NJ Forest Stewardship Task Force Report

February 2023

Table of Contents

I. Charge to the Task Force

In February 2022, Senate Environment and Energy Committee Chairman Bob Smith convened a Forest Stewardship Task Force (the "Task Force" whose primary task was to seek and build consensus around matters related to the stewardship of New Jersey's public forestlands. Senator Smith invited four conservation organizations representing divergent views and perspectives on forests and forest management to co-chair the Task Force. The four organizations were: NJ Audubon, NJ Conservation Foundation, NJ Forestry Association, and NJ Sierra Club. Each organization selected a representative to serve as co-chair. The four co-chairs were: Eileen Murphy from NJ Audubon, Tom Gilbert from NJ Conservation Foundation, Andy Bennett from NJ Forestry Association, and Anjuli Ramos-Busot from NJ Sierra Club.

Senator Smith asked the co-chairs to gather stakeholders – "anyone with an interest" – together and identify consensus and non-consensus issues surrounding forest stewardship on state lands and report on their findings by December 31, 2022. Senator Smith requested that the report identify actions that the State Legislature should consider to better protect and manage New Jersey's public forestlands.

Specifically, the charge to the co-chairs from Senator Smith was: "...to study and identify ways in which the State can best manage its forests in order to fight climate change, prevent forest fires, improve ecosystems, and protect soil and water quality, among other things."

This report describes the process used by the co-chairs to identify consensus and non-consensus issues related to the protection and management of public forestlands in New Jersey. Over the course of the months-long (*April through December of 2022*) process of meetings and discussions, the co-chairs came to unanimous agreement and the participants came to an overall supermajority agreement (*as defined as at least two thirds of the total*) on numerous issues which are described in the framework recommendations. The minority viewpoints have also been documented within this report.

II. Co-Chair Statement

Like the Task Force participants, the co-chairs came into this process with very different backgrounds and perspectives on these issues. However, through many hours of discussion with the participants, agency, and academic experts, and each other, we reached agreement on a comprehensive, high-level framework to guide the protection and management of New Jersey's public forestlands. Finding common ground was not easy given the passionate and divergent views on these issues, but through healthy give-and-take, we crafted a framework that enjoys support from two-thirds of the many organizations and individuals involved. We are united in our belief that these recommendations, if adequately funded and implemented effectively through legislation and rulemaking, will result in significant steps being taken toward better protecting and stewarding our public forestlands. These recommendations acknowledge the vital role that forests must play as part of the state's response to the climate crisis while also recognizing the equally important goals of ecological health, biological diversity, clean air and water, and recreation opportunities in the most densely populated State in the nation. And lastly, these recommendations acknowledge the deep intrinsic value of our forests apart from human use.

III. Executive Summary

The extensive process employed to develop the framework recommendations is described in Section VII. By the end of the Task Force discussions, the co-chairs reached unanimous agreement and a supermajority (*two thirds*) of participants supported the final framework recommendations. In total, 113 responses were recorded from organization representatives and individuals. There were 49 organizations with formal authorized representatives responding and 64 individual New Jersey residents responding to the survey. Responses from organizations and individuals resulted in the same levels of support - 67% supported the framework while 33% did not.

IV. Conceptual Framework of Recommendations

This framework was developed by the Task Force co-chairs based upon many hours of discussion among the co-chairs, Task Force participants, and invited speakers. In addition to Task Force wide meetings with participants, the co-chairs held numerous meetings among themselves to discuss topics that were raised during the meetings and to evaluate and discuss submitted proposals. Numerous proposals were submitted and considered; all proposals are found in Appendix E. The co-chairs developed and reached agreement on these recommendations through healthy give-and-take and by including ideas that enjoy broad agreement among diverse Task Force participants. The co-chairs view these recommendations as a starting point, with many details still to be worked out in legislation and rulemaking.

None of the recommendations are intended to interfere with current approved forest

management plans and their associated activities.

Statewide Inventory and Planning

Recommendation 1:
The NJDEP should be directed to initiate and conduct a statewide planning and mapping process for forested public land. Future protection and management of NJ's public forests must be based upon a comprehensive planning and mapping process at the landscape level based upon sound science and data. Additional appropriate inventories of significant biota and resources, as needed and feasible, should be included. This planning process should be directed by a science advisory panel* as well as require public participation throughout the process consistent with other comparable legislative processes in the state of NJ. The process should focus on state owned lands and then extend to significant forested parcels of county, municipal, and other lands acquired using state funding (acreage to be determined in the rulemaking). Throughout the planning process, places with historical, cultural and spiritual significance for Indigenous People should be identified, characterized, and protected.
**The science advisory panel should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists) - the panel should be a new committee of the NJDEP Science Advisory Board or be modeled similar to the NJ Endangered and Nongame Species Advisory Committee or NJ Forest Stewardship Advisory Council or similar. There should be no Governor or legislative approvals needed for appointments to move forward.*

Recommendation 2:
The NJDEP should be directed to commence a formal rulemaking process for the development of forest management plans* on public forests. The rulemaking will be informed by and consistent with statewide planning and inventory efforts in accordance with the NJ Administrative Procedures Act. The rulemaking should not take longer than three years to be adopted.
**Includes Ecological Restoration Plans, Natural Resource Stewardship Plans, or other plans on public forested lands*

Recommendation 3:
The NJDEP should be directed to initiate and complete rulemaking to provide interim guidelines for forest management plans* on public lands. A rulemaking process, separate from Recommendation 2 and consistent with the NJ Administrative Procedure Act, will be initiated and completed within one year. This rulemaking will outline interim guidelines to govern the development of forest management plans* on state lands as well as significant forested parcels of county or municipal lands acquired with state funding (acreage to be determined in the rulemaking) until the more comprehensive rulemaking described in Recommendation 2 is finished. Once the rulemaking process has begun, newly initiated plans will not be approved for a one-year period or until the rules are adopted, whichever comes first. If this rulemaking extends beyond one year, those plans can move forward. During this one-year period, exceptions will be permitted in instances including emergency scenarios, fire management, or invasive species.
**Includes Ecological Restoration Plans, Natural Resource Stewardship Plans, or other plans on public forested lands*

Recommendation 4:
The NJDEP should be directed to revitalize and implement the existing Natural Areas Program. The Program needs to be revitalized with increased funding, staffing, and appointments to fill vacant seats in order to fulfill the original vision and mission of the program. Implementation of activities within areas already identified with management plans should start immediately, and areas that are already identified but do not have plans should be prioritized for plan development. Further, the planning process should identify additional Natural Areas to be designated on public lands, including Natural Heritage Priority Sites. Additional resources are needed to fully implement the Natural Areas Program for existing and new Natural Areas.

Recommendation 5:
The NJDEP should be directed to identify areas where afforestation and reforestation should occur on public lands. This should be done as part of the inventory and planning process and should include measures needed to ensure success, consistent with the carbon sequestration goals identified in the NJDEP Global Warming Response Act 80x50 report,* which pursuant to that report includes reforestation.
**State climate goals - NJ's Global Warming Response Act 80x50 Report. pp 153-160. https://www.nj.gov/dep/climatechange/mitigation/index.html#:~:text=Global%20Warming%20Response%20Act%20%E2%80%94%20Legislation,below%202006%20levels%20by%202050*

Recommendation 6:
The NJDEP should be directed to establish a new program within the agency to designate carbon reserves, as identified through the planning process, with a primary goal of protecting mature forests and providing for future old growth forests (as defined by the science advisory panel*) for their carbon benefit. Carbon reserves should be defined similar to "ecological reserves" in the Natural Areas Program as areas "managed to allow natural processes to proceed with little or no habitat manipulation" with the exception that management will occur only to address ecological or safety threats, as approved by an oversight council** that includes a mix of NJDEP representatives and private interests representing appropriate expertise. The council should be appointed by the Commissioner of the Department of Environmental Protection and have authority similar to the NJ Natural Lands Trust.
**The science advisory panel should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists) - the panel should be a new committee of the NJDEP Science Advisory Board or be modeled similar to the NJ Endangered and Nongame Species Advisory Committee or NJ Forest Stewardship Advisory Council or similar. There should be no Governor or legislative approvals needed for appointments to move forward.*
*** The oversight council should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists). There should be no Governor or legislative approvals needed for appointments to move forward.*

Recommendation 7:
The NJDEP should be directed to identify areas where active management is needed to promote future carbon sequestration, maintain biodiversity, and to address current and future threats to ecological health. This is consistent with the carbon sequestration goals

identified in the NJDEP Global Warming Response Act 80x50 report,* which discusses proactive management for carbon defense including thinning and burning.

**State climate goals - NJ's Global Warming Response Act 80x50 Report, pp 153-160. https://www.nj.gov/dep/climatechange/mitigation/index.html#:~:text=Global%20Warming%20Response%20Act%20%E2%80%94%20Legislation,below%202006%20levels%20by%202050*

Recommendation 8:

The NJDEP must recognize the importance of adaptive management during the inventory and planning process, whereby planