul Leakan

Abigail and Alex Lloyd, attended the ceremony, which included comments about Mr. Lloyd's extraordinary work and dedication to protect the environment in New Jersey.



Above: Mr. Lloyd's wife and two children joined current and former Commission members and Commission staff for a ceremony to unveil a newly planted sweetbay magnolia that was planted in his memory in October 2023.

Photo/Paul Leakan

Commission Gains Two New Members in 2023

The Pinelands Commission gained two new members on its 15-member board in 2023, including gubernatorial appointee Mark Mauriello and Cumberland County representative Nicholas Asselta.

Mr. Mauriello took the oath of office during the Commission's regular meeting on January 13, 2023. He is a former Commissioner of the New Jersey Department of Environmental Protection (NJDEP), and he replaced Gary Quinn on the Pinelands Commission.

Mr. Mauriello began his career with the NJDEP in May 1980, after earning a bachelor's degree in geology from Middlebury College in Vermont. He accepted a position as a shoreline mapping specialist with the New Jersey Geological Survey, and during the 1980's and 1990's he rose through the ranks of the Division of Coastal Resources and Land Use Regulation Division and was appointed as Division Director in 2002. In 2006, Mr. Mauriello was selected by NJDEP Commissioner Lisa Jackson to be Assistant Commissioner for Land Use Management. In November 2008, Mr. Mauriello was nominated by Governor Jon S. Corzine to serve as Commissioner of the NJDEP, replacing newly confirmed U.S. Environmental Protection Agency Administrator Lisa Jackson. He served in that capacity from November 2008 until his retirement from NJDEP in January 2010. In March 2010, he accepted a position as Director of Environmental Affairs and Planning with Edgewood Properties. In this capacity, Mr. Mauriello is responsible for overseeing the company's environmental programs and planning initiatives and serves as an advisor on regulatory issues and property acquisitions. He also serves as vice-president of the Board of Trustees of New Jersey Future, vice-president of the Board of Trustees of American Littoral Society and as a Board member of the New Jersey Association for Floodplain Management.

Mr. Asselta took the oath of office during the Commission's regular meeting on February 10, 2023. He filled a seat that became vacant when Jane Jannarone resigned from the Commission in December 1, 2022.

A native of Vineland and the son of a Vineland Police Officer and the city's first detective, Mr. Asselta graduated from Vineland



Commissioner Mark Mauriello



Commissioner Nicholas Asselta

High School, Cumberland County College and Frederick Military Academy. He attended Rider College and the Glassboro State College Management Institute. After college, Mr. Asselta worked for 23 years, culminating in his position as Marketing and Production Director for Times Graphics, Inc., a Gannett Company subsidiary. Mr. Asselta has been an educator, a coach and a community leader. From 1978 to 1981, he served as an adjunct faculty member at Atlantic Cape Community College, where he served as the head basketball coach. He was elected to the Vineland Board of Education in 1993, and in 1995 he was sworn in as a member of the New Jersey State Assembly to fill an unexpired term. He was elected to his first full term on the General Assembly in November 1995. Having completed four terms in the General Assembly, Mr. Asselta was sworn in to serve

on the New Jersey State Senate in January 2004. He went on to serve as a Commissioner on the New Jersey Board of Public Utilities from 2008-2013, where he fought to maintain affordable utility rates for New Jersey ratepayers while improving the utility infrastructure throughout the state. In 2013, Aqua America asked Mr. Asselta to join the company as president of its New Jersey Division. In November 2016, he was hired as Vice-President of South State, Inc., a major road, bridge and utility infrastructure building based in New Jersey. He began working as an independent consultant in 2019, providing services for private, public and political clients. Numerous community and civic groups have recognized and honored Mr. Asselta for his work, and he continues to serve on The New Jersey Vietnam Veterans Memorial Foundation.

In January 2023, the Commission adopted resolutions thanking Commissioners Quinn and Januarone for their service.

The Commission's 15-member board consists of seven members who are appointed by the New Jersey Governor, one member appointed by each of the seven Pinelands counties, and one member appointed by the U.S. Secretary of the Interior. The gubernatorial appointees are subject to the review and consent of the New Jersey Senate.

Commission Appoints New Executive Director

The Pinelands Commission voted unanimously to appoint Susan R. Grogan as the agency's Executive Director on February 10, 2023.

Ms. Grogan served as the agency's Acting Executive Director for 18 months, and Commissioners expressed their support for her extraordinary accomplishments and skills as the agency's top executive.

"Her wealth of experience, extraordinary knowledge, and tremendous work ethic are only a few of the reasons we are thrilled to officially appoint her Executive Director," said Commission Chair Laura E. Matos.

The position of Executive Director of the Pinelands Commission became vacant on June 24, 2021, following the passing of Nancy Wittenberg. In according with the Pinelands Commission's By-Laws, then-Chairman Richard Prickett designated Ms. Grogan as the Commission's Acting Executive Director.

Ms. Grogan has worked at the Pinelands Commission since August 1988. She served as the Commission's



Above: Pinelands Commission Chair Laura E. Matos (left) seated next to Susan R. Grogan during the meeting in which Ms. Grogan was appointed the Commission's new Executive Director. Photo/Paul Leakan

longtime Chief Planner and was promoted as the Director of Planning in 2020. In her capacity as Chief Planner, Ms. Grogan authored many amendments to the Comprehensive Management Plan, reviewed thousands of municipal ordinances and master plans to ensure conformance with Pinelands regulations, implemented the Pinelands Conservation Fund land acquisition program that has preserved nearly 9,000 acres to date and supervised Planning Office staff and a wide variety of projects. Ms. Grogan has also served

as the Executive Director of the Pinelands Development Credit Bank since 2011.

Ms. Grogan advanced numerous initiatives during her tenure as the Commission's Acting Executive Director, including:

- The adoption of amendments to the CMP that will better protect Pinelands resources by requiring the use of green infrastructure and other more stringent standards to manage stormwater;
- Proposing rule changes pertaining to water management and the Kirkwood-Cohansey aquifer. These rule changes have since been adopted, as noted below;
- Working to prepare the Commission for future rule changes aimed at addressing climate change;
- Recruiting and hiring several staff members to fill vacant positions;
- Providing invaluable guidance to longtime and new Commission members;
- Securing funding to help refurbish the historic Fenwick Manor farmhouse;
- Overseeing the implementation of office-wide policies pertaining to COVID-19; and
- Furthering efforts to reduce the Commission's carbon footprint at its headquarters.

Prior to joining the Commission, Ms. Grogan was the Assistant Land Use Coordinator for Burlington County's Office of Economic Development, where she was responsible for implementing the county's farmland preservation program, among other responsibilities. Ms. Grogan holds a Masters of City and Regional Planning from Rutgers University and a Bachelors of Arts in Government and Sociology from the College of William and Mary. She is a licensed New Jersey Professional Planner and a member of the American Institute of Certified Planners.

The Commission's Executive Director is responsible for the daily operations of the Commission and its staff of 41 planners, scientists, environmental reviewers, computer programmers, educators, and others.



To the left: Susan R. Grogan received a standing ovation from Commission members after being appointed as the agency's new Executive Director in February 2023.

Photo/Paul Leakan

Planning Activities

Amendments to the Pinelands Comprehensive Management Plan

After decades of intensive study, the Commission adopted rules in 2023 that strengthen protections of the Kirkwood-Cohansey aquifer and the Pinelands ecology as a whole, while ensuring sufficient water supply for authorized development in the growth-oriented portions of the Pinelands Area.

The Kirkwood-Cohansey is a freshwater reservoir underlying the Pinelands and containing an estimated 17 trillion gallons of water. Withdrawals from the aquifer can negatively impact the essential character of the Pinelands environment; therefore, the Commission proposed clear, quantifiable standards to address potential adverse local and regional impacts.



Above: In 2023, the Commission adopted rules that strengthen protections of the Kirkwood-Cohansey aquifer and the Pinelands ecology as a whole.

Photo/Paul Leakan

Climate change is anticipated to create more extreme patterns of rainfall and drought. The rules adopted by the Commission provide a margin of safety for the ecosystems and human uses of the Kirkwood-Cohansey aquifer by limiting the total volume of water that can be withdrawn in a watershed and by prohibiting new withdrawals in the most protective management areas within the Pinelands Area.

Climate resilience

The Commission continued to focus on climate change and resilience, while working to reduce the agency's environmental impacts.

The Commission's Climate Committee met four times in 2023, focusing on the review of and potential changes to Pinelands regulations for solar energy facilities, including consideration of agrivoltaics and other siting opportunities. The Committee also undertook a comprehensive review of Pinelands management area boundaries to identify areas designated for growth that are vulnerable to climate change, with the goal of considering zoning changes, enhanced wetlands protection and/or land preservation in the future.

Climate resiliency was also the focus of office initiatives, as evidenced by the purchase of two plug-in, hybrid electric vehicles for field work and conversion of all grounds maintenance equipment from gas to electric. Finally, Commission staff attended the monthly and senior staff meetings of the Interagency Council on Climate Resilience and contributed to the Council's agency accomplishments report and upcoming Extreme Heat Resilience Action Plan.

Pinelands Commission Agreement Would Authorize Accessibility Improvements at Pemberton Lake Trail

In 2023, the Pinelands Commission finalized a proposed Memorandum of Agreement (MOA) that would enable Pemberton Township to undertake accessibility improvements at the Pemberton Lake Trail.

Pemberton Lake is located in the Pemberton Lake Wildlife Management Area, which is managed by the NJDEP. The site consists of three parcels. Pemberton Township owns two of the parcels, and the State of New Jersey owns the third parcel.

The Commission's proposed MOA with

Pemberton Township would enable the
Township to improve a portion of the

Pemberton Lake Trail that starts at the site's
parking area on Magnolia Road and proceeds
proximate to the shoreline of the lake to the
trailhead at the NJDEP's parking area on Coleman's
Bridge Road. The improvements include placing
crushed gravel within the existing length and width
of the trail, leveling the trail to no more than a 5%
grade along its entire length and installing boardwalks
at two areas of the trail that are prone to being wet.
The improvements would make the trail firm, stable
and flat from side-to-side, so it is more accessible to
individuals with mobility issues.

Portions of the Pemberton Lake Trail are located within wetlands and wetlands buffers, necessitating the Commission's authorization of a deviation from the standards of the Pinelands Comprehensive Management Plan (CMP) in order to permit the trail improvements. Under the CMP, such deviations may be granted via MOAs between the Commission and other public agencies. MOAs allow those agencies to undertake development activities that may not be consistent with Pinelands regulations, so long as the agreement is accompanied by measures that afford an equivalent level of protection of the resources of the Pinelands as would be provided through a strict application of CMP standards.

To offset the impacts associated with the trail improvements, the Township has proposed to:



Above: The Commission's proposed Memorandum of Agreement would allow Pemberton Township to undertake accessibility improvements at the Pemberton Lake Trail. Photo/Paul Leakan

- Revegetate two wetlands buffer areas within the project site, one (4,980 square feet) adjacent to the Magnolia Road parking area and the other (9,250 square feet) adjacent to the Coleman's Bridge Road parking area, with native Pinelands vegetation;
- Create a rain garden in a portion of the denuded area adjacent to the parking area on Magnolia Road;
- Install a gate at each end of the improved trail that is designed to permit pedestrians, wheelchairs, walkers and electric scooters to enter the trail, while prohibiting entry by off-road vehicles;
- Install wooden rail and post barriers at specific points along the trail in the vicinity of the Pemberton Bypass that are currently used unlawfully by off-road vehicles to access the trail; and
- Create two accessible parking spaces at the existing Coleman's Bridge Road parking area.

The Commission is scheduled to vote on the MOA during its regular meeting in January 2024. Also in 2023, the agency began working on a similar MOA that would allow the paving of an existing trail around Forecastle Lake in Stafford Township for accessibility purposes.

Pinelands Development Credit Program

The Pinelands Development Credit Program is a regional transfer of development rights program that preserves important agricultural and ecological land. Pinelands Development Credits (PDCs) are allocated by the Commission to landowners in the Preservation, Agricultural Production and Special Agricultural Production Areas, which are the sending areas. PDCs can be purchased by property owners and developers who are interested in developing land in Regional Growth Areas, which serve as the receiving areas.

Once PDCs are "severed" from a sending area property, the property is permanently protected by a conservation or agricultural deed restriction and the PDCs allocated to that property can be sold on the private market.

During 2023, 41.25 PDCs were allocated by the Commission to 15 sending area properties. A total of 25.00 PDCs were severed, protecting a total of 557.43 acres of land in the Preservation Area District, Agricultural Production Area, and Special Agricultural Production Area on properties located in Hammonton Town, Mullica Township, and Woodland Township. Since 1982, 58,070 acres in the Pinelands Area have been permanently preserved through the PDC



Above: This blueberry farm in Hamilton Township, Atlantic County was permanently preserved through PDC severance in July 2022.

Photo/Steve Simone

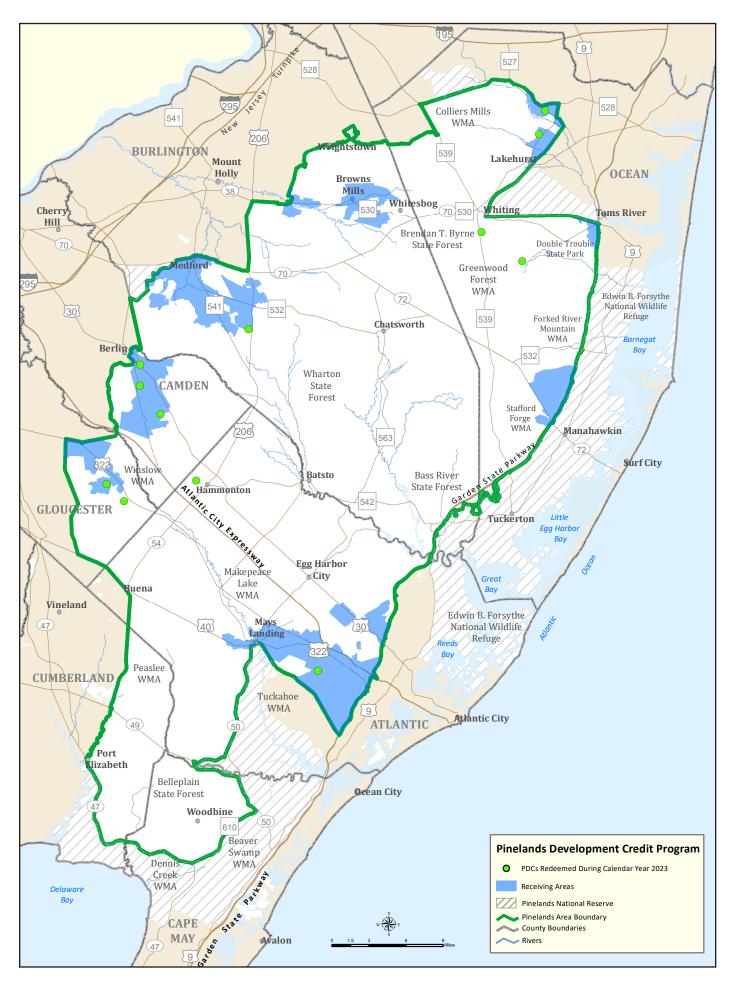
Program.

In 2023, a total of 31.00 PDCs were sold, with an average sales price of \$73,242 per PDC. A total of 13.75 PDCs were redeemed for one nonresidential project and 11 residential projects involving a variety of single-family detached dwellings, townhouses and apartments. These projects are located in Egg Harbor Township, Hammonton Town, Jackson Township, Lacey Township, Manchester Township, Monroe Township, Shamong Township, Waterford Township, and Winslow Township, as depicted on the map on page 12.



Above: This 30-unit inclusionary housing development in Medford Township, Burlington County, includes 25 market rate units and five affordable housing units. It is being built with the use of 1.75 PDCs, which were redeemed in September 2022.

Photo/Steve Simone



Reviewing Municipal Ordinances

The master plans and land use ordinances of all Pinelands municipalities and counties must be consistent with the Pinelands CMP. Consistency is ensured through the conformance process, by which municipalities and counties submit their master plans, ordinances and amendments to the Commission for review and certification.

The Commission received and reviewed 142 municipal master plan and ordinance amendments in 2023. Many of these ordinances amended stormwater management standards in response to amendments to the CMP adopted in 2022. The Commission also approved significant master plan and zoning updates for Bass River Township. The Commission continued to see a trend of municipalities adopting redevelopment plans

regulating land uses in areas designated in need of redevelopment. In 2023, the Commission reviewed 19 ordinances either adopting or amending redevelopment plans. As in 2022, these redevelopment plans sought to advance a variety of local planning objectives, including the development of affordable housing and senior housing, warehouses, cannabis-related land uses, solar energy facilities on closed landfills, and the redevelopment of aging shopping centers. The Commission also approved two redevelopment plans, one in Monroe Township and one in Waterford Township, that will require the acquisition and redemption of Pinelands Development Credits as part of any warehouse development within the respective redevelopment area.

Permanent Land Protection Summit, Update & Priorities

Land Preservation Summit

The Pinelands Commission hosted its first in-person Land Preservation Summit at the agency's headquarters on March 7, 2023.

Presentations by NJDEP Green Acres staff, Ocean County staff, and New Jersey Conservation Foundation staff described the objectives of each entity's land preservation program, plus the successes and challenges to achieving those objectives.

Nineteen different organizations were represented and participated in roundtable discussions about the topics of climate change impacts, stewardship, partnership, and economy of open space issues. Staff gained valuable insights into ways of improving participation in future Pinelands Conservation Fund land acquisition grant offerings.

Permanent Land Protection Update

The Commission's staff delivered the annual update on permanent land protection in the Pinelands on October 13, 2023.

A total of 1,359 acres of land were preserved in the Pinelands Area from July 2022 to June 2023. Of that total, 123 acres were preserved through Pinelands programs, along with 348 acres of land through the Pinelands Development Credit Program. As of June 2023, 51% (482,000 acres) of the state Pinelands Area has been permanently preserved through a variety of programs.

Of that total, 94% of the land is located in Pinelands Management Areas that are designated for conservation,

including the Preservation Area District, the Forest Area, the Special Agricultural Production Area, and the Agricultural Production Area.

Possible Changes in Priorities for Permanent Land

In late October of 2023, Commission members and staff discussed possible changes to the priorities and funding for future land preservation projects through the agency's Pinelands Conservation Fund (PCF).

The possible changes include adding consideration of NJDEP environmental justice communities' stressors and historically underserved communities as factors in the Commission's acquisition project evaluation matrix. Changes in the boundaries of the Commission's 20

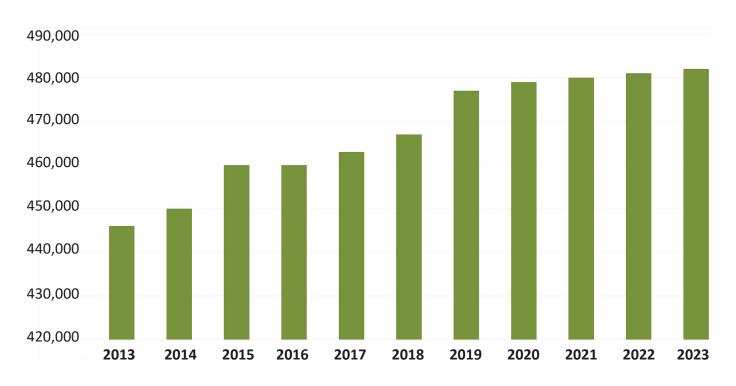


Above: As of June 2023, 51% of the land in the Pinelands Area has been permanently preserved, including the Cloverdale Farm County Park (a former cranberry farm) in Barnegat Township. Photo/Paul Leakan

land acquisition target areas might also be considered as well as a revision of factors in the evaluation matrix to better align with NJDEP's recreation plan and land acquisition priorities. As a tool to assist preservation partners with the stewardship challenges identified at the Land Preservation Summit, the Commission may also consider a potential change to its PCF land acquisition funding structure.

Acres Preserved in the Pinelands Area

(Rounded to the nearest thousand)



Regulatory Activities

Applications

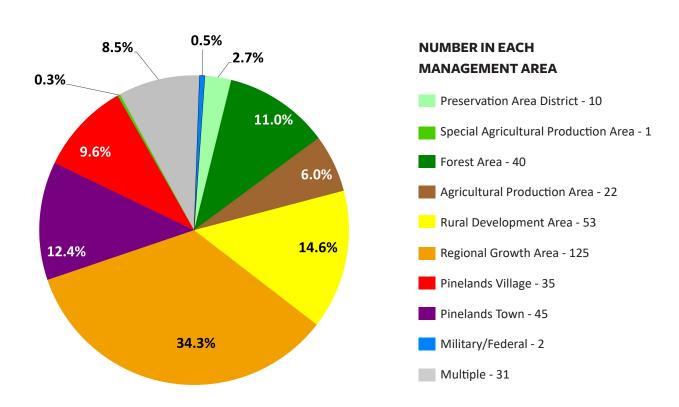
The Pinelands Commission reviews applications for development by evaluating proposals to ensure that they meet the regulations contained in the Pinelands Comprehensive Management Plan. Development proposals must meet a series of environmental standards, including those that protect water quality, wetlands and threatened and endangered species.

The Commission's development approval process varies, depending on whether the application is submitted by a public agency or a private landowner. The Commission's staff reviews private development proposals, such as single-family dwellings, subdivisions and commercial projects.

The Commission received a total of 364 new applications for development in 2023, with the highest percentage of the applications (34.3%) proposing new development in Pinelands Regional Growth Areas (or RGAs). There are 24 municipalities with RGAs in the 938,000-acre state Pinelands Area. RGAs make up 8% of the land in the Pinelands Area, and they are generally located on the fringes of the Pinelands boundary. The RGAs include areas of existing development and adjacent lands that have the infrastructure such as sewers, roads and other utilities needed to accommodate new development while protecting the essential character and environment of the Pinelands. The Pinelands CMP encourages future growth in the RGAs as a way to prevent scattered and piecemeal development in other more sensitive portions of the Pinelands Area. The pie chart below illustrates the number and percentages of applications received by management area in 2023.

A majority of the development applications received were for residential development (51.9%), followed by commercial/industrial development (27.7%), infrastructure (7.1%), institutional (6%), recreation (2.7%),

Development Applications Received in 2023 by Management Area



resource extraction (1.6%), mixed use (1.3%), forestry (0.8%) and other (0.5%). A full listing of development applications received by development type in 2023 is shown to the right.

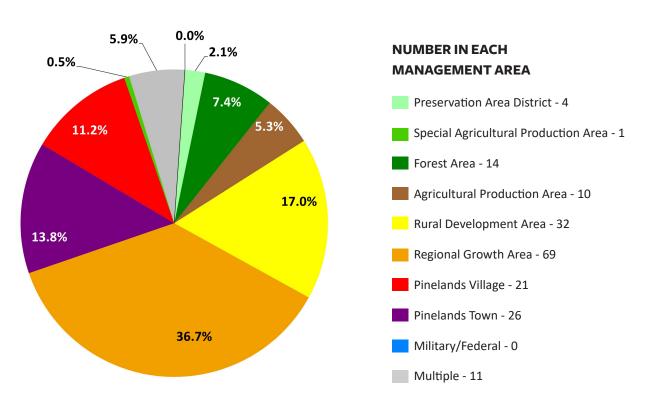
After applicants provide all of the necessary information, the Commission issues a Certificate of Filing (or CF), signifying completion of an application and allowing an applicant to seek all municipal and county approvals for the proposed development. Other completeness documents include Preliminary Zoning Permits (PZPs) and Notices of Filing, which are issued under alternative permitting programs in accordance with the CMP. These documents certify completeness of development applications and are equivalent to CFs. A total of 188 Completeness Documents were issued in 2023, including CFs, PZPs and Notices of Filing.

Development Applications Received in 2023 by Development Type

Development Type	Total
Residential	189
Commercial/Industrial	101
Infrastructure	26
Institutional	22
Recreation	10
Resource Extraction	6
Mixed Use	5
Forestry	3
Other	2
Total	364

The highest percentage of Completeness Documents (36.7%) were for proposed development in Regional Growth Areas (as shown in the chart below).

Completeness Documents Issued in 2023 by Management Area

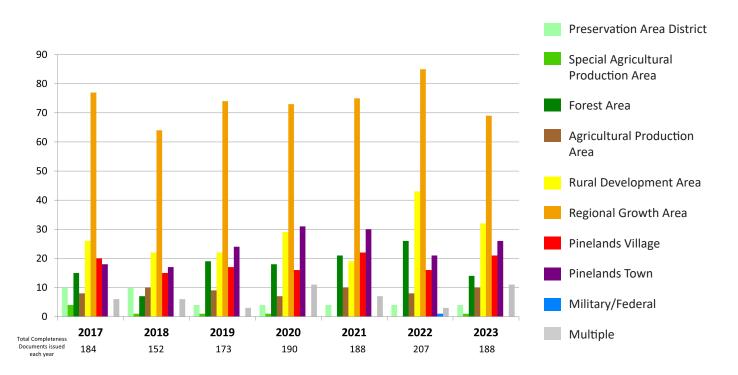


Completeness Documents Issued in 2023 by Management Area and Type of Development

Management Areas	Commercial	Infrastructure	Institutional	Recreation	Residential	Resource Extraction	Total
Preservation Area District	2					2	4
Special Agricultural Production Area					1		1
Forest Area	4				9	1	14
Agricultural Production Area	4				6		10
Rural Development Area	9				22	1	32
Regional Growth Area	25	3	3		38		69
Pinelands Village	5				16		21
Pinelands Town	12	1			13		26
Military/Federal							0
Multiple	5	2			3	1	11
Totals	66	6	3	0	108	5	188

Of the 188 Completeness Documents that were issued in 2023, most involved proposals for residential development (108 or 57.4%), followed by commercial development (66 or 35.1%, as shown in the table above). The Commission issued similar numbers of Completeness Documents from 2017 to 2023, with the highest percentage of the proposals for development located in RGAs (69 or 36.7% of the total, as shown on the bar graph below).

Completeness Documents Issued in 2023 by Management Area (2017 - 2023)



After an applicant receives any required municipal or county approvals for private development in the Pinelands Area, copies of those approvals must be sent to the Commission. The Commission staff then reviews the approved development and determines whether it meets all Pinelands standards. If it does, the Commission staff will send the applicant a letter confirming that the agency's review is complete and the permit or approval can take effect.

The Commission staff issued such determinations for 65 development projects in 2023, allowing the associated final municipal site plan and subdivision approvals to take effect. Thirty-one of these applications (or 47.6%) were for commercial or industrial development, including retail commercial buildings, offices, warehouses, hotels, storage yards, and solar energy facilities. An equal number (31 or 47.6%) were for residential development, with one additional project proposing a mix of residential and nonresidential uses. In total, 1,079 residential units were approved, in projects ranging in size from 1 to 457 units. The vast majority of

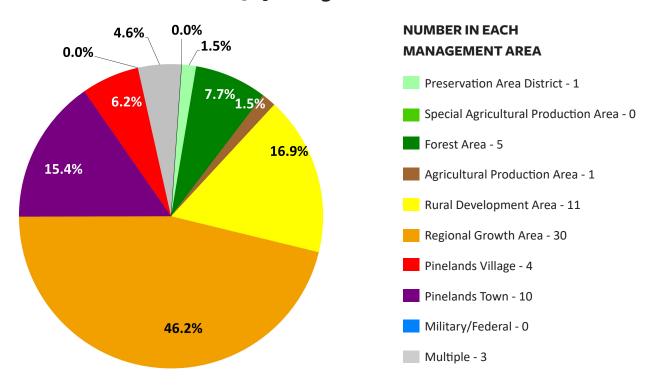
Final Municipal Site Plan/Subdivision Approvals Allowed to Take Effect in 2023 By Development Type

Development Type	Total
Commercial/Industrial	31
Residential	31
Mixed Use	1
Infrastructure	1
Resource Extraction	1
Total	65

approved residential projects were for single-family detached dwellings; however, several of the larger projects included townhouses and multifamily (apartment) units. The final two approved projects were for resource extraction and infrastructure.

The 65 applications are located in 25 municipalities, with the highest percentage (10.38%) located in Monroe Township, Gloucester County. The table on the following page provides a full list of municipalities. Nearly half (46%) of the applications are for development in the RGA, as shown in the pie chart below.

Final Municipal Site Plan/Subdivision Approvals Allowed to Take Effect in 2023 by Management Area



The Commission staff reviewed approvals for significantly more private development applications than the 65 discussed above during 2023. Many preliminary site plan and subdivision approvals were reviewed and allowed to take effect, along with hundreds of municipal building permits, county septic permits and other types of approvals. Still other approvals were reviewed but determined to be inconsistent with Pinelands standards. Such approvals cannot take effect until the inconsistencies have been addressed.

The Pinelands Commission is also responsible for reviewing and approving development applications that are submitted by public entities, such as a municipality, county or a State agency. The full, 15-member Commission votes on whether to approve these applications during its monthly meetings. The Commission approved a total of 30 applications for public development in 2023, including construction of an artificial turf field at an existing, municipal recreational facility in Hammonton, soil capping of a closed, 42.5-acre municipal landfill in Berkeley Township, installation of an artificial turf field at Oakcrest High School, replacement of an existing access road bridge at the NJDEP's Forest Resource Education Center in Jackson Township, soil capping of a closed, 53-acre municipal landfill in Woodbine Borough, construction of 1,200 linear feet of earthen trail at the Piney Hollow Preservation Area in Franklin Township, Construction of a 10,749-square-foot New Jersey Guard Civil Support Team Building at Joint Base McGuire-Dix-Lakehurst in Jackson Township, construction of a 20,138-square foot building at the Ocean County Vocational Technical School in Jackson Township and construction of a 10,563-square-foot addition to an existing school and 73 parking spaces in Hammonton.

Final Municipal Site Plan/Subdivision Approvals Allowed To Take Effect in 2023

Municipality	Number of Applications
Barnegat Township	3
Bass River Township	1
Berkely Township	3
Buena Vista Township	3
Egg Harbor City	2
Egg Harbor Township	7
Evesham Township	2
Folsom Borough	1
Galloway Township	5
Hamilton Township	2
Hammonton Town	4
Jackson Township	4
Lakehurst Borough	1
Manchester Township	2
Medford Township	2
Monroe Township	10
Mullica Township	1
Shamong Township	1
Southampton Township	1
Tabernacle Township	1
Upper Township	1
Vineland City	1
Waterford Township	2
Winslow Township	4
Wrightstown Borough	1

Some applications may not be able to meet all of the Commission's land use or environmental standards. In these instances, applicants may elect to apply for a "Waiver of Strict Compliance." The Commission approved

ON OR ABOUT 97/1/23
THIS ROAD TO ABE
CLOSED
PLAN ALT ROUTE

ROAD
CLOSED

Above: The Pinelands Commission approved 30 applications for public development in 2023, including the replacement of an existing access road bridge at the NJDEP's Forest Resource Education Center in Jackson Township. Photo/Paul Leakan

4 waivers in 2023, each of which allowed for the development of one single-family home.

Recreation Permits

In 2023, the Commission issued 10 Recreation Permits for organized, off-road vehicle events in the Pinelands Area. In order to receive a Recreation Permit, groups must submit a completed "Off-Road Vehicle Event Application" for each proposed event. In addition to the application form, the group must submit the course route in electronic format, an application review fee, proof of insurance, property owner permission and proof that the township and New Jersey State Police have been notified. Commission staff reviews the course route to determine if there are any issues

with wetlands, threatened and endangered species, deed-restricted land and private and public ownership. Any portions of the route that have potential issues are site inspected by a member of the Commission's staff. If any route changes are necessary, a revised route is required and must again be submitted for review.

Online Enhancements to Further Assist Applicants

The Commission completed several major, online enhancements to assist applicants in 2023, including the creation of a simplified, easy-to-use, interactive Pinelands Property Lookup Map and a portal that enables applicants to pay their required application fees online.

The <u>Pinelands Property Lookup Map</u> can be accessed on the Commission's website, and it enables users to quickly determine whether a property is located in the Pinelands Area, along with providing other key information, such as the Pinelands Management Area, the municipal zoning, and the presence or absence of wetlands and wetlands buffers.

The <u>Commission's new payment portal</u> was launched in September 2023 and is also linked on the agency's website. It enables applicants to pay application fees online. Previously, applicants could only submit their application fees by paying via check or money order. Of the total 441 application fee payments that the Commission received in 2023, approximately 18% were paid online.

Science & Research Activities

Long-term Environmental Monitoring Program

Rare Snake Monitoring

Long-term data for assessing rare snake population trends in the Pinelands are lacking. Therefore, the Pinelands Commission is establishing a network of natural snake hibernacula, shed areas, and nest sites to monitor long-term changes in several species of rare snakes. As part of ongoing snake studies that were initiated in late 2016, numerous winter hibernacula have been identified for corn snakes and pine snakes. The Commission is attempting to identify more natural pine snake hibernacula and natural hibernacula for other rare snake species. From 2018 to 2023, corrals were built around most hibernacula to capture snakes as they emerge



Above: A corn snake that emerged from its hibernacula and was recaptured inside a closed corral.

from hibernation in the spring. The corrals offer an effective, non-invasive method to census snakes each spring without physically disturbing hibernacula or hibernating snakes.

From 2016 to 2023, 2,140 snakes representing 13 species were found. These include 1,159 corn snakes, 513 pine

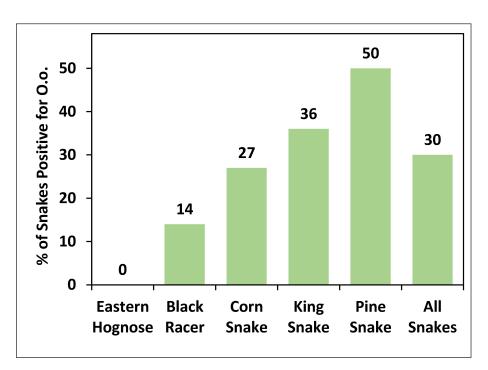
snakes, 192 kingsnakes, 137 black racers, 86 hognose snakes, and 53 snakes of several other species. All snakes were weighed, measured, and PIT tagged. A PIT tag is a tiny, glass-coated microchip commonly used in wildlife research that allows for the permanent identification of an animal through the use of a special scanner that reads the unique tag number. A total of 343 of these processed and tagged snakes were recaptured at least once during this period.

Snake Disease Monitoring

Snake Fungal Disease: In 2018, Commission scientists began collaborating with Dr. Joanna Burger of Rutgers University, Robert Zappalorti of Herpetological Associates, Inc., and Dr. Jeffrey Lorch of the United States Geological Survey (USGS) to conduct research on snake fungal disease in the Pinelands. Snake fungal disease is an emerging disease found in populations of captive and wild snakes and is caused by the fungus *Ophidiomyces ophiodiicola*. Although snakes can show signs of fungal disease just after spring emergence from hibernation, it was previously unknown if *O. ophiodiicola* was present inside the hibernacula.

Dr. Burger and Mr. Zappalorti have been excavating a group of northern pine snake hibernacula annually for almost 40 years. Their long-term study provides a unique opportunity to sample inside snake hibernacula to determine if the fungus is present in the soil or on the hibernating snakes. Initial sampling in 2018 indicated that *O. ophiodiicola* was present on snakes and in the soil inside the hibernacula, therefore, in 2019 - 2022, all hibernating snakes were swabbed for snake fungal disease. Results assessing the presence of *O. ophiodiicola* in hibernacula versus adjacent soils and examining factors associated with the growth of the fungus were published in the Journal of Fungi (Campbell, L.J.; Burger, J.; Zappalorti, R.T.; Bunnell, J.F.; Winzeler, M.E.; Taylor, D.R.; Lorch, J.M. Soil reservoir dynamics of *Ophidiomyces ophidiicola*, the causative agent of snake fungal disease. Journal of Fungi 2021, 7, 461).

Results assessing fungal prevalence among individual snakes and the soils in contact with them during hibernation were published in Environmental Monitoring and Assessment (Burger, J.; Gochfeld, M., Zappalorti, R.; Bunnell, J.; Jeitner, C; Schneider, D.; Ng, Kelly;, DeVito, E.; Lorch, J. M. Prevalence of Ophidiomyces ophidiicola and epizootiology of snake fungal disease in freeranging Northern Pine Snakes (Pituophis melanoleucus melanoleucus) in New Jersey. Environmental Monitoring and Assessment 195, 662 (2023) https://doi. org/10.1007/s10661-023-11259-w).



Above: Graph showing the percentage of individual snake species and all snakes sampled that are positive for Ophidiomyces ophidiicola, the fungus responsible for snake fungal disease.

In 2023, all hibernating snakes were sampled again for fungal infections.

A manuscript assessing the relationship between sores present on a snake and the clinical evaluation of sores by an investigator and whether the snake is infected was submitted for publication in a scientific journal at the end of 2023.

Building on the fungal disease results obtained from the artificial hibernacula excavations, Commission scientists began collaborating with researchers at Virginia Tech to swab for fungal disease from snakes that were collected from the natural hibernacula, nest sites, and shed sites discovered as part of the Rare Snake Monitoring component. In 2023, swab samples from 164 snakes were sent to Virginia Tech for analysis. Results for the first batch of 80 swab samples indicate that 30% of the sampled snakes tested positive for *O. ophidiicola*, the fungus associated with snake fungal disease. Results varied by species.

Adenovirus Monitoring: As part of a collaboration with Dr. Anthony Geneva of Rutgers University, Commission scientists swabbed Pinelands snakes to test for the presence of adenovirus. Adenoviruses affect the gastrointestinal tract and liver of some reptile species, including snakes. Swab samples from



Above: Commission scientists processing and swabbing a northern pine snake for diseases.

216 snakes were sent to Rutgers University for eventual analysis.

Other Environmental Monitoring: Other 2023 environmental monitoring activities included surveying calling frogs and toads at a group of ponds that are surveyed annually, measuring bimonthly water quality at 47 stream sites, recording monthly water levels at 35 forest plots and 30 ponds, and maintaining continuous water-level recorders installed in seven other ponds and in a shallow observation well installed within a pine lowland forest. Prior to the December water-level monitoring round, large trucks drove through two of the ponds in Brendan Byrne State Forest and damaged the pond sediments, vegetation community, and metal posts used for measuring water levels. Trucks drove in the same pond and other long-term monitoring ponds in the past. The damage was reported to the NJDEP southern regional superintendent of the New Jersey Park Service.

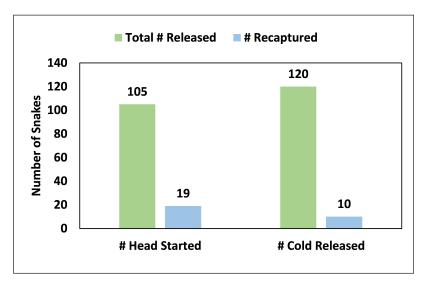
Long-term environmental monitoring research is being funded by the National Park Service.



Above: Recent vehicular damage to a long-term monitoring pond.

Joint Corn Snake Radio-tracking and Drift Fence Study

In 2016, Commission scientists began to collaborate with Dr. Howard Reinert of The College of New Jersey, Mr. Robert Zappalorti of Herpetological Associates, and the NJDEP Endangered and Nongame Species Program staff to conduct an intensive research project on the corn snake in the Pinelands. The corn snake is listed as an endangered species in New Jersey. The goals of the corn snake research are to better understand the habitat requirements and life history of this secretive serpent to develop meaningful conservation management programs for the species and ensure its continued survival in the Pinelands.



Above: Results of the headstarting component of the corn snake study (2016 – 2023).

The research includes two components:

radio-telemetry and headstarting, which is a conservation technique where vulnerable young animals are raised in captivity until they attain a larger size and then released into the wild. For the telemetry aspect, researchers surgically implant small radio-transmitters in adult corn snakes and locate the snakes on a regular basis to collect data on their activity range; types of habitats used; and the locations for nesting, shedding, and hibernation. In 2019, scientists completed radio-tracking of 29 corn snakes, which concluded the telemetry component of the study. Corn snake telemetry data will be analyzed by Commission scientists.

For the headstarting component of the study, researchers collected corn snake eggs from nest areas and transported them to a laboratory for incubation and hatching. The hatchlings are PIT tagged and one-half of them are released back to the primary nest area as cold-released snakes. The other group of hatchlings is kept in the laboratory over the winter and released the following spring as headstarted snakes. The goal is to recapture as many of these snakes as possible to assess growth and survivorship of the cold-released and headstarted hatchlings over time.

In 2019, a drift fence array was established at the primary nest area to help recapture corn snake hatchlings to assess the survival of headstarted and cold-released hatchlings. An equally important goal was to assess the effectiveness of using a drift fence outfitted with box traps and artificial wood and metal cover to detect corn snakes and other species of snakes. During the final year of the study, a series of pitfall traps were installed in the ground along the fence. A total of 7,644 animals were found along the drift fence, under the artificial cover associated with the fence, or in the traps. These 7,644 animals included 15 species of snakes and 22 species of other animals, including toads, frogs, salamanders, lizards, turtles, mammals, and birds. The drift fence was removed from the area at the end of 2022. Drift fence data will be analyzed by Commission scientists.

In 2023, the headstarting component of the study was completed. For the 2016 – 2023 period, a total of 225 corn snake hatchlings, including 120 cold released and 105 head started hatchlings, were released. To date, 10 cold-released and 19 headstarted snakes were recaptured over the course of the study. Scientists also continued to release corn snake hatchlings and monitor corrals and strategically placed cover in other nearby areas for new and previously pit tagged snakes.

This Joint Corn Snake Study is being funded by the Pinelands Commission and the NJDEP.

Eastern Kingsnake Study

In 2019, the Commission was awarded funding for a grant proposal, titled "Activity range, habitat use, shedding, denning, and nesting of the wetland-dependent eastern kingsnake." The eastern kingsnake is listed as a species of special concern in New Jersey because it is vulnerable to multiple threats, is potentially declining, and its

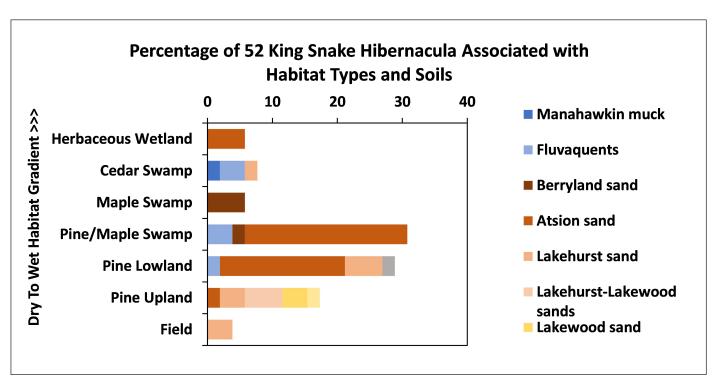
distribution and population status are not known. Commission scientists collaborated with Mr. Robert Zappalorti of Herpetological Associates and Dr. Howard Reinert of The College of New Jersey on this four-year study. Scientists used radio-telemetry to determine the activity range; upland and wetland habitat use; and timing of shedding, denning, and nesting of the eastern king snake.

From 2019 to 2022, scientists radio-tracked 47 king snakes, including 23 females and 24 males. Of the 47 kingsnakes, 22 snakes hibernated, 20 died, 4 were released, and 1 went missing. Radio-tracking was completed in 2022.



In 2023, the remaining study snakes were collected after they emerged from dens, transmitters were removed, and the snakes were released. During the summer, science staff visited the 52 kingsnake hibernacula identified during the study and characterized the habitat structure and forest type of the hibernation sites. All field data collected during the study have been finalized and methods and software for data analysis are being investigated.

This research is being funded by a grant from the U.S. EPA and a match by the Commission through the Pinelands Conservation Fund.



Above: Most king snake hibernacula were located in sandy wetland soils associated with pine lowland and pine/maple swamps.

Eastern Box Turtle Study

In 2021, the Commission began to radio track eastern box turtles. This species is listed by the NIDEP as a species of special concern because it is vulnerable to multiple threats, its distribution and population status in the state are not well understood, and it is potentially declining throughout its range. One goal of this research on box turtles is to gather data on turtle behavior, habitat use, movement, and use of nest sites and hibernacula in the Pinelands. Another goal is to monitor turtles in burned and unburned areas to better understand the relationship between turtles and prescribed fire. In 2021, a total of 20 box turtles were captured and outfitted with external transmitters and radio tracked about once each week. The turtles were tracked to their winter hibernation areas.

In 2022, Commission scientists frequently checked the box turtles in spring to detect when they emerged from hibernation burrows. New turtles found at existing study sites were captured, processed, and tracked. In November, 36 turtles were tracked

Above: Activity ranges for several eastern box turtles that were radio tracked in 2023. Dots indicate the locations of turtles, lines show the activity ranges, and stars denote turtle hibernation locations. Turtles overwintering at green stars have iButtons glued to their shells and turtles at red stars do not have iButtons. The iButtons log the temperature of the turtle during hibernation.

to hibernation burrows and geographic coordinates were collected at these locations.

In 2023, Commission scientists visited the overwintering locations of the 36 turtles to measure the thickness of the leaf litter, thickness of the partially decomposed organic layer, depth to the sand, and depth of the hibernating turtles. Additional turtles found while radio racking the 36 turtles after spring emergence were measured and weighed, and radio-transmitters were glued on their shells to track them as part of the study. A total of 68 box turtles are currently being radio tracked. In the fall, staff affixed ibuttons to a subset of turtles to collect temperature data before, during, and after the hibernation period. Staff also assessed the overlap of box turtle activity ranges and overwintering locations with areas approved for prescribed burning by the New Jersey Forest Fire Service in preparation for the upcoming burn season. Staff met with other turtle researchers at the annual Northeast Partners in Amphibian and Reptile Conservation (NEPARC) meeting and at the North American Box Turtle Conservation Workshop to discuss current research and conservation challenges faced by this species. An agreement between the Commission and the NJDEP to provide some funding for the box turtle study was finalized and executed.

Public Information, Education & Outreach

Raising Awareness, Fostering Stewardship

The Commission continued to raise awareness and appreciation of the Pinelands in 2023, educating thousands about the region's resources.

The Commission cosponsored and carried out the 34th annual Pinelands Short Course at Stockton University's main campus in Galloway Township on March 11, 2023. More than 430 people attended the event, which featured 28 educational presentations, including 21 new programs. Ninety-eight percent of the event evaluation respondents rated the event as either excellent or great.



Above: The Commission's Instagram site has more than 4,000 followers.

Staff educated more than 130 students about the Pinelands during the World Water Monitoring Challenge at Batsto Lake on October 20, 2023. The event is coorganized and staffed by the Commission, NJDEP, New Jersey Division of Parks & Forestry, the Jacques Cousteau National Estuarine Research Reserve, and Americorps Ambassadors.

More than 120 people attended the 7th annual Pinelands Summer Short

Course on June 23, 2023. The daylong, educational event was held at Stockton University's Kramer Hall in downtown Hammonton. The event featured 12 classroom programs at Kramer Hall and guided field trips at the 1808 Trail in Wharton State Forest, a walking tour of Batsto Village and a kayak trip on the Mullica River. Event evaluations were also overwhelmingly positive.

The Commission also organized and hosted three educational presentations at its headquarters in 2023. The first presentation was held on July 20, 2023 and featured numerous live turtle species, including the highly unusual and inquisitive Otis the Box Turtle (see page 27 for a photo). The second presentation was held on August 3, 2023, and it provided attendees with an

By the Numbers:

In 2023, the Commission's staff:

- Responded to more than 700 public inquiries about recreation, general information about the Pinelands and the Commission, and other non-development application questions;
- Organized and carried out the 34th annual Pinelands Short Course, the 7th Pinelands Summer Short Course, the annual, Pinelands-themed World Water Monitoring Challenge events. The events educated a total of nearly 700 people;
- Organized, promoted and staffed three educational presentations that were held at the agency's headquarters as part of the Pinelands Speaker Series. The presentations educated a total of more than 90 people;
- Took and shared 1,360 photos and 103 videos on the agency's Instagram site and shared 678 Tweets on X (formerly known as Twitter);
- Uploaded/archived 44 videos that raise awareness of the Pinelands on the Commission's YouTube Channel, garnering 153 new subscribers, 353 shares and 22,300 views for the year;
- Maintained, updated and enhanced the Pinelands Commission's website. This included creating a new Cultural Resources webpage and updating dozens of documents and webpages; and
- Designed and launched the Commission's new online store, which has netted more than \$1,600 in sales. (See pages 29 30).

opportunity to learn about and then make their own hand-printed art with natural materials such as the leaves from trees and shrubs. (Please see the photo on page 28). The third program was held on September 21, 2023, and it included a presentation on the use of native trees and shrubs, along with guided tours of the Commission's rain garden, pollinator garden and bog. Attendees also sampled fresh pawpaw fruit that was harvested at the Commission's headquarters. Pawpaws are a native and rare species in New Jersey.

Commission staff shared hundreds of posts, 103 videos, 1,360 photographs, links to meetings, and numerous polls and Pinelands-themed trivia contests on its Instagram account and 678 Tweets on its X account (formerly

known as Twitter). Dozens of additional videos were uploaded to the agency's YouTube channel, which garnered 153 new subscribers, 353 shares and 22,300 views in 2023.

