









## The Pinelands Preservation Alliance presents this special report to mark the occasion of our 35th anniversary.

In lieu of our annual report card for federal, state, and local government agencies rating actions taken in an individual year, this issue looks as far back as 1989—the year of PPA's founding. We seek to characterize the state of today's Pinelands, the history that shaped the present moment, PPA's role in it, and what the future may hold. The following pages contain articles that reflect on the major themes of our current work:

- The Pinelands Commission
- Accessible Natural Spaces
- Native Landscaping
- Sustainable Farming
- Climate Change
- **Energy Infrastructure**
- Public Lands

PPA has grown from what was strictly an environmental watchdog group, to the multifaceted organization of today. All of the issues that we currently engage with have been present in some form since our founding, although their urgency and relevance to our work may not have been initially clear. As issues that were once hidden from public consciousness have risen to the forefront, PPA has endeavored to meet each moment with advocacy and transformative programs. Regardless of which theme first brought you to the organization, we hope that you will discover new interests and points of connection with our expanded work within these pages.

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# **Celebrating 35 Years of Pinelands Preservation**

Dear Friends of the Pinelands,

In July 1989, the Pinelands Preservation Alliance (PPA) was founded to advocate for the Pine Barrens, a unique ecosystem in New Jersey. Guided by board members from organizations like the Sierra Club, New Jersey Conservation Foundation, and others, along with scientists and activists, PPA aimed to protect the region's distinctive natural and cultural resources.

Thanks to the dedication of supporters and volunteers, the Pinelands today looks very much as it did 35 years ago. Over 800,000 acres of forests thrive, vital wetlands and streams sustain biodiversity, and rare species continue to flourish. The Kirkwood-Cohansey aquifer system provides clean water to millions of people. Most fundamentally, the Pinelands Protection Act still safeguards the region from harmful development. This is no small feat given the immense changes in New Jersey and beyond since 1989. While suburban sprawl has consumed thousands of acres elsewhere, the Pinelands have withstood economic recessions, the COVID-19 pandemic, and relentless political pressure.

PPA has played a big—we think essential—role in this success. The Alliance has inspired action through educational programs, advocacy, and initiatives like Pinelands Adventures, which has introduced over 60,000 people to the area since 2016. Since its founding, PPA has engaged over 80,000 individuals in activities such as protests, public meetings, and petition drives. The Pinelands will only survive into the future if our citizens are willing to continue to fight for it.

Over the years, PPA has won significant victories. In its early days, it helped defeat two major efforts to repeal the Pinelands Protection Act and stopped new mining operations in conservation zones. We have won significant battles to better protect the Kirkwood-Cohansey aquifer system from over-pumping and blocked a harmful natural gas pipeline that was slated to run through the southern Pinelands. PPA's persistence and expertise have made a critical difference in safeguarding this unique region.

However, challenges remain. Weak enforcement of Pinelands rules has led to damage from illegal development and off-roading. Some losses, like the construction of Seneca High School on preserved farmland and the approval of a northern Pinelands natural gas pipeline, underscore the fragility of environmental protections. Yet, PPA's willingness to fight these battles has discouraged further violations, strengthened regulations, and held public agencies accountable.

PPA is also an organization that does not stand still. We have broadened our reach through initiatives that link environmental preservation with health, food systems, and community well-being. This inclusive approach has drawn in individuals and organizations not previously involved in Pinelands work—and who often do not even identify as "environmentalists." PPA created Pinelands Adventures in 2016, launched Rancocas Creek Farm in 2020, began partnering with health and community organizations like Allies in Caring in Hammonton and The Opportunity League in Burlington City, and became the home for food equity and health initiatives like Roots to Prevention. These programs connect new audiences to the importance of protecting the Pinelands, demonstrating that nature's health is essential for human health.

As PPA enters its next decade, we will continue the drumbeat of protection and connection to this irreplaceable natural treasure. This work never ends, because the threats never end. Some persistent threats are perennial, like sprawling development. Others are dynamic, like the growing menace of climate change. And some, like the seemingly endless multiplication of warehouses, were not even in the discussion a few years ago. By being inclusive, persuasive, innovative, and nimble, PPA aims to ensure the Pinelands' survival for generations to come. With our new leaders and your support for our sustained efforts, the Pinelands will remain a source of wonder and life for the region.

Jaclyn Rhoads

Executive Director

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# The New Jersey Pinelands

The Pine Barrens is a vast forested area extending across South Jersey's coastal plain. This important region protects the world's largest example of pitch pine barrens on Earth and the globally rare pygmy pine forests. One of the largest fresh water aquifers, the Kirkwood-Cohansey, lies underneath its forests and wetlands. The Pine Barrens is home to many rare species, some of which can now only be found here having been extirpated elsewhere.

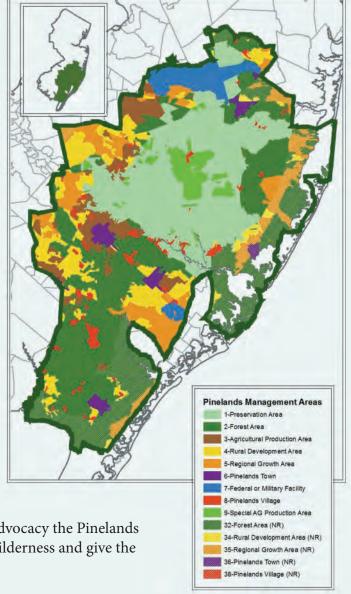
In the 1960's, the Pine Barrens were threatened by a proposal to build the world's largest supersonic jetport and an accompanying city of 250,000 people. This proposal galvanized citizens, scientists and activists to find a way to permanently protect the Pinelands. In 1978 Congress passed the National Parks and Recreation Act which established the Pinelands National Reserve, our country's first. In 1979 New Jersey adopted the *Pinelands Protection Act*. This Act implemented the federal statute, created the Pinelands Commission, and directed the Commission to adopt a Comprehensive Management Plan (CMP) to manage development throughout the region.

