New Jersey Conservation
FOUNDATION

Bamboo Brook, 170 Longview Road
Far Hills, NJ 07930
Ph 908-234-1225 Fax 908-234-1189
info@njconservation.org
www.njconservation.org

February 27, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room IA
Washington, D.C. 20426

Submitted via <eFiling> at www.ferc.gov/Documents

RE: Docket No. PF15-1-000: Comments Regarding PennEast Pipeline Project Scoping for Preparation of Environmental Impact Statement

Comments of New Jersey Conservation Foundation re: PennEast Pipeline Project, Scoping for Environmental Impact Statement

New Jersey Conservation Foundation **(New Jersey Conservation)** is a private, non-profit organization whose mission is to preserve land and natural resources throughout New Jersey for the benefit of all. Since 1960, we have worked to protect New Jersey's farmland, forests, parks, wetlands, water resources and special places. We protect strategic lands through acquisition and stewardship, promote strong land use policies, and forge partnerships to achieve conservation goals. New Jersey Conservation has protected over 120,000 acres of natural areas and farmland in New Jersey – from the Highlands to the Pine Barrens to the Delaware Bay, from farms to forests to urban and suburban parks.

New Jersey Conservation is providing the comments below for consideration by the Federal Energy Regulatory Commission ("FERC" or the "Commission") in its preparation of an Environmental Impact Statement for the proposed PennEast Pipeline project. The PennEast pipeline is proposed to cross significant preserved natural open space lands and farmlands that are legally protected in perpetuity from development, as well as other lands containing a multitude of environmentally sensitive attributes and features, including forests, surface and groundwater recharge watersheds, wetlands, the Delaware Wild and Scenic River, numerous NJ

Category One streams, habitat of rare, threatened and endangered species, steep slopes, and productive agricultural soils. The project will also impact significant cultural, historic and archaeological resources. The size and scope of the construction activity of the PennEast pipeline will cause significant and irremediable damaging effects on valuable and irreplaceable resources.

In addition, the proposed project will result in significant forest fragmentation, reducing already limited interior forest habitat, and causing concurrent loss of critical carbon sequestration capability. The project will invite and propagate the spread of invasive species, cause degradation of surface and groundwater quality, water supply and stream habitat, and measurably degrade the functions and values of the ecosystems traversed. Below, New Jersey Conservation identifies significant concerns related to the direct, indirect, reasonably foreseeable and cumulative impacts of this proposed project that must be addressed in the Environmental Impact Statement.

I. FERC has the obligation and responsibility, as it satisfies its duties under the National Environmental Policy Act (NEPA), to assess the direct, indirect, reasonably foreseeable and cumulative effects of climate change both as a result of and upon the project, when preparing its Environmental Impact Statement (EIS) for the proposed PennEast Pipeline, and we request that FERC do so.

On December 18, 2014, the White House Council on Environmental Quality (CEQ) issued *Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, which was noticed in the ***Federal Register*** December 24, 2014.

CEQ states: "As part of an ongoing effort to modernize implementation of the National Environmental Policy Act and promote effective and transparent environmental reviews, the Council on Environmental Quality (CEQ) today released updated draft guidance for Federal agencies on how to consider greenhouse gas emissions and the impacts of climate change in their NEPA analyses…These measures will increase the efficiency of environmental reviews and help agencies make informed decisions that are sound investments of taxpayer dollars and good for American communities… NEPA requires Federal agencies to consider and transparently disclose the potential effects of their actions and decisions on the environment. ..The draft guidance …outlines how Federal agencies should describe these potential effects when conducting NEPA reviews to allow decision makers and the public to more fully understand the environmental impacts of proposed actions. In turn, agencies will be better able to compare alternatives, and consider measures to reduce the impacts of climate change on Federal resources and investments."

The guidance "Counsels agencies to use the information developed during the NEPA review to consider alternatives that are more resilient to the effects of a changing climate; and advises agencies to use existing information and science when assessing proposed actions" and notes that "This guidance was called for by the governors, mayors and other local leaders on the President's Task Force on Climate Preparedness and Resilience in their recommendations to the President...The Task Force requested the guidance to ensure that projects and investments are advanced with adequate and coordinated consideration of the project design or alternatives relative to climate impacts and greenhouse gas emissions, to avoid unacceptable public health,

safety, and financial risks for communities…This draft updated NEPA guidance …addresses land and resource management actions."

The "Sidley Environmental Update" Dec. 22, 2014 (Sidley Austin LLP Environmental Practice of 40 lawyers "with extensive experience in all aspects of environmental and natural resources law," in a nationwide and international firm) notes that "the proposed guidance is especially important in the energy sector, [as] many energy projects, including infrastructure improvements, may require federal permits, approvals or funding…This guidance is likely to expand the scope of any EIS or EA prepared for a wide scope of energy-related projects." A "highlight" of the proposed guidance is that "the scope now includes land and resource management actions…Thus, the impacts of GHG [greenhouse gas] emissions resulting from direct federal actions, from federal funding, and from federal licensing and permitting must be assessed as prescribed…"

In June 2013, the Executive Office of the President issued ***The President's Climate Action Plan***. The ***Action Plan*** has three key pillars: 1) Cut carbon pollution in America; 2) Prepare the United States for the impacts of climate change; and 3) Lead international efforts to combat global climate change and prepare for its impacts.

The ***Action Plan*** notes the importance of *Preserving the Role of Forests in Mitigating Climate Change*, stating that "America's forests play a critical role in addressing carbon pollution, removing nearly 12 percent of total U.S. greenhouse gas emissions each year. In the face of a changing climate and increased risk of wildfire, drought, and pests, the capacity of our forests to absorb carbon is diminishing. Pressures to develop forest lands for urban or agricultural uses also contribute to the decline of forest carbon sequestration." (Action Plan, pg.11) It should be noted that the CEQ Guidance identifies greenhouse gas *"'emissions' as including the release of stored GHGs as a result of destruction of natural GHG sinks such as forests and coastal wetlands, as well as future sequestration capability."*

The Climate Action Plan stresses that "climate change is affecting nearly every aspect of our society, from agriculture and tourism to the health and safety of our citizens and natural resources. Preparing the United States for the impacts of climate change requires *Protecting Our Economy and Natural Resources.* To help protect critical sectors, "the Administration will mount …targeted efforts to protect our country's vital assets" including *Conserving Land and Water Resources* and *Maintaining Agricultural Sustainability.* ***These assets are the very resources that New Jersey Conservation Foundation strives to protect, and which would suffer severe and irremediable negative impacts from the approval and construction of the PennEast Pipeline project, as we detail below.***

Thus, the impacts of the PennEast project directly conflict with important national goals set forth in the President's Climate Action Plan. The Action Plan states that "America's ecosystems are critical to our nation's economy and the lives and health of our citizens. These natural resources can also help ameliorate the impacts of climate change, if they are properly protected…The President is directing federal agencies to identify and evaluate additional approaches to improve our natural defenses against extreme weather, protect biodiversity and conserve natural resources in the face of a changing climate, and manage our public lands and natural systems to store more carbon." (*The President's Climate Action Plan,* Executive Office of the President, June 2013, p.15)

II. ***In light of the President's Climate Action Plan and the CEQ Guidance noted above, we request that FERC require the applicant PennEast to conduct a full assessment of the impacts of the proposed project on carbon sequestration properties within the project corridor, and to require that carbon sequestration capability shall not be diminished.***

Comment by Dr. Emile DeVito, New Jersey Conservation Manager of Science and Stewardship: Along its entire length in Pennsylvania and New Jersey, the proposed pipeline project will require many hundreds of acres of forest cover to be cleared and permanently lost. Forests sequester atmospheric carbon not only in the wood of standing trees, but in below ground roots and organic soil. Forests transfer carbon deep below ground, where it is stored for long periods. The rate of tree carbon accumulation does not slow, but actually increases continuously with tree size (NL Stephenson, et. al., Nature Vol. 507, Issue 7490, letters) Recent studies in deciduous forests in Massachusetts and other northeastern states have revealed that maturing and old-growth forests are still increasing their rate of carbon sequestration. This increasing and often accelerating carbon sequestration service provided by mature forests is due to previously unaccounted for components of carbon sequestration in roots and soil.

It has been promoted in many venues that young forests and forests that are harvested frequently (rotations of less than 100 years) sequester carbon rapidly, while old forests become carbon-neutral. This general assumption is simply invalid. Perhaps an eastern deciduous forest stand that is many centuries old would begin to decline in its rate of sequestration, but so few ancient eastern forests stands exist today that the issue is irrelevant regarding the impacts of this pipeline proposal.

New studies reveal that carbon storage in the eastern deciduous forest may increase by as much as 37% through 2050, offering a major contribution to countering greenhouse gas emissions. The loss of forest cover through conversion to other land uses, such as the clearing for this proposed pipeline, will be the major contributor in reducing the eastern forest's carbon sequestration service by up to 20% by 2050. (US Geological Survey Release 6/25/2014, 4:33:54 P.M., Carbon Storage in US Eastern Ecosystems Helps Counter Greenhouse Gas Emissions Contributing to Climate Change) No project that may cause the loss of hundreds of acres of forest is trivial in regard to the need to maximize carbon sequestration.

A major consequence of this new information is that it will not be possible to conduct timber management within an existing forest in order to mitigate or recover lost sequestered carbon from the permanent loss of forest cover at another site. The only way to generate new sequestered carbon is through afforestation, where non-forest lands are converted to forest. This process is slow, and requires an enormous ratio of new forest (saplings) planted for every acre of more mature forest lost to development or other non-forest land uses. Thus, it will likely be impossible for the sequestered carbon lost through forest clearing to be recovered and balanced in any reasonable timeframe by the applicant.

III. ***As per CEQ guidance, we request that FERC assess the upstream and downstream effects, cumulative impacts and all other reasonably foreseeable events that are 'causally' related to the proposed PennEast Pipeline project, including the direct, indirect and cumulative impacts of the gas wells that are sources of the gas to be transported, the impacts caused by the disposition of the gas and the use of the gas, whether within the United States or***

elsewhere in the world, as climate change is a worldwide phenomenon whose cumulative impacts threaten the United States of America.

CEQ's revised guidance includes provisions that "NEPA's scope of impacts or effects that must be addressed now includes an array of upstream and downstream effects, cumulative impacts and all other reasonably foreseeable events that are 'causally' related to the proposed action… NEPA also requires consideration of 'connected actions' which CEQ defines as those that automatically trigger other actions which may require an EIS, that cannot or will not proceed unless other actions are also taken, or are interdependent parts of a larger action.

Based on these broad, long-standing definitions, CEQ now believes that the application of these NEPA regulations to climate change and GHG emissions means that an EIS or EA must include a discussion of emissions from other activities that have a reasonably close causal relationship with the proposed action and either "upstream" or "downstream" from the proposed action. CEQ gives the example of a proposed open pit mine that requires some form of federal approval. Under this guidance, the EIS would include a discussion of GHG emissions from land clearing, access road construction, transporting the extracted resource, refining or processing the resource and, importantly, '*using the resource.'* After considering these impacts, an agency must also address GHG emissions and climate change in terms of the cumulative impact of the proposed action which is the incremental impact of the action when added to other past, present and reasonably foreseeable actions, regardless of which agency or entity undertakes such other action." (Sidley Environmental Update, Dec. 22, 2014, pg. 2)

IV. ***Because the PennEast Pipeline is but one of many natural gas pipelines pending, proposed or recently constructed in New Jersey, Pennsylvania and the Delaware River Basin, and all such pipelines must be approved and certified by FERC, it is common sense that intelligent planning for these facilities should be comprehensive and cumulative in nature, not piecemeal and isolated. Therefore, we request that FERC prepare a Programmatic Broad Based NEPA Review of all currently proposed and reasonably anticipated gas industry projects, including all pipelines and the "upstream" wells that they would serve, assessment of other recent related projects, and the "downstream" effects and uses. Further, we request and strongly urge a moratorium on all pipeline approvals pending completion of this Programmatic Review.***

Current, recent or proposed gas pipelines in the area include the NJ Natural Gas Southern Reliability Link, the Williams/Transco Northeast Supply Link and Diamond East, the Tennessee Gas 300 and Northeast Upgrade, in addition to PennEast, as well as others, totaling approximately 11 proposed or pending pipelines in New Jersey, and seven within the Delaware River Basin. Others will likely be proposed in the future, including additional pipelines in proposed or existing rights of way. FERC has been and is currently reviewing each pipeline application separately, with no overall planning for these facilities. There appears to be no assessment of the total quantity of gas to be moved, nor the actual domestic need. A holistic approach is required to minimize cumulative impacts and avoid unnecessary overbuilding.

The CEQ guidance notes that "Agency decisions can address different geographic scales that can range from the programmatic or landscape level, to the site- or project-specific level. In the context of long-range energy, transportation, and resource management actions, for example, an

agency may decide that it would be useful and efficient to provide an aggregate analysis of GHG emissions or climate change effects in a programmatic analysis and then incorporate by reference that analysis into future NEPA reviews." Guidance. D. *40 CFR PP 1502.20, 1508.28. "A programmatic NEPA review is appropriate when a decision is being made that is subject to NEPA, such as establishing formal plans, establishing agency programs, and approving a suite of similar projects.* A programmatic NEPA review may also serve as an efficient mechanism to describe Federal agency efforts to adopt sustainable practices for energy efficiency, GHG emissions avoidance or reduction, petroleum product use reduction, and renewable energy use, as well as other sustainability practices."

V. In addition to evaluating the PennEast Pipeline's impacts on the environment, FERC also must assess the potential impacts of climate change upon the proposed pipeline(s) and related facilities, as climate change impacts are likely to include increased and more intense precipitation, resulting in flooding, scouring, erosion, and other impacts.

In addition to addressing the GHG effects of pipelines and their "upstream" and "downstream" effects and "causally" related projects, FERC must assess **the potential impacts of climate change upon the pipelines and their related facilities,** including predicted increased precipitation in the Northeast Region with flooding, scouring, uncovering and rupturing of pipeline segments crossing the Delaware River or other streams and other potential impacts. "Key Messages" for the Northeast in the 2014 National Climate Assessment are that "river flooding will pose a growing challenge to the region's environmental, social and economic systems… Infrastructure will be increasingly compromised by climate-related hazards, including sea level rise, coastal flooding and intense precipitation events. Agriculture, fisheries and ecosystems will be increasingly compromised over the next century by climate change impacts." (***Climate Change Impacts in the United States, The Third National Climate Assessment.*** **2014. U.S. Global Change Research Program, pg. 372** Online at <nca2014.globalchange.gov>

VI. We request that FERC recognize that the proposed PennEast Pipeline will put at serious risk New Jersey's $7 Billion investment in farmland and open space preservation programs over the past half century.

New Jersey has been actively preserving farmland and open space for decades. Known as the "Garden State," New Jersey is also the most densely populated state in the nation. Before the automobile age and the rise of suburban living, New Jersey was the bread basket and garden plot that fed the major cities along the eastern seaboard. Elected officials, planners and policymakers realized decades ago that full buildout would be reached here before any other state, and if our high quality of life was to be sustained, we would need to permanently preserve 50% of our remaining undeveloped lands.

In response, the state passed bond acts for open space preservation as early as 1961. In 1981, the state passed a $50 million bond act for Farmland Preservation, followed by the Agricultural Retention and Development Act (See Appendix A) and the Right to Farm Act (See Appendix B), both in 1983. In 1998, in order to further the goals of its farmland and conservation and recreational open space preservation programs, the New Jersey legislature enacted the Garden State Preservation Trust Act (See Appendix C).

The federal government also recognizes the importance of retaining agricultural lands in this densely populated state. Since 1996, the Federal Farm and Ranch Preservation Program has purchased easements on 196 parcels in totaling 18,961 acres in New Jersey. They have invested over $43 million to preserve farmland in the Garden State. Since 2005, New Jersey Conservation has been awarded over $35 million from the Federal Farm and Ranch Lands Preservation Program, half of which is still available for the protection of eligible farms. If approved, the proposed PennEast pipeline could cause that money to go back to the federal government to be spent in other states, as farmers may no longer want to participate if it means preservation will make them a target for proposed pipelines.

New Jersey has invested approximately $3.709 billion to permanently preserve 1,433,242 acres of open space and farmland, or 30% of the state, through the State's Farmland Preservation, Green Acres and Historic Preservation Programs. This money was leveraged with $3 billion in matching funds from federal, county, municipal and nonprofit sources. The county and municipal funding is provided by local open space and farmland taxes, secured with the overwhelming support of voters over many years. It is important to note that significant private funds have been invested through cash donations and bargain sales of land.

Since 1961, New Jersey voters have approved 13 statewide public questions supporting land preservation funding. Much of the nearly $7 billion invested in our state's preservation efforts has been bonded, as New Jersey residents have voted to share the costs with future taxpayers, and thus every New Jersey taxpayer is a stakeholder in this scoping process for the PennEast Pipeline.

- ***The PennEast EIS must document how every taxpayer in New Jersey would be compensated for the investment we have collectively made in our current and future collective health and welfare, if these lands are condemned and utilized for pipeline purposes. We would need to be compensated for not only the price of the land, but also for the environmental resources and the ecosystem services that would be permanently and negatively impacted.***

- ***The EIS must document the amount of any outstanding bonds on all lands in the proposed pipeline's path and consider for how long into the future these bonds will need to be paid at the state, county and municipal levels.***

VII. ***We have observed in the PennEast proposal both errors in calculations and incorrect assumptions regarding the potential impacts of both proposed PennEast Pipeline routes, and request that these errors be rectified.***

To date, PennEast has proposed two routes – the original and the "preferred alternate." The latter would impact 69 parcels totaling 4,500 acres of land, including more preserved land than the original proposed route, representing a $35 million investment by the public. We point out that PennEast's resource report is incorrect in its accounting of these acreages, as the map that was used as a basis is incomplete and did not include lands protected with the federal Farm and Ranch Lands Protection Program.

In addition, PennEast's calculations are based on only the dimensions of the right of way itself and the area of construction. Conversely, we maintain that each parcel throughout the entire area

traversed by the proposed pipeline would be negatively impacted in its entirety, as its integrity and the original public purpose for preserving it would be compromised. Environmental degradation, including forest fragmentation, siltation and loss of historic resources would extend far beyond the right of way.

- ***The EIS must accurately consider the entirety of the preserved lands impacted by the proposed pipeline, based on the entire parcel and the surrounding area, not just the specific dimensions of the right of way and construction area.***

- ***The EIS must identify the block & lot of each preserved property that is impacted, and record each and every ownership interest.***

- ***The EIS must include the most distant boundaries of all contiguous and adjacent properties, as well as water bodies, historic sites and economic activity centers, when assessing the indirect and cumulative impacts the pipeline would inflict if approved.***

- ***The EIS must analyze the cumulative impacts on and the cost of compensation for all ecosystem services as well as the development potential for any lands PennEast has targeted for condemnation.***

VIII. PennEast's Economic Analysis does not account for the loss of program benefits or for the ecosystem services that would be cumulatively impacted by the proposed pipeline. Program benefits and ecosystem services are described briefly below:

New Jersey's Farmland Preservation and Green Acres Programs preserve land to accomplish many goals including to: protect water quality, maintain land for agricultural purposes including food production and for ecosystem services including carbon sequestration, flood retention and aquifer recharge; maintain a high quality of life; provide recreational and educational benefits; protect wildlife habitat and scenic beauty, and increase our state's and our nation's health and welfare.

A 2009 study by The Trust for Public Land outlining the economic benefits of preserved lands found that every $1 invested in state land preservation programs returns $10 in economic value through nature's ecosystem services, including flood control and the filtering of pollutants from air and water. The TPL report finds further that:

• The average home value increases 16% when located within 1,500 feet of natural areas.
• Parks contribute up to 20% of the value of homes in urban areas.
• 7,000 jobs are supported by New Jersey's public recreation lands.
• Wildlife-related tourism is estimated to generate about $3 billion of gross economic activity every year, representing about $1 billion of wage and salary income annually, or about 37,000 jobs.
• The U.S. Census Bureau reports that, each year, over 2.6 million people participate in hunting, fishing and wildlife watching in New Jersey, contributing $1.7 billion to the economy.
• For every 10% increase in forest cover, water treatment and chemical costs decrease by 20%.

• In one 523-acre urban park, tree cover was found to remove daily 48 pounds of particulates, 9 pounds of nitrogen dioxide, 6 pounds of sulfur dioxide, and a half a pound of carbon monoxide, which amounts to a service worth $136 per day based on pollution control technology.
• Open spaces in New Jersey support approximately 900 wildlife species.
• Access to parks leads to a 25% increase in people exercising three or more times per week.
• People living in a greener environment report fewer health complaints.

IX. FERC's EIS must address and quantify the permanent negative impacts that the approval and construction of the pipeline would have upon our state's investment in farmland, open space and historic and natural resources preservation. A landscape scale taking of preserved land for a private pipeline is not in the public benefit. It will discourage landowners from continuing to enroll in these programs.

The taking of preserved lands for the proposed PennEast pipeline would create an extremely negative precedent that would affect every past, present and future preservation project in the state into the foreseeable future. It would undermine federal, regional, state and local land use plans and policies and change the meaning of the phrase "permanently preserved".

Landowners will be reluctant to preserve their property in the future, if it can become a target for a pipeline or other energy infrastructure. The cumulative environmental, social and cultural impacts of this proposed use and taking of public land by private corporations would be immense, likely rendering New Jersey's 50-year old preservation programs ineffectual.

The diversion of preserved land to other uses is considered to be a serious matter and is discouraged by New Jersey Green Acres rules. The New Jersey Department of Environmental Protection requires that any party wishing to divert Green Acres preserved land to another use must undergo a diversion process with public hearings and provide replacement land that is of equal or greater value. Approval by the State House Commission must also be sought. The diversion process is further complicated if nonprofits, counties or municipalities also have ownership interests in the preserved property.

Farmland preservation easements funded by the New Jersey Department of Agriculture can only be amended in a court of law. Often more than one agency has an interest in the development easement, while a private landowner owns the restricted fee. It appears that PennEast may not be fully aware of land preservation law, as the company has approached the owners of the restricted fee farmland to negotiate the purchase of Rights of Way, but the owners of the easements, including counties, municipalities and nonprofits, have generally not been contacted.

X. The EIS must address numerous socio-economic, environmental, and cultural impacts and their cumulative effects on New Jersey Conservation's Wickecheoke Preserve and its surrounding community. It is not possible to mitigate for the destruction of a community's values, rural quality of life, and sense of place. The proposed PennEast pipeline would be a 21st century industrial intrusion on a unique area which preserves 18th and 19th century rural cultural patterns.

The Wickecheoke Creek Preserve was established 30 years ago, with the goal of connecting three nationally designated historic districts through a greenway of open space with trails. NJ Conservation Foundation has been preserving the undisturbed and historic wooded and rural landscape as the context for the historic structures. Cumulatively, the various resources complement each other and, together create a more vibrant whole. An important synergy exists among all the resources, and each is diminished if the integrity of the whole is not maintained. According to the Wickecheoke Creek Preserve Management Plan, "The Wickecheoke Creek Preserve represents excellent examples of the natural and agricultural heritage contained within the Wickecheoke Creek Project area, which harbors a unique, rural portion of the Northern Piedmont." (*Wickecheoke Creek Preserve Management Plan, May 2011, Prepared by Michael Van Clef, Ph.D., Ecological Solutions, LLC., Page 1*) The Wickecheoke Creek Watershed contains 14 miles of waterways within three sub-watersheds (HUC 14's) that total 26.6 square miles or 17,024 acres. *(Please note: A disk containing the complete Wickecheoke Creek Management Plan was provided to FERC at the February 25, 2015 public hearing held in West Trenton.)*

"The northern piedmont is highly developed and remnants of its past natural, agricultural and cultural heritage are few, which highlights the significance of the preserve." *Ibid.* The preserve contains over 500 acres of forest, 200 acres of shrubland and meadow habitat and 400 acres of farmland. Another 3,000 acres have been preserved with various partners in the project area. *(A list of these preserved properties was e-filed separately with FERC on Feb. 27, 2015.)*

The Preserve links three nationally registered historic sites, and three nationally designated historic districts. From the Prallsville Mills on the Delaware River in Stockton, a broad swath of many preserved properties accompanies the Wickecheoke Creek upstream and north to New Jersey's only remaining covered bridge, the Green Sergeants Covered Bridge, continuing to the Locktown Stone church.

In 1999, the Green Sergeants Covered bridge, the last functioning covered bridge in New Jersey, and the surrounding hamlet were designated as a national historic district. In recognition of the fact that the historical integrity of the bridge would be compromised if its context (the surrounding agricultural fields and woods) were ever lost, the Rosemont Valley Rural Agricultural District gained national designation in 2010. (*The Covered Bridge Historic District National Register of Historic Places Registration and the Rosemont Rural Agricultural District Registration were e-filed separately with FERC February 27, 2015.)*

New Jersey Conservation has worked on all fronts to preserve this unique area as a landscape wide resource. There are not many places in our state where one can walk or travel between historic hamlets, past antique patterns of agricultural fields and woods dating back to the 17th century, pass through New Jersey's last remaining covered bridge, and then continue through a breathtakingly beautiful valley where all but one of the farms are preserved, and the entire landscape has been designated a historic district, including the buildings, barns, stone walls and hedgerows.

The preserve has grown over the decades, with new additions every year. Native people burial grounds have been uncovered, and prehistoric implements found.

<u>XI. Impacts on Forests , Flora and Fauna:</u> ***New Jersey Conservation Foundation requests that the EIS include data from a two-year, full-season floral and faunal survey for all of the state listed rare, special concern, threatened, and endangered plant and animal species in the region, using appropriate methods for each taxa. Impacts to these species must be considered according to both New Jersey Highlands Act and Green Acres regulations. We also request that all historic forest soils are delineated, so that impacts to unique forest communities with exemplary conservation values can be evaluated. Once properly elucidated, the sum total of environmental degradations that cannot be successfully mitigated will lead to the selection of the "no action" alternative.*** Comments by Emile DeVito, PhD, University of Wisconsin, Ecologist, Manager of Science and Stewardship for New Jersey Conservation Foundation.

.

- The NJ Green Acres Program rules require that when there is a proposal to alter the use of public conservation lands, consideration must be given to impacts to any "rare species" or "species of special concern," as defined in the New Jersey Department of Environmental Protection Green Acres Program Rules at N.J.A.C. 7:36. The aggregate list of rare species designated by the NJ Department of Environmental Protection includes well over 1000 species statewide, and many are known to occur in the Hunterdon/Mercer county region. The list of rare species is far larger than the species listed as Threatened and Endangered in NJ, and includes special concern animal species listed by the NJ Endangered and Non-Game Species program, as well as all plants determined by the NJ DEP Natural Heritage Program to show a degree of imperilment of S3 or greater.

  Public lands are held in trust on behalf of the citizens of New Jersey; it is incumbent on the applicant to prove that no additional harm will come to any of these declining and rare species of plants and animals. Hence, the applicant must be required to conduct intensive, full season surveys in order to ascertain the potential harm to all occurrences of rare species, including special concern, threatened, and endangered species of both flora and fauna, on all public conservation lands potentially impacted by the suite of proposed pipeline routes. Many of these rare species are cryptic, difficult to detect, and some plants do not reveal themselves every year. It is not possible to discover all rare species populations in one season. In order to be reasonably certain that nearly all occurrences of these special concern and rare species are located and potential impacts ascertained, surveys must be conducted by experts for each taxa, using appropriate methods, and must be repeated over at least two full years during all appropriate seasons. Once all occurrences of rare flora and fauna on public lands have been quantified, existing populations of rare flora and fauna must be avoided.

- For nearly all rare species, there are no known, effective mitigation procedures that can assure an equal or greater degree of protection and enhancement to existing local populations, in an attempt to balance or reverse the loss of individuals and populations caused by direct impacts of gas pipeline construction and operation. For example:

  - With rare plant populations, virtually no attempts to move rare plant populations have ever achieved long-term success. While rare plants have been propagated in garden settings, attempts to create experimental populations of rare plants within new or historic habitat settings in the wild have nearly always been unsuccessful. Fahselt, D., Can. J. Bot 85: 1007-1017 (2007)

- With rare animal populations, such as the numerous special concern species of sensitive, forest-interior, long-distance migratory birds that inhabit the Ted Stiles Preserve at Baldpate Mountain, a Mercer County Park, right of way expansion and the elimination of forest cover will dissect and destroy a number of breeding territories and reduce the habitat quality of other territories of numerous rare species. This will result in a reduction in the local population of these declining species, through the loss and degradation of available habitat. Decades-worth of bird census data has been submitted as part of this scoping process by Hannah B. Suthers (hsuthers@princeton.edu). The NJDEP Green Acres Rules at N.J.A.C 7:36 require that consideration must be given to these irreversible impacts to rare species. But, there is absolutely no way to mitigate for these habitat impacts in any time scale that is relevant to their conservation: These bird populations are local and small, suitable habitat is at a minimum viable level, and all suitable habitat is already occupied. Loss of habitat equates directly with loss of birds in the population, as there is no other local habitat where these birds can breed successfully.

- The only way to counter the severe habitat loss of linear forest clearing would be to successfully create new habitat, which would require the re-establishment of suitable large patches of new forest containing native species of trees, shrubs, herbaceous plants, with native soil containing native fungi, invertebrates, and the basis for a healthy food chain. This type of restoration can and should be part of a long-term recovery strategy for declining rare species. Such a project might be successful with massive inputs of non-forest land being converted back to forest habitat, deer and weed control, and substantial care for native plantings, but a restored forest habitat would not be ready to house forest interior species for at least 30-40 years (if not far longer). Therefore, no applicant should be given permission to destroy breeding territories critical to a local population without first successfully establishing new breeding territories. Creation of future habitat, with no guarantee of success, cannot be traded for immediate losses to a local population that is already at or near minimum viable population size and that would be driven closer to local extirpation.

- Recovery of rare plant and animal populations through habitat restoration is a laudable goal; in general ecological restoration should be encouraged as a long-term public policy. But long-term restoration is not mitigation for destruction of local populations of rare species. Restoration projects take decades, and are fraught with uncertainty. It is impossible for restoration projects to provide population benefits *in time* to mitigate for a habitat loss that quickly destroys or subtly pushes a local population to extinction. If long-term restoration is to be allowed to mitigate for known impacts to a suite of declining and/or rare species, the restoration must be conducted, completed, and show quantifiable expansion greater than the anticipated losses of the population of the species in question, *before* permitting a habitat loss to occur.

XII. Pipeline construction on Historically Forested Lands will cause permanent irreversible damage and cannot be mitigated.

In New Jersey, there remain numerous patches of historically forested lands which have never been exposed to the agricultural practices of plowing or heavy pasturing. These historically forested lands usually have been utilized repeatedly for the harvest of wood products, but the forest was never converted to non-forest. These "Historic Forests" still retain intact, native soil structure with undisturbed soil horizons, native soil invertebrate communities, native understory herbaceous and woody shrub communities with vigorous root structure in the upper soil horizons, and high native plant and animal biological diversity.

In contrast, there are also an abundance of post-agricultural forests, where 19th century agricultural lands have reverted to middle-aged successional forests on post-agricultural soils. These forests are often heavily invaded by non-native alien species, and are no longer dominated by native herbaceous woody and herbaceous understory plant species.

Critical differences exist between these two types of forest. A recent study by New Jersey Conservation Foundation shows that historically forested lands are significantly higher in native species richness, dominance, and Floristic Quality Index (FQI) (see http://universalfqa.org/) than post-agricultural forest (See Figure 1, below).

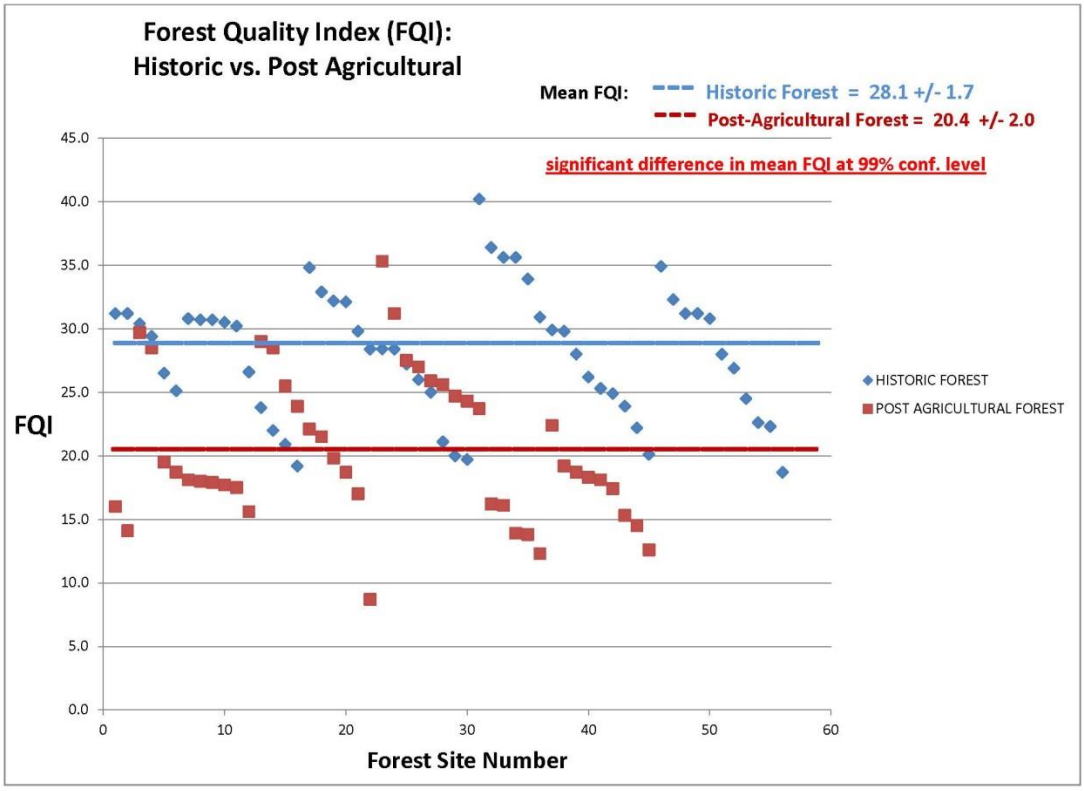

Figure 1- Summer 2014 field research by New Jersey Conservation Foundation, showing that historic forest lands have significantly higher Floristic Quality Index FQI than post-agricultural forest lands.

The mechanism by which "Historic Forests" retained their native floristic quality, in comparison to successional forests that have recolonized former agricultural lands, is simply that the upper soil horizons have never been severely disturbed by plows or other mechanized equipment, and they never experienced severe grazing pressure, erosion, or compaction by long-periods of intense exposure to domestic animals.

Maintenance of native soil integrity allows a natural community to maintain historic ecological functions and provide valuable ecological services, such as:

- Resistance to alien species invasion and loss of native species;
- maintenance of carbon sequestered in an organic litter and root layer;
- nutrient transfer by soil invertebrates, especially native ant communities;
- maintenance of diverse and abundant soil invertebrate populations, which are at the base of the food chain, giving rise to an ecological web that supports all forest vertebrate populations, from salamanders to understory birds, reptiles, small mammals, and even large mammalian and avian predators.
- resistance to alien earthworm invasion and their eventual dominance, which results in the loss of soil organic layer and sequestered carbon, erosion due to the loss of native deep-rooted perennials and replacement by alien, weedy, shallow-rooted annual plants such as Japanese Stiltgrass;
- maintenance of aquifer recharge and flood prevention attributes, through maintained health of the sponge-like organic soil horizon with intact, deep-rooted perennials. Disturbance to this thin but essential organic soil horizon results in soil compaction, increased surface runoff during storms, harmful sedimentation in streams, scouring of stream channels, and other cascading degradations that not only ruin downstream ecological quality, but also result in expensive siltation, flooding, and water supply problems that are either expensive or impossible to cure.

Fortunately, the State of New Jersey maintains a wealth of historic documents (maps and aerial photographs) that reveal with high accuracy whether or not current forested lands may be Historic Forest patches. The late 1800s survey by CC Vermeule indicates where patches of forest were still present on the landscape at the height of agricultural clearing during the 19th century. When used in combination with the 1930 aerial photographs of NJ, it is possible to predict quite accurately where field reconnaissance will reveal Historic Forest patches with intact soil.

There are many acres of Historic Forest patches along the proposed Penn-East pipeline routes. These patches are especially common in the dozens of steep slope areas where numerous Delaware River tributaries cut the through the fractured rocky soils of New Jersey's Highlands and Piedmont physiographic provinces, and also on the gently sloping rock outcrops that were never suitable for agriculture. These long, forested ridges, including Baldpate Mountain, are likely to house not only numerous rare species but also intact plant communities of high aesthetic value. These steep, rocky slopes and gently sloping rocky ridges containing Historic Forest patches have thin native soils, but nonetheless support diverse, relatively - intact native plant and animal communities from within the soil horizons, through the herbaceous and shrub layers and into the tree canopies.

It is not possible to conduct pipeline construction activities in these Historic Forest habitats without causing permanent, irreversible damage to public trust natural resources and the quality of the ecological services that intact soil and native plant and animal communities provide.

Restoration attempts, no matter how well-intended, always result in feeble, failed attempts to compensate for the destruction of intact ecological communities where soil disturbance is conducted for the first time.

The reason that ecological restoration attempts cannot succeed after construction-related soil disturbances occur on steep slopes or in thin rocky soils is because the artificial practices needed to quickly establish vegetation in order to prevent massive erosion are mutually exclusive to re-creating the natural conditions that would allow for native plant and animal communities to re-establish.

Once construction is finished, soils that were sequestered during construction are redistributed, seeded or planted and fertilized, in order to establish vegetative cover. Even if native plants are used, the result of the construction activity and the artificial replacement of soil is no longer representative of a natural system. Natural soil horizons no longer exist, and the soil pH and nutrient content will have been elevated. Once this has happened, it is impossible for native herbaceous plants and woody shrubs to compete with the current onslaught of alien weeds that are adapted to colonizing the construction sites from nearby areas. Despite any efforts to re-establish a native plant community, eventually the site becomes dominated by alien weeds that are pre-adapted to thrive in areas where human disturbance has occurred.

Without the long-term persistence of native plants, a natural ecological web can never re-develop, and the construction site can never regain the biological diversity nor perform the ecological services that existed before the construction occurred. It is impossible to mitigate for such ecological damage, since the historic patches of forest cannot be re-created.

A century or more of ecological succession has taken place in patches of post-agricultural forest where soil was disturbed before and until World War I. One hundred years ago, the landscape was not filled with the dozens of aggressive alien weeds and over-abundant deer that now make it nearly impossible for native species to successfully dominate after disturbances. Conditions 100 years ago were more suited to successful re-establishment of native plant communities. From a distance, these maturing post-agricultural forests appear "natural." Yet, no patch of post-agricultural forest, not even patches embedded within in a matric of Historic Forest (and therefore surrounded by forests with plant and animal and seed sources that aid in natural restoration), has ever re-grown to display a Floristic Quality Index or ecological integrity as high as neighboring, undisturbed Historic Forest lands.

Today, given the stressors of over-abundant deer and super-abundant, aggressive alien weeds, it is impossible for an ecological restoration effort to re-establish Historic Forest conditions.

It is incumbent upon the applicant to utilize New Jersey's historic mapping resources to determine all potential Historic Forest sites that may be impacted by construction, and conduct field surveys at each site in order to determine Floristic Quality Index (FQI reference). Only with this information can the applicant and the public evaluate the potential for irreversible and un-mitigatable ecological damage to Historic Forest patches in the path of the proposed pipeline.

Rare species are not the only natural features that must be given special consideration by FERC and other agencies in reviewing the impacts of this proposed pipeline project. Other unique natural attributes, such as those being presented in this section, must also be considered and addressed. A document authored by Mark Gallagher of Princeton Hydro provides a succinct

review of some of the regulatory constraints that must be addressed by the applicant and considered by all permitting agencies regarding this project.
(Comments to the FERC Regarding the Proposed PennEast Project, Prepared by Mark Gallagher, Vice president, Princeton Hydro, LLC, e-filed separately February 27, 2015 as part of New Jersey Conservation comments)

XIII. We request that FERC's EIS fully comply with the New Jersey Highlands Regional Master Plan (RMP) goals, policies and objectives for the Highlands portion of the PennEast Pipeline project. The RMP mapping of the natural resources identified on each parcel by the New Jersey Highlands Water Protection and Planning Council, accompanied by the RMP goals, policies and objectives, is easily accessed with the "Consistency Mapping Tool," found on the Council's website.

In 2004, after a nearly two-decade struggle to protect the environmentally sensitive New Jersey Highlands region from overdevelopment, and after its recognition in New Jersey's 2001 State Development and Redevelopment Plan as a "Special Resource Area," New Jersey enacted the Highlands Water Protection and Planning Act. Later in 2004, the federal Highlands Conservation Act, sponsored by NJ Congressman Rodney Frelinghuysen, was signed by President Bush. Federal recognition especially was based on two studies conducted by the USDA Forest Service, the 1992 "New York-New Jersey Highlands Regional Study," and its 2002 Update. *See Appendix D, New Jersey Highlands Water Protection and Planning Act (Findings) and Appendix E, Federal Highlands Conservation Act (Purposes)*

The PennEast Pipeline project area traverses and impacts Holland and Alexandria Townships, which are located within the New Jersey Highlands Region, as delineated by both Highlands laws. The New Jersey Highlands Region is recognized in both the federal and state statutes for its water supply, forests, wildlife, farmland, historic, cultural, scenic and recreational values.

The pipeline route through Alexandria and Holland Townships impacts 100 parcels of land totaling approximately 2700 acres. These lots contain numerous important Highlands resources identified in the Highlands Regional Master Plan (RMP). These resources are identified on each lot by the Highlands Council's map "Consistency Tool," which displays each of the Highlands resources found on that lot, along with the goals, objectives and policies of the Regional Master Plan that apply to each resource. We request that the resources and constraints to development identified by the New Jersey Highlands Water Protection and Planning Council be fully respected by FERC, and that the EIS review and any FERC decisions be made in full compliance with the New Jersey Highlands Water Protection and Planning Act and with the New Jersey Highlands Water Protection and Planning Council Regional Master Plan goals, policies and objectives. *At the FERC hearing held February 26 in Hampton, NJ, we hand-delivered as part of our comments on the PennEast project a 4.7 GB capacity DVD that includes, downloaded from the New Jersey Highlands Council website, the "Consistency Tool" maps and identified RMP policies that apply to each of these 100 lots.*

New Jersey's Highlands Water Protection and Planning Act, signed in August 2004, was passed by the state legislature to preserve open space and protect the state's greatest diversity of natural resources, including irreplaceable water resources that supply drinking water to more than half of New Jersey's population. The NJ Highlands Act establishes the Highlands Preservation Area and

the Highlands Planning Area. The Act required the NJ Department of Environmental Protection to establish protective regulations for the Highlands Preservation Area, which comprises about one-half of the region. The law also directed the creation of the Highlands Water Protection and Planning Council, whose task is to develop and implement a regional master plan (RMP) for the entire Highlands Region. The regional master plan was finalized and approved in 2008.

Preparers

Alix Bacon, Piedmont Regional Manager, New Jersey Conservation
Emile DeVito, PhD, Manager of Science and Stewardship, New Jersey Conservation
Wilma E. Frey, Senior Policy Manager, New Jersey Conservation
Amy Hansen, Policy Analyst, New Jersey Conservation
Alison Mitchell, Policy Director, New Jersey Conservation
Greg Romano, Assistant Director and Director Land Program, New Jersey Conservation

Appendix A

New Jersey's Agricultural Retention and Development Act, 1983

Legislative findings and declarations

N.J.S.A. 4:1C-11

This act shall be known and may be cited as the "Agriculture Retention and Development Act."

4:1C-12. Legislative findings and declarations

The Legislature finds and declares that:
a. The strengthening of the agricultural industry and the preservation of farmland are important to the present and future economy of the State and the welfare of the citizens of the State, and that the Legislature and the people have demonstrated recognition of this fact through their approval of the "Farmland Preservation Bond Act of 1981," P.L. 1981, c. 276;
b. All State departments and agencies thereof should encourage the maintenance of agricultural production and a positive agricultural business climate;
c. It is necessary to authorize the establishment of State and county organizations to coordinate the development of farmland preservation programs within identified areas where agriculture will be presumed the first priority use of the land and where certain financial, administrative and regulatory benefits will be made available to those landowners who choose to participate, all as hereinafter provided.

Appendix B:
New Jersey's Right to Farm Act, 1983

NJSA 4:1C-1

This act shall be known and may be cited as the "Right to Farm Act."
L.1983, c. 31, s. 1, eff. Jan. 26, 1983.

4:1C-2. Legislative findings

The Legislature finds and declares that:
a. The retention of agricultural activities would serve the best interest of all citizens of this State by insuring the numerous social, economic and environmental benefits which accrue from one of the largest industries in the Garden State;
b. Several factors have combined to create a situation wherein the regulations of various State agencies and the ordinances of individual municipalities may unnecessarily constrain essential farm practices;
c. It is necessary to establish a systematic and continuing effort to examine the effect of governmental regulation on the agricultural industry;
d. All State departments and agencies thereof should encourage the maintenance of agricultural production and a positive agricultural business climate;
e. It is the express intention of this act to establish as the policy of this State the protection of commercial farm operations from nuisance action, where recognized methods and techniques of agricultural production are applied, while, at the same time, acknowledging the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in New Jersey. L.1983, c. 31, s. 2, eff. Jan. 26, 1983.

Appendix C:
New Jersey's Garden State Preservation Trust Act, 1998

N.J.S.A. 13:8C-1

Sections 1 through 42 of this act shall be known, and may be cited, as the "Garden State Preservation Trust Act."

13:8C-2. Legislative findings

The Legislature finds and declares that enhancing the quality of life of the citizens of New Jersey is a paramount policy of the State; that the acquisition and preservation of open space, farmland, and historic properties in New Jersey protects and enhances the character and beauty of the State and provides its citizens with greater opportunities for recreation, relaxation, and education; that the lands and resources now dedicated to these purposes will not be adequate to meet the needs of an expanding population in years to come; that the open space and farmland that is available and appropriate for these purposes will gradually disappear as the costs of preserving them correspondingly

increase; and that it is necessary and desirable to provide funding for the development of parks and other open space for recreation and conservation purposes.

The Legislature further finds and declares that agriculture plays an integral role in the prosperity and well-being of the State as well as providing a fresh and abundant supply of food for its citizens; that much of the farmland in the State faces an imminent threat of permanent conversion to non-farm uses; and that the retention and development of an economically viable agricultural industry is of high public priority.

The Legislature further finds and declares that there is an urgent need to preserve the State's historic heritage to enable present and future generations to experience, understand, and enjoy the landmarks of New Jersey's role in the birth and development of this nation; that the restoration and preservation of properties of historic character and importance in the State is central to meeting this need; and that a significant number of these historic properties are located in urban centers, where their restoration and preservation will advance urban revitalization efforts of the State and local governments.

The Legislature further finds and declares that there is growing public recognition that the quality of life, economic prosperity, and environmental quality in New Jersey are served by the protection and timely preservation of open space and farmland and better management of the lands, resources, historic properties, and recreational facilities that are already under public ownership or protection;

that the protection and preservation of New Jersey's water resources, including the quality and quantity of the State's limited water supply, is essential to the quality of life and the economic health of the citizens of the State;

that the acquisition of flood- prone areas is in the best interests of the State to prevent the loss of life and property;

that the preservation of the existing diversity of animal and plant species is essential to sustaining both the environment and the economy of the Garden State, and the conservation of adequate habitat for endangered, threatened, and other rare species is necessary to preserve this biodiversity;

that there is a need to establish a program to serve as the successor to the programs established by the "Green Acres, Farmland and Historic Preservation, and Blue Acres Bond Act of 1995," P.L.1995, c. 204, nine previous similar bond acts enacted in 1961, 1971, 1974, 1978, 1981, 1983, 1987, 1989, and 1992, and various implementing laws; and that any such successor program should support implementation of Statewide policies, goals, and strategies concerned with and emphasizing the importance of preserving open space, sensitive environmental areas, critical wildlife habitat, farmland, and historic resources.

The Legislature further finds and declares that the citizens of the State have indicated their very strong support for open space, farmland, and historic preservation efforts not only in the past approval of State Green Acres bond acts and numerous county and municipal dedicated funding sources for those purposes, but most recently in 1998 with

the approval of an amendment to the New Jersey Constitution that provides for a stable and dedicated source of funding for those purposes for the next decade and beyond.

The Legislature therefore determines that it is in the public interest to preserve as much open space and farmland, and as many historic properties, as possible within the means provided by the 1998 constitutional amendment;

that of the open space preserved, as much of those lands as possible shall protect water resources and preserve adequate habitat and other environmentally sensitive areas;

that, in recognition of the recommendations of the Governor's Council on New Jersey Outdoors, it is a worthy goal to preserve one million more acres of open space and farmland in the Garden State in the next decade to protect the quality of life for New Jersey residents;

and that, to accomplish that goal, it is also in the public interest to create the Garden State Preservation Trust and to enable it to raise revenue for those purposes, and to delegate to it such other duties and responsibilities as shall be necessary to further the purposes of the constitutional amendment and to advance the policies and achieve the goals set forth in this preamble.

Appendix D:
New Jersey's Highlands Water Protection and Planning Act
(Findings and declarations)

CHAPTER 120. AN ACT concerning the Highlands Region, creating a Highlands Water Protection and Planning Council, dedicating a portion of the realty transfer fee revenue annually for certain State aid purposes in the Highlands Region and in the pinelands area, supplementing Title 13 of the Revised Statutes, and amending and supplementing various sections of the statutory law.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

C.13:20-1 Short title. 1. This act shall be known, and may be cited, as the "Highlands Water Protection and Planning Act."

C.13:20-2 Findings, declarations relative to the "Highlands Water Protection and Planning Act."

2. The Legislature finds and declares that the national Highlands Region is an area that extends from northwestern Connecticut across the lower Hudson River Valley and northern New Jersey into east central Pennsylvania; that the national Highlands Region has been recognized as a landscape of special significance by the United States Forest Service; that the New Jersey portion of the national Highlands Region is nearly 800,000 acres, or about 1,250 miles, covering portions

of 88 municipalities in seven counties; and that the New Jersey Highlands Region is designated as a Special Resource Area in the State Development and Redevelopment Plan.

The Legislature further finds and declares that the New Jersey Highlands is an essential source of drinking water, providing clean and plentiful drinking water for one-half of the State's population, including communities beyond the New Jersey Highlands, from only 13 percent of the State's land area; that the New Jersey Highlands contains other exceptional natural resources such as clean air, contiguous forest lands, wetlands, pristine watersheds, and habitat for fauna and flora, includes many sites of historic significance, and provides abundant recreational opportunities for the citizens of the State.

The Legislature further finds and declares that the New Jersey Highlands provides a desirable quality of life and place where people live and work; that it is important to ensure the economic viability of communities throughout the New Jersey Highlands; and that residential, commercial, and industrial development, redevelopment, and economic growth in certain appropriate areas of the New Jersey Highlands are also in the best interests of all the citizens of the State, providing innumerable social, cultural, and economic benefits and opportunities.

The Legislature further finds and declares that there are approximately 110,000 acres of agricultural lands in active production in the New Jersey Highlands; that these lands are important resources of the State that should be preserved; that the agricultural industry in the region is a vital component of the economy, welfare, and cultural landscape of the Garden State; and, that in order to preserve the agricultural industry in the region, it is necessary and important to recognize and reaffirm the goals, purposes, policies, and provisions of the "Right to Farm Act," P.L.1983, c.31 (C.4:1C-1 et seq.) and the protections afforded to farmers thereby.

The Legislature further finds and declares that, since 1984, 65,000 acres, or over 100 square miles, of the New Jersey Highlands have been lost to development; that sprawl and the pace of development in the region has dramatically increased, with the rate of loss of forested lands and wetlands more than doubling since 1995; that the New Jersey Highlands, because of its proximity to rapidly expanding suburban areas, is at serious risk of being fragmented and consumed by unplanned development; and that the existing land use and environmental regulation system cannot protect the water and natural resources of the New Jersey Highlands against the environmental impacts of sprawl development.

The Legislature further finds and declares that the protection of the New Jersey Highlands, because of its vital link to the future of the State's drinking water supplies and other key natural resources, is an issue of State level importance that cannot be left to the uncoordinated land use decisions of 88 municipalities, seven counties, and a myriad of private landowners;

that the State should take action to delineate within the New Jersey Highlands a preservation area of exceptional natural resource value that includes watershed protection and other environmentally sensitive lands where stringent protection policies should be implemented;

that a regional approach to land use planning in the preservation area should be established to replace the existing uncoordinated system;

that such a new regional approach to land use planning should be complemented by increased standards more protective of the environment established by the Department of Environmental Protection for development in the preservation area of the New Jersey Highlands;
that the new regional planning approach and the more stringent environmental regulatory standards should be accompanied, as a matter of wise public policy and fairness to property owners, by a strong and significant commitment by the State to fund the acquisition of exceptional natural resource value lands;

and that in the light of the various pressures now arrayed against the New Jersey Highlands, these new approaches should be implemented as soon as possible.

The Legislature further finds and declares that in the New Jersey Highlands there is a mountain ridge running southwest from Hamburg Mountain in Sussex County that separates the eastern and the western New Jersey Highlands; that much of the State's drinking water supplies originate in the eastern New Jersey Highlands; and that planning for the region and the environmental standards and regulations to protect those water supplies should be developed with regard to the differences in the topography of the Highlands Region and how the topography affects the quality of the water supplies.

The Legislature therefore determines, in the light of these findings set forth hereinabove, and with the intention of transforming them into action, that it is in the public interest of all the citizens of the State of New Jersey to enact legislation setting forth a comprehensive approach to the protection of the water and other natural resources of the New Jersey Highlands;

that this comprehensive approach should consist of the identification of a preservation area of the New Jersey Highlands that would be subjected to stringent water and natural resource protection standards, policies, planning, and regulation;

that this comprehensive approach should also consist of the establishment of a Highlands Water Protection and Planning Council charged with the preparation of a regional master plan for the preservation area in the New Jersey Highlands as well as for the region in general;

that this comprehensive approach should also include the adoption by the Department of Environmental Protection of stringent standards governing major development in the Highlands preservation area;

that, because of the imminent peril that the ongoing rush of development poses for the New Jersey Highlands, immediate, interim standards should be imposed on the date of enactment of this act on major development in the preservation area of the New Jersey Highlands, followed subsequently by adoption by the department of appropriate rules and regulations;

that it is appropriate to encourage in certain areas of the New Jersey Highlands, consistent with the State Development and Redevelopment Plan and smart growth strategies and principles, appropriate patterns of compatible residential, commercial, and industrial development, redevelopment, and economic growth, in or adjacent to areas already utilized for such purposes, and to discourage piecemeal, scattered, and inappropriate development, in order to accommodate local and regional growth and economic development in an orderly way while protecting the Highlands environment from the individual and cumulative adverse impacts thereof;

that the maintenance of agricultural production and a positive agricultural business climate should be encouraged to the maximum extent possible wherever appropriate in the New Jersey Highlands;

and that all such aforementioned measures should be guided, in heart, mind, and spirit, by an abiding and generously given commitment to protecting the incomparable water resources and natural beauty of the New Jersey Highlands so as to preserve them intact, in trust, forever for the pleasure, enjoyment, and use of future generations while also providing every conceivable opportunity for appropriate economic growth and development to advance the quality of life of the residents of the region and the entire State.

Appendix E:

Federal Law: Highlands Conservation Act

PUBLIC LAW 108–421—NOV. 30, 2004

118 STAT. 2375

Public Law 108–421 108th Congress

An Act To assist the States of Connecticut, New Jersey, New York, and Pennsylvania in conserving priority lands and natural resources in the Highlands region, and for other purposes.

SECTION 1. SHORT TITLE. This Act may be cited as the ‘‘Highlands Conservation Act’’.

SEC. 2. PURPOSES. The purposes of this Act are—

(1) to recognize the importance of the water, forest, agricultural, wildlife, recreational, and cultural resources of the Highlands region, and the national significance of the Highlands region to the United States;

(2) to authorize the Secretary of the Interior to work in partnership with the Secretary of Agriculture to provide financial assistance to the Highlands States to preserve and protect high priority conservation land in the Highlands region; and

(3) to continue the ongoing Forest Service programs in the Highlands region to assist the Highlands States, local units of government, and private forest and farm landowners in the conservation of land and natural resources in the Highlands region.