Commission staff also delivered dozens of presentations in schools, libraries, and other venues in 2023. They also led numerous field trips, including

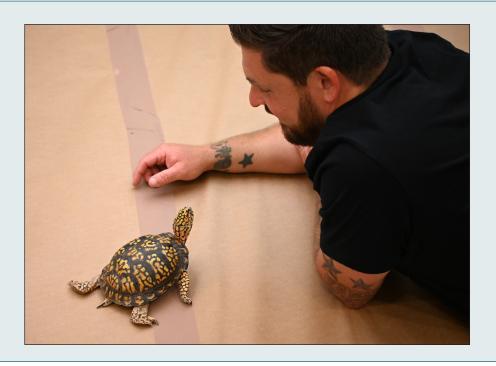


Above: Bethany Williams, an Environmental Specialist with the Pinelands Commission (center), was among the staff members who educated students during the annual World Water Monitoring Challenge in 2023.

Photo/Paul Leakan

a daylong tour of the Pinelands with Cliff McCreedy of the U.S. Biosphere Network on November 9, 2023. The Pinelands National Reserve is one of 28 internationally recognized areas across the continental United States, Puerto Rico and Hawai'i.

Last but not least, the Commission continued to educate the public by promoting visitation of the Candace McKee Ashmun Education Exhibits at its office in Pemberton Township.



To the left: Chris Leone of Garden State Tortoise delivered a lively presentation on the Turtles of the Pinelands at the Commission's headquarters on July 20, 2023. More than 30 people attended the presentation, which included live turtles such as Otis the Box Turtle (shown here).

Photo/Paul Leakan

Pinelands National Reserve Calendar

The Pinelands Commission issued its seventh edition of the Pinelands National Reserve wall calendar in late November 2023.

The calendar features a theme of "Winged Wonders of the Pinelands," and includes 38 photos of birds, butterflies, moths, dragonflies, damselflies, bees, the Jersey Devil and other winged creatures.

The Commission worked with Rowan College at Burlington County to design and print the calendar.

All of the photos were taken by members of the Commission's staff.

Aside from the photos of the region's resources, the calendar includes State holidays, dates of Pinelands Commission meetings and important dates in Pinelands history.

A total of 834 copies of the calendar were printed and distributed free of charge at the Bass River State Forest, Batsto Visitor Center, Belleplain State



Above: The front cover of the 2024 Pinelands National Reserve wall calendar features a photo of a monarch butterfly drinking nectar from a native sweet pepperbush flower in the Pinelands.

Forest, Brendan T. Byrne State Forest, the General Store at historic Whitesbog Village, and at the Pinelands Commission's headquarters.

The project was funded by the National Park Service.



Above: Presenter Laura Bethmann (second from left) demonstrated how to create hand prints by using natural materials such as leaves during a presentation at the Pinelands Commission's headquarters on August 3, 2023. Photo/Paul Leakan

Finances

Fiscal & Budget

The Commission's Operating Budget for Fiscal Year 2023 totaled \$6,499,578. Of this, \$5,563,299, or 85.59% percent, was budgeted for personnel expenses.

Budgeted revenue sources included \$383,000 in federal grants, a \$3,399,000 State appropriation, \$693,000 in State grants and other State funding, \$650,000 in application fees and \$1,374,578 from the Commission's fund balance and reserves.

The budget for the Pinelands Conservation Fund was \$960,831.

During 2023, the State Auditor worked to complete the Commission's Audit Report for Fiscal Year 2021, which ended June 30, 2021. Work on the Fiscal Year 2022 Audit Report will commence in 2024.

Pinelands Application Fees

Since April 2004, the Pinelands Commission has received application fees to partially underwrite the direct costs associated with reviewing development applications in the Pinelands Area. During Fiscal Year 2023, unaudited application fee revenues actually collected totaled \$1,105,475.25 (\$7,957.10 less) than Fiscal Year 2022).

Refurbishing Fenwick Manor

In 2023, the Commission applied for and was awarded a Capital Level II grant from the New Jersey Historic Trust. The grant will allow the Commission to rehabilitate and ensure the long-term preservation of its historic office building, known as Fenwick Manor. The structure was constructed as early as the late 18th century and has been the home of some of New Jersey's most industrious people, including Benjamin Jones, James Fenwick, J.J. White, and Elizabeth C. White. Benjamin Jones, who is responsible for the initial construction of the house, owned Hanover furnace and Mary Ann Forge and constructed the Columbus, Kinkora, and Springfield Railroad to transport his iron. James Fenwick and J.J. White are responsible for transforming cranberry agriculture in southern New



Jersey from a minor rural activity into the major industry that continues today. J.J.'s daughter, Elizabeth White, conducted horticultural experiments that led to the cultivation of the first commercial blueberry crop. Funds from an historic sites management grant, received in 2022, were used to complete a preservation plan and will inform the rehabilitation effort. The awarded Capital Level II grant funds of \$575,000 will be equally matched by the Commission, making a total of \$1,150,000 available for the much needed stabilization and improvements to this important historic structure.

New Pinelands Merchandise & Online Store

The Commission started selling Pinelands merchandise after launching its online store in 2023, with all proceeds from sales benefiting a fund that supports native plantings and raises awareness of native vegetation.

The <u>online store is accessible via the Commission's</u> website, and it enables the public to purchase mugs that feature a photo and information about the iconic Pine Barrens treefrog, Pine Barren Gentian or the Jersey Devil, along with reusable grocery/market tote bags and note cards. (The mugs and tote bags are shown in the photos to the right.)

The Commission netted \$1,657.75 in sales from August through December 2023.

All proceeds from sales go to the Kathleen M. Lynch-van de Sande Fund. The fund was established in memory of Ms. Lynch-van de Sande, a NJ Pinelands Commission Environmental Specialist who died in a car accident in June 1989. Sales and donations will support the planting of native Pinelands plants and projects that raise awareness about native Pinelands plants.

Over the years, thousands of dollars have been dedicated to the fund's mission. To date, three arboretums were funded at area schools and over 35 scholarships were awarded to a senior majoring in the environmental field from each high school in the Pinelands. It also funded the creation of a rain garden that serves as a model for rain gardens in the Pinelands.





Proceeds from sales and donations to the fund will support future rounds of grant funding for projects that focus on native plants in the Pinelands.

Certification

As required by State Executive Order #37, all State authorities are required to certify that during the preceding year the authority has, to the best of its knowledge, followed all of the authority's standards, procedures, and internal controls. I hereby certify to the best of my knowledge that, during the 2023 calendar year, all of the Commission's standards, procedures, and internal controls were followed.

Susan R. Grogan Executive Director

Susan R. Brigan

Scenes around the Pinelands in 2023



Above: This male prairie warbler was photographed at Whitesbog Village in Brendan T. Byrne State Forest in early May 2023. They are approximately 4 inches in length and have a thin bill.



This fiery sunset reflected off Atsion Lake in Wharton State Forest in the Pinelands on November 8, 2023. The site is a popular spot for kayaking, hiking, picnicking, photography and swimming (in season).



Above: This red-spotted purple butterfly was feasting on the nectar of a pawpaw fruit that fell on the ground at the Pinelands Commission's headquarters in 2023.



Above: Native pink lady's slipper orchids were blooming in abundance at this site in the Pinelands in May 2023. They are among almost 30 species of wild orchids that can be found in the Pinelands.

Photos by Paul Leakan NJ Pinelands Commission



COVER PHOTO: Sunrise over the Town of Hammonton, as captured in October 2023. Photo/Paul Leakan