Many residents do not know that all new development in the Pinelands is controlled by the nation's most innovative regional land use plan. The CMP is designed to preserve the pristine conditions found within the core of the Pinelands while accommodating human use and some growth around the periphery. The Pinelands Commission's staff of approximately 40 professionals is directed by 15 Commissioners who serve voluntarily. Seven Commissioners are appointed by the Governor with approval of the state Senate, seven by the counties in the Pinelands, and one by the U.S. Secretary of the Interior.

The New Jersey Department of Environmental Protection (NJDEP) also plays a key role in protecting the Pinelands. In addition to its job of implementing the CMP in the coastal zone, the NJDEP regulates the distribution of fresh water from the aquifers that lie beneath the Pinelands.

What the Pinelands Commission and NJDEP have accomplished in the Pinelands is remarkable. But this region faces an onslaught of threats in the form of political interference to benefit development projects, and the failure of state agencies to enforce Pinelands rules on

a consistent basis. Through public education and advocacy the Pinelands Preservation Alliance works to protect this great wilderness and give the public a voice in its preservation.



### **Pinelands Commission**

#### Staff & Leadership

The Pinelands Commission is responsible for executing the Pinelands Comprehensive Management Plan (CMP), as well as improving it. Revisions have been made to address topics such as forestry and stormwater management that the original CMP did not anticipate. Reforms have often been delayed due to political interference or lack of funding. A prime example are protections for the Kirkwood-Cohansey Aquifer, which took almost twenty years to become a CMP amendment.

Rare instances of political intrigue aside, the reason for delay is often far more banal: the Commission simply does not have enough staff to implement reforms. State funding has stagnated and been stretched thin by inflation. Declining support has slowed progress on important reforms to address climate change and protect endangered species. The state government should increase its support for this critical work.

Pinelands Commission leadership has had a profound impact on the effectiveness and openness of the agency over the years. Commission meetings were once intimate affairs, but openness to the public declined under Nancy Wittenberg's tenure as Executive Director (2011-2021). The atmosphere became more welcoming when Susan Grogan took the reins in 2021. Despite virtual access options, public participation today remains low, with the typical meeting attended by only a few Commission staff, PPA staff, and local residents.

#### **Appointments**

The Commission benefits from Commissioners bringing a range of perspectives from their professional experiences to inform discussions and decisions. Members have represented viewpoints of stakeholder groups such as farmers, wildfire managers, and environmental advocates. However, the perspective of minority groups has been missing. Like many other NJ boards and Commissions, the Pinelands Commission membership is overwhelmingly male and white—the only exceptions to this are gubernatorial appointees.

The Governor has significant influence over the composition of the Pinelands Commission, with the ability to nominate seven of its fifteen members. However, Governors from both parties have struggled



Activists gathered on the steps of the War Memorial in Trenton to protest the Pinelands Commission's approval of the New Jersey Natural Gas Pipeline in 2017.

to fill vacancies, often leaving this responsibility at the bottom of their priority list. More diverse representation is needed, and it can be achieved most quickly through gubernatorial action.

#### **Pinelands Municipal Council**

Established by state statute, the Pinelands Municipal Council (PMC) was meant to provide a forum for mayors and leaders of Pinelands municipalities to give input to the Pinelands Commission. Engagement had already declined before the COVID-19 pandemic, which further exacerbated its issues. Low participation rates, struggles to achieve quorum, and difficulty keeping staff paid all contributed to the council's ineffectiveness. Township leaders began questioning its value, leading to a further decline in involvement. These issues culminated in the sudden halt of meetings in 2022—with the PMC now defunct for over two years.

While the PMC is independent, it complements the Pinelands Commission. The Commission staff can assist with administrative work, but the drive to revive the PMC must come from township leaders. PPA is eager to see the PMC reborn and reimagined as a space for productive conversations. Instead of merely relaying Commission announcements, the PMC could foster cooperation and idea-sharing among municipalities facing common challenges. Collaboration will be increasingly vital as climate change reshapes the landscape, requiring new approaches to municipal management—we believe that this can be done better, together.



PPA was founded just before the Americans with Disabilities Act (ADA) was passed and signed into law in 1990. Before this point, accessibility for the disabled community was not widely recognized or implemented in development plans.

It wasn't until the ADA was created when inclusion of the various disadvantaged sections of the disability community stopped being an afterthought.

Decades later, this ethos was expanded to recreation and outdoor spaces. There have been small strides within the federal, state, and non-profit realms to advance the need for accessible outdoor experiences for folks with disabilities. Trailblazers include organizations such as Disabled Hikers (West Coast), the Amiee Copeland Foundation (Georgia), and the National Park Service. On the New Jersey front, state legislators started to address the issue in 2018 with the passage of Jake's Law—which requires public playgrounds to be more inclusive and accessible for children of all ages and abilities.

The COVID-19 pandemic led many people to reflect on their mental and physical health. It was in this context that PPA launched The Pinelands is For Everyone project in 2021. In the following years, this idea spread beyond the Pinelands, as our Access Nature forum now engages agencies, officials, and organizations across the state.

Why start this movement in the Pinelands? It is a unique natural space which poses distinct accessibility challenges. The sandy and loose soils make it difficult to use mobility devices such as walkers and wheelchairs. Many desirable Pinelands destinations are water features, heavily regulated (and rightfully so) to protect the wetlands and sensitive species found nearby. However, Pinelands protections have had the unintended consequence of excluding folks with disabilities from experiencing this unique landscape. The Pinelands are a convenient destination for the millions of people who live within a forty minutes' drive, but offers significantly less opportunities for the estimated 400,000+ individuals in surrounding counties who identify as having a disability.



In 2023 Access Nature volunteers from the Outdoors Club of South Jersey helped Brendan Bryne State Forest improve their ADA Cranberry Trail. Volunteers helped spread stone dust on the trail to provide a more stable surface making the trail easier to use for people with mobility issues.

PPA was well-positioned to seek solutions that would meet both environmental and accessibility needs, as our work is driven by the conviction that experiences in nature will motivate people to protect it. With grant funding from the Department of Human Services Inclusive Healthy Communities Program, we began the campaign to make outdoor spaces more accessible for people with disabilities. Through a series of "Town Hall" meetings and focus groups, we learned that this underserved section of the community was yearning to get out and enjoy natural spaces.

The first major focus of Access Nature has been to create accessible trails around scenic Pinelands locations. For the last three years, we have been seeking Pinelands Commission approval to complete improvements to a 0.65-mile existing trail around Pemberton Lake, as well as a 0.87-mile trail in Evesham Township. The trails will be 5-6 feet wide, made of a combination of crushed stone and boardwalk to provide for a firm, even surface. The municipal staff in both townships have been persistent and eager to have the natural spaces improved for disability accessibility.

If only we could put shovels in the ground! Unfortunately, the features that give these trails their scenic beauty—namely, lakes, ponds, and wetlands also complicate their construction. The Pinelands Comprehensive Management Plan (CMP) protects wetlands from being destroyed, but was not designed to accommodate projects that work with nature. In the absence of appropriate rules, every project must instead go through an arduous 12-Step Memorandum of Agreement (MOA) process. This creates an agreement between individual municipalities and the Pinelands Commission. Since a unique MOA must be made for each project, approvals that would otherwise take months have stretched into years.

To more easily facilitate future projects without compromising on wetlands protections, the Pinelands Commission needs to adopt a new set of rules for recreational trails. Such rules would define a uniform formula for accessible trails that balances environmental and recreational needs. PPA has been advocating for CMP amendments that would cut down on the bureaucracy needed for future accessibility projects.



Sean Kane-Holland, Access Nature Advocate for PPA, tests out the Eagle Electric Chair for use by our all terrain wheelchair loan program.

In the meantime, we've been hard at work collaborating with volunteers, municipalities, counties, non-profits, and the NJ State Parks. Together, we have been creating plans for better access to trails by improving trail surfacing materials, signage, and other public information to enhance accessibility in other ways.

The success of these initiatives depends on engaging a wide range of organizations, agencies, and individuals to achieve collective impact for the entire community. PPA and its collaborators hope to spark a new ethos of inclusivity and accessibility for the enjoyment of nature and recreation. Together, we can provide the most comprehensive accessibility design, development, and implementation in our natural spaces—for all to enjoy. ■



As we displace native vegetation, our need for their ecosystem services only grows. Paved surfaces and manicured lawns of non-native turfgrass cannot provide the stormwater management, water quality, and habitat benefits of the native plants that they replace.

Remaining natural spaces can no longer compensate for the expanding human-built environment. However, this trajectory is not inevitable —everyone can help in forging a different path.

#### Missing the Forest for the Lawns

Historically, early settlers in the Pinelands prioritized survival over aesthetics. The modern fascination with ornamental lawns traces back to mid-20th-century suburban expansion, which spread the American dream of picket fences and neatly trimmed grass. Developments like Levittowns, designed as affordable homes for returning WWII veterans, standardized the suburban landscape. Over the decades, this aesthetic crept into the Pinelands as the megacity expanded.

Today, suburban developments occupy a significant portion of the region, with even denser housing complexes overtaking single-family homes. Farmland is rapidly paved over for million square foot warehouses, and housing prices skyrocket as developable space dwindles. Developers, focused on short-term gains,

often employ the cheapest stormwater management practices and landscaping allowed, without regard for the future challenges these may create for residents.

#### A Rising Tide of Stormwater Challenges

When it rains, where does all of the stormwater go? Drain the water too slowly, and your basement might flood. Drain the water too quickly, and rivers are quickly overwhelmed—flooding downstream communities. As humans alter the landscape and reduce its natural ability to absorb water, we need to better plan for how to capture stormwater in place before we pipe it elsewhere.

Stormwater management regulations were not enacted in New Jersey until 1983. As a result, older developments completely ignore stormwater runoff, while newer ones implement limited solutions. Common practices include retention ponds and detention basins, which capture runoff but fail to replicate the natural hydrological functions of forests, native grasslands, or shrublands.

New Jersey has strengthened stormwater regulations to address flooding and climate risks. This includes enhanced stormwater rules in 2021, new inland flood protection rules in 2023, and the Resilient Environments and Landscapes (REAL) rules in 2024. These measures aim to enhance community resilience against rising sea levels, extreme weather, and flooding.

# When we see land as a community to which we belong, we may begin to use it with love and respect."

- Aldo Leopold, Ecologist and Author

To fund upgrades, municipalities can adopt stormwater utilities, charging fees based on runoff. Properties such as mega-warehouses and shopping centers with extensive parking areas that create the most stormwater runoff pay the lion's share. Tax-exempt institutions are also responsible for paying their fair share. New Brunswick and Maplewood are the first municipalities making the shift to proactive water management.

#### Landscape Makeover Program

Green infrastructure—including rain gardens, bioswales, and restored habitats—offers practical solutions for stormwater management. The introduction of rain gardens in 1990 marked a pivotal moment in sustainable landscaping. These features enhance biodiversity while managing runoff effectively.

The Pinelands Comprehensive Management Plan (CMP) promotes green infrastructure and native plants but allows exceptions for some limited ornamental and screening purposes for areas "specifically intended for human use". Developers and property owners often apply this exception to their entire properties, replacing native vegetation with foreign ornamental trees, shrubs, and turf lawns. Non-native plants are not adapted to the nutrient-deficient soils of the Pine Barrens, which necessitates extensive irrigation and fertilizer use.

PPA has been working to reverse this landscaping trend by encouraging the use of rain gardens through its Landscape Makeover Program (LMP). Since its inception in 2017, the LMP has provided homeowners and municipalities with tools to adopt green infrastructure. This includes training, project management and financial incentives for installing features like rain gardens. The program has transformed landscapes across New Jersey by reducing flooding, improving water quality, and creating habitats for wildlife. In 2024 alone, approximately 6,000 square feet of new green infrastructure was installed that is now naturally treating over 250,000 gallons of runoff per year. The program has expanded into the New Jersey Highlands, addressing issues like harmful algal

#### Nature's Sponge

Imagine a forest as a natural sponge, absorbing rain and gradually releasing water to nourish soil, plants, and waterways. Its complex system of trees, plants, and soil filters water, prevents erosion, and keeps streamflow stable.

Now, compare this to a retention pond: an artificial substitute, that collects water briefly but lacks the forest's slow-release ability. It can overflow or drain too quickly, causing imbalances in the water system. The pond doesn't filter or nurture the water in the same way a forest does, leading to stagnant, polluted water that can harm wildlife and degrade the environment.

blooms in lakes. By managing thousands of gallons of stormwater annually, the LMP demonstrates the profound impact of small-scale, localized efforts.

The path forward requires a collective shift in mindset. Turf lawns—while tidy—demand lots of resources and squander valuable space that could support vibrant ecosystems. Every rain garden, native tree, and stormwater solution helps to transform landscapes from mere decoration into vital parts of a thriving environment. To achieve this, developers must prioritize sustainable practices over short-term profits. Local government should fund stormwater improvements by establishing stormwater utilities. CMP rules and local ordinances need to allow fewer exceptions for tree removal, non-native plantings, and the addition of turf lawn. Homeowners can embrace native landscaping, treat their property as their canvas, and transform their yards into ecological havens. Together, these actions can redefine our relationship with the land, ensuring that the Pinelands and beyond remain resilient for generations to come.



# PPA's work is intimately connected to farming; we are headquartered on a historic farmstead and surrounded by dozens of active farms—including our own Rancocas Creek Farm.

In and around the Pinelands, farming can play a vital role in preserving the region's natural resources by preserving open space, maintaining ecosystem balance and supporting biodiversity. Farming also contributes to the local economy and provides a connection to our rich agricultural heritage. However, most farming in our region is not environmentally friendly compared to sustainable or regenerative methods. Industrial sod, soy, and corn farms dominate the area and can harm soil health and water resources.

New Jersey's longtime identity as "The Garden State" is swiftly being overtaken by warehouses to yield a new moniker: "The Logistics State". The duel between these identities is on full display in the current fight for farmland. As farmers retire, or find that their farms are no longer economically viable, developers swoop in to purchase the land and convert it to other uses. Large housing developments fueled the first wave of losses, but warehouses have taken over as the COVID-19 pandemic shifted demand to online shopping. This dynamic is exemplified in Pemberton Township, where a residential community that was once encircled by farmland now finds itself boxed in by warehouses.

#### Preserving New Jersey's Farming Legacy

The number of farms has been declining statewide—the Pinelands region is no exception. Decreasing profitability, industrial farming economics, and increasing development pressure disproportionally affect smaller growers in our region. Since 1983, farmers have been able to weather these economic headwinds with help from programs like the New Jersey SADC's Farmland Preservation Program, which pays landowners for development rights in exchange for keeping farmland permanently in agriculture.

In the Pinelands, PPA was able to help protect a 180acre cranberry farm in Southampton Township. Now permanently preserved as open space, this ensures the ongoing protection of water quality and wetland



Rancocas Creek Farm crew brings in a bumper crop of squash.

habitats essential for critical species. PPA's efforts have also helped to preserve Pleasant Valley Farm in Hamilton Township, Bill Boerner's historic 100+ year-old family farm. Through advocacy efforts and collaboration between PPA, local stakeholders, and government agencies, the necessary zoning adjustments were made to ensure the farm's preservation. As New Jersey approaches buildout, preserving the agricultural and environmental heritage of our farmland for future generations will become even more critical.

The Pinelands Comprehensive Management Plan has supported farmland preservation by designating specific areas for agricultural production. As of 2024, 43% of agricultural production areas and 67% of special agricultural areas in the Pinelands have been preserved. Approximately 100,000 acres of farmland within the Pinelands have been preserved through the collaboration of state, local, and nonprofit initiatives. This success accounts for about 21% of the total 483,000 acres permanently protected in the Pinelands Area.

#### **Charting the Way to Greener Pastures**

Farming can have significant environmental impacts. A 2019 USDA report found that about 70% of the US food supply comes from industrial farms. These can harm ecosystems through practices like intensive tillage, pesticide use, and monocropping. These farms prioritize high yields to achieve low prices, often at the expense of biodiversity and ecological health. The Pinelands is especially vulnerable to conventional

farming practices, because fertilizers change the water and soil pH which in turn changes the environment for rare plants and animals. Pesticides are also detrimental to this sensitive ecosystem.

The Pinelands Commission has taken a hands-off approach with the farming that is done within its boundaries. Agricultural water use is not even being monitored properly. Farming is absolutely critical to our society, but better practices could yield a better environment, better food, and better health for all. Over the years, PPA has urged the Commission to collaborate with farmers to adopt sustainable practices, but progress has been minimal. Although systemic change has been slow, PPA is leading by example on our 72-acre farm.

In 2020, a former soybean farm was donated to PPA, which we have transformed into Rancocas Creek Farm (RCF): a flourishing chemical-free produce farm. RCF employs regenerative farming practices to grow diverse, pesticide-free, seasonal foods while maintaining a healthy farm ecosystem. Our farm enhances ecological capital, manages stormwater, and sequesters carbon. Alternative farming practices like this can be especially impactful in south Jersey because of the sensitive pine barrens ecosystems. By using sustainable practices, RCF is an example of how farming can coexist with the Pinelands ecosystem, providing benefits to both the environment and surrounding communities.

#### **Reforming Food Systems**

For sustainable farming to thrive and grow in our region, people must support it by purchasing locally grown food. Over the past 50 years, diets in New Jersey-like much of the country—have shifted towards processed foods, with around 80% of diets now consisting of ultra-processed products (Pew Research Center). To reverse this trend and support sustainable farming, PPA's USDA-funded SJ FEAST project (South Jersey Farmers, Equity and Sustainability Team) connects farmers with underserved communities to expand access to fresh, local produce.



A view of PPA's Rancocas Creek Farm from the above. We planted native trees and shrubs to better manage stormwater that runs off the property.



The biggest threat to the Pinelands used to be development, with battlegrounds clearly delineated in property lines and acres of forest. Climate change has propagated in an insidious way that makes it difficult to identify its effects on our daily lives, or see the impact of individual actions.

When a supersonic jetport was proposed in the 1960's, residents waged a campaign to stop the complete destruction of the Pinelands. Together, they created the one-of-a-kind Pinelands National Reserve. To this day, nothing has matched the unique nature of protection alongside development in the Pinelands. The efforts of a mighty few shows how people can move mountains and disrupt the traditional cycle of economic gains at the expense of natural resources.

While the issue of the jetport was resolved in the 1960's, a much larger problem has continued to grow in the Pinelands and beyond. At the time of PPA's founding, climate change was known as global warming to few and not accepted by many. In the decades since, its urgency has become apparent in all areas of our lives.

The Pinelands is experiencing:

- 1. Increased fire risk. The fire season is extended as a result of less rainfall and warmer temperatures expanding into the fall and winter. Marking March 15 as the official start of NJ's fire season is now obsolete, since fires now regularly happen in early March, and even February.
- 2. Flooding and sea level rise. This is evident in the property losses in our region and the loss of salt-sensitive species like Atlantic white cedar.
- 3. Flash droughts. 2024 swung from the wettest spring on record to unprecedented droughts in the fall; in 87 days, our Rancocas Creek Farm only received 0.6 inches of rain.
- 4. Impacts to Pinelands species. Warm winter days disrupt hibernation patterns and fail to kill off pests, leaving animals more vulnerable to threats like death by freezing and disease.



The flammable resins found in many Pinelands trees and shrubs make for a very fire prone environment.

Despite growing awareness of climate change, progress has stalled. Where are our mighty few today to fight climate change? They still exist. Pinelands Preservation Alliance, founded by those who fought the jetport, continues the fight with its members and supporters. However, addressing the problem of climate change is far more complex than opposing a single development proposal.

PPA and its allies succeeded in stopping South Jersey Natural Gas pipeline in 2019 which would have further entrenched fossil fuels in our landscape and contributed to climate change. PPA also pushed for change at the Pinelands Commission, backing up our convictions with research and recommendations summarized in a white paper. These efforts ultimately convinced the Commission to create the climate change committee in 2021. An accompanying resolution officially documented the Commission's acknowledgement of climate change, as well as its commitment to mitigate and adapt to this threat.

The Pinelands Commission has made little progress to back up these gestures with substantive action. Commission staff have made laudable changes to their internal operations—such as building efficiency changes and a composting program—but the agency has yet to make an impact in the greater Pinelands region. Meetings of the climate committee have been delayed or canceled, hamstrung by the lack of staff resources to support the committee's work. The Commission requested additional funding to create a staff position dedicated to climate change in 2024, but Governor Murphy denied it. Although he is very vocal about climate change and has publicly supported efforts to switch to 100% renewable energy by 2035, Governor Murphy doesn't seem to recognize the importance of on-the-ground efforts to combat climate change in the Pinelands.

In light of the political changes that have taken place, PPA and other organizations need to substantially increase their engagement with the public and elected officials about the resources needed in the Pinelands. The recent release of the state's NJ PACT (Protecting Against Climate Threats) rules is a step forward in the right direction; these rules modernize New Jersey's land use regulations so that residents and businesses become more resilient to the impacts of climate



Flooded roads following a nor'easter in Tuckerton, NJ. Photo by Life on the Edge Drones.

change. These rules aren't enough, and the Pinelands Commission needs resources to update the Pinelands Comprehensive Management Plan.

Despite these obstacles, significant progress has been made to help the Pinelands adapt to climate change in targeted ways.

- 1. Fire: prescribed burning now happens regularly thanks to legislation that PPA championed for 10 years until its adoption in 2019.
- 2. Flooding: stormwater utilities are starting to form in New Jersey as a result of advocacy from the Flood Defense Coalition, in which PPA serves as a key member.
- Droughts: PPA's advocacy for water supply protections has resulted in CMP amendments to protect the Kirkwood-Cohansey aquifer.
- 4. Pinelands plants and animals: PPA advocates for protected plant species list updates and critiques development plans that fail to safeguard critical habitats for threatened and endangered animals.

It is clear that climate change is not just a far-off problem for the future, but rather an issue that permeates every facet of our modern lives. New Jersey has to use all of its resources and focus its efforts on addressing this threat. Climate change concerns are being drowned out by the politics and economic concerns of today—we need the mighty few to stand with us and tackle climate change together.



The electricity that powered the first 35 years of PPA's work is fundamentally different from what the grid will deliver in the next 35 years. The need to transition from fossil fuels to zero-carbon energy becomes more urgent as the effects of climate change intensify.

PPA has worked with policymakers and other environmental groups to advocate for statewide changes in energy production. Under Governor Phil Murphy's Energy Master Plan (released in 2020, updated in 2023), New Jersey aims to reach the goal of 100% clean energy by 2035. Achieving this goal will require expanding renewable power sources and phasing out the use of fossil fuels.

#### **Pipeline Battles**

The Pinelands Preservation Alliance is the leading advocate for policies and infrastructure—sometimes even lawsuits—to protect this fragile ecosystem. One important battle that PPA won in 2019 targeted a pipeline that would have entrenched natural gas in NJ's energy grid. In 2013, South Jersey Gas (SJG) applied to the Pinelands Commission to construct a 22-mile, high-pressure natural gas pipeline through the Forest Management Area of the Pinelands National Reserve. PPA strongly objected to the pipeline because it violated the Pinelands Comprehensive Management Plan

(CMP). Despite this incompatibility and the presence of over 1,000 protesters at a single meeting, the Pinelands Commission approved the pipeline in 2017. We appealed this decision, along with the Sierra Club and Environment New Jersey. This delayed the project long enough that the pipeline became obsolete, as renewable energy options came to the forefront. This had the knock-on effect of closing the B.L. England Generating Station in Upper Township, which had been planned to convert its power generation from coal and oil to natural gas.

Our fight against a second pipeline, the Southern Reliability Link Pipeline, running from Chesterfield to Plumsted, was not successful. Despite a 2020 lawsuit that PPA filed jointly with the New Jersey Sierra Club, this 30-mile pipeline through the Pinelands National Preserve finished construction in 2021. These challenging episodes reflect just how vulnerable the Pinelands are to political and legal manipulation, requiring constant vigilance by dedicated advocates.

#### Renewing NJ's Energy Portfolio

The effects of climate change in the Pinelands hasten the need for carbon-free energy, especially from renewable sources like wind and solar. At the time of PPA's founding, our electricity came from nuclear (40%), coal (22%), and natural gas (6%), with the remaining third coming from other states and sources. Today, coal usage has been nearly eliminated, and the share of carbon-free energy has increased. Coal fueled less than 1% of New Jersey's in-state electricity

generation in 2022, when the state's last coal-fired power plants shut down—following the closure of the B.L. England plant in 2019. The electricity currently produced in-state is approximately 51% natural gas, 44% nuclear, and 2% solar—with the remainder from other sources.

#### **Solar Siting Struggles**

Governor Murphy aims to achieve 32 GW of solar capacity in New Jersey by 2050, contributing 34% of projected energy production. While 15% of this goal has been met, some installations have raised concerns about environmental impacts. For instance, in 2016, Six Flags Great Adventure in Jackson Township cleared 40 acres of forest to build a solar farm, instead of utilizing its 100-acre parking lot. This was allowed to proceed just outside the area protected by the Pinelands CMP, despite lawsuits from environmental groups to prevent it. Such developments miss opportunities to provide co-benefits, like shaded parking areas that reduce extreme heat. The Pinelands CMP prioritizes solar projects on existing structures or disturbed lands prohibiting clearing fields or forests solely for solar farms. As a result, solar projects in the Pinelands have focused on rooftops, paved surfaces, and disturbed lands—including hazardous waste sites, resource extraction sites, and closed landfills.

Solar energy expansion has had the unexpected benefit of cleaning up Pinelands landfills. The region still grapples with the legacy of landfills that were closed shortly after the passage of the Pinelands Protection Act. Many that were simply abandoned without being properly capped are now being repurposed as solar farms through incentives like the Community Solar Energy Program, launched in 2018. To make way for these solar farms, municipalities have had to finalize their long-overdue landfill-capping plans. This has prompted a surge in applications to the Pinelands Commission. However, concerns remain about the habitats of threatened and endangered species, such as the barred owl and northern pine snake, which have colonized some uncapped landfills. PPA advocates for tracking studies to understand these species' movements, nesting, and hibernation habits, ensuring responsible solar development.



In February 2017 over 1,000 people gathered at a Pinelands Commission meeting to protest the South Jersey Gas Pipeline proposal for the Pinelands.

#### Powering the Fight Against Climate Change

The Pinelands are a fragile ecosystem, home to unique species and critical habitats that are threatened by climate impacts and fossil fuel infrastructure. Zerocarbon energy sources offer significant benefits to the Pinelands by reducing the harmful effects of fossil fuels, which contribute to climate change, air pollution, and habitat degradation. By transitioning to renewable energy, we reduce greenhouse gas emissions, mitigate the risk of extreme weather events, and preserve the region's biodiversity. PPA is proud to lead those efforts, along with its allies, to maintain the beauty of the Pinelands and preserve them for future generations. ■

#### **Clean Energy Headwinds**

New Jersey's coastal location offers abundant offshore wind potential. In 2010, Governor Christie initiated the state's first offshore wind farm project but halted it in 2016. Governor Murphy revived the effort in 2018, setting ambitious targets, peaking at 11,000 MW of energy generation by 2040. However, economic and political challenges paused projects in early 2025. Although the future of offshore wind in NJ is uncertain, PPA will continue to advocate for the state to achieve 100% clean energy.



Over its 35-year history, PPA has led numerous campaigns to block inappropriate development and advocate for land preservation. Achieving significant victories often requires years or even decades of dedicated advocacy.

Public open spaces are the reservoirs of biodiversity in the Pinelands, and a recreational asset for millions of people. These areas are critical to how we experience the Pines and are the places we rely on to showcase the beauty that we believe is worth protecting.

#### **Land Preservation**

Our State Parks, Wildlife Management Areas, Natural Lands Trust Preserve, and other public open space areas are the reservoirs of biodiversity in the Pinelands and a recreational asset for millions of people. The forests, fields, and parks that you can visit throughout NJ today often took contentious and circuitous routes to become public open space. Most public lands in the state started as private properties, becoming parks only after development plans failed. For instance, Wharton State Forest was once intended to be a water reservoir for Philadelphia, and the unique Pygmy Pines area faced threats of being converted into a jetport and city. The New Jersey Department of Environmental Protection

(NJDEP) Green Acres program and private land trusts have eagerly pursued private sellers and purchased thousands of acres in this decade.

Once land becomes part of public open space, the next step is encouraging sustainable recreation while preventing harmful activities like illegal dumping and illegal off-road vehicle use. The challenge is maintaining access for healthy activities such as hiking, biking, or horseback riding, while discouraging use by illegal dumpers and off-road vehicles.

#### **Illegal Dumping**

Illegal dumpers enter Pinelands forests and drop debris—that is sometimes contaminated—with impunity. Certain areas close to developed towns are vulnerable to illegal dumping without direct intervention. The dumped waste spans the spectrum

#### The Success of the Pinelands CMP

Land preservation efforts span the entire state, but the Pinelands CMP has been particularly effective in enhancing preservation within the Pinelands. As of 2024, 51% of the Pinelands Area (483,000 acres) has been permanently protected, with 94% of this land located in core conservation areas. from household trash up to entire building demolitions. When left exposed to the elements, this waste leaches contaminants into the surrounding environment, including the open Pinelands aquifers that thousands of residents rely upon for drinking water.

PPA and other organizations have led clean-up efforts over the years. Local residents are highly motivated to volunteer, but the limiting factor is funding: when dumped waste appears by the ton, a few trash-bags just isn't going to cut it. Finding 7-10 tons of waste dumped in a single location is not uncommon. PPA has received funding from multiple sources over the years to rent dumpsters and have the waste hauled to appropriate facilities. Some of these funding sources have dried up, but the persistent problem of illegal dumping has not. Sustained support is needed from the state government to fund cleanup efforts, as well as to prevent the problem of illegal dumping in the first place.

Effective strategies to limit illegal dumping include reducing the number of un-watched vehicle access points to the forest, creating the perception of detection, and increasing the knowledge of fines and penalties. Atlantic County has mandated an innovative approach called "waste flow control": when a construction permit is issued—whether that be for new construction, demolition, or renovation—the closing of the permit requires the submission of a receipt from the county waste facility for the deposition of materials from the job. Without the receipt, the permit cannot be closed out. This both enhances compliance with illegal dumping laws and ensures that the materials are going to the best possible place for their deposition.



PPA coordinated a workday with volunteers from REI, Inc. to remove trash dumped in Wharton State Forest.



Severe erosion at Colliers Mill Wildlife Management Area caused by off road vehicles.

#### Illegal ORV Use

Illegal ORV riders are also drawn to these places due to their remoteness. Riders looking to challenge their vehicles on Pinelands terrain tear up wetlands and other sensitive habitats in the process. Right-of-ways for utilities have been particularly hard-hit, putting these riders on a collision course with the open, sandy habitat that is critical for pine snakes and other species. Raucous recreation has also discouraged other visitors to the Pinelands from responsibly enjoying these public lands.

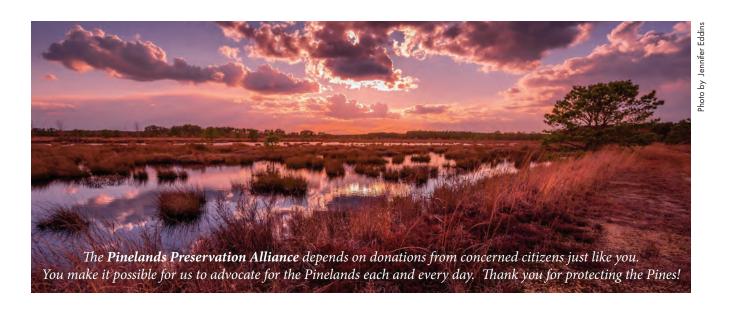
PPA and other groups have worked to protect the Pinelands by installing barriers and restoring damaged habitats. Over the years, these efforts have paid off. In 2009, PPA led the charge to pass a state law requiring off-road vehicle registration and increasing penalties for violations. In 2017, we convinced the Pinelands Commission to adopt the topographic map as the official road map for Wharton State Forest, as a first step to limit unnecessary entry points into sensitive areas. More recently, NJDEP finalized an official Wharton Map after years of studying routes that balance access with conservation. These actions have led to a decline in damage to wetlands and dunes. Additionally, more Pinelands municipalities are passing ordinances to address the issue, including cooperation from gas stations. The establishment of the Wharton vehicle map proves that dedicated efforts can bring positive change and help protect the region's natural resources for future generations.



#### **Get Involved in Pinelands Protection**

While PPA staff can focus and structure a campaign, we can't do it without you. The more people that attend planning meetings, voice concerns, and work with the community to protect forests, the better our backyards and special places will be. We need conservation-minded individuals to join local planning boards or run for public office—land preservation advocates in leadership make a difference. With sustained public engagement, we will continue to be successful in protecting the Pinelands.

Joining our Fix Our Parks Campaign is a great place to start. Launched in 2022, this initiative puts pressure on NJ state leaders to protect our state forests and parks by asking leadership to devote the resources necessary to maintain and fix these precious lands.



## A Banner Year for Public Lands in the Pinelands

PPA's 35th year saw many victories for public lands. The following snapshots highlight progress towards big goals, some of which have been decades in the making.

#### **Wharton Map**

The updated map for Wharton State Forest, New Jersey's largest state park at over 124,000 acres, has been released following a seven-year advocacy campaign. This map protects thousands of acres of wildlife habitat and improves public navigation. This movement was inspired by Albert Horner, a Pinelands photographer and key advocate, whose legacy continues after his 2024 passing. The map addresses the long-standing issue of illegal off-road vehicle damage to critical habitats. With support from Southern Regional Superintendent Rob Auermuller, NJDEP Assistant Commissioner John Cecil, and NJDEP Commissioner Sean LaTourette, the new map enhances public access while safeguarding the park's ecological integrity.

#### **Pole Bridge Forest**

PPA spent decades opposing plans to replace the 700-acre Pole Bridge Forest with retirement condos, culminating in a significant victory for the forest in Pemberton Township. Early on, PPA staff highlighted the critical habitat of the site and pushed for substantial endangered species reviews, until the 2008 housing recession delayed the project for another decade. When the proposal re-emerged in 2019, PPA staff maintained pressure to demand strict protections. Planning board meetings began in 2023 to review the proposal, despite its deficiencies. PPA identified legal weaknesses in the proposal and partnered with township residents to lead a massive grassroots effort, which led to the repeal of the underlying "redevelopment plan". PPA hired a land-use attorney to challenge the development proposal and brought experts like Joe Arsenault, Bob Zappalorti, and Emile DeVito to provide key testimony. These experts substantiated the presence of wetlands and high-quality habitat for endangered species that the developer had failed to identify. On December 5, 2024, the planning board voted against approving the proposed retirement community. While this victory diminishes the immediate threat of development, permanent protection is still needed. PPA hopes that the Pole Bridge Forest will achieve its happy ending, much like Pomona Woods, through NJDEP Green Acres preservation.



Pole Bridge Forest in Pemberton. Photo by Jon Holcombe.

#### Pomona Woods

Just before the new year, the NJDEP Green Acres program finalized the purchase of the Pomona Woods in Hamilton Township (Atlantic County), permanently protecting this critical forest. In early 2023, the woods faced threats of redevelopment into a youth sports complex, hotels, arenas, and retail spaces. PPA worked alongside residents to coordinate opposition to these proposals, including a rezoning effort that would have facilitated such sprawl. With public pushback and the Pinelands Commission's intervention, the plans were abandoned. PPA then collaborated with the landowner and the New Jersey Conservation Foundation to submit an application to Green Acres for permanent protection. After over a year of effort, this vital step has been completed, expanding the Pomona Woods preserve by 268 acres for a total of 440 acres. This victory ensures the forest remains safeguarded for future generations, highlighting the power of community and conservation partnerships.





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## COVER PHOTOGRAPHY Top: Matt Baron: Bottom Left

Top: Matt Baron; Bottom Left: Michael Burkhauser; Bottom Center: Rich Gess; Bottom Right: John Dolph



#### The Pinelands Preservation Alliance

is a 501(c)(3) charitable organization established in 1989 to protect New Jersey's Pinelands National Reserve.

Our unparalleled expertise in Pinelands laws and regulations allows us to engage thousands of people each year in actions to protect the wildest place in New Jersey.

Using science, education, litigation, and grassroots advocacy, we work to make sure the Pinelands are here for future generations to enjoy.

Our work is possible thanks to generous donations from people like you.

# PLEASE DONATE TODAY! www.PinelandsAlliance.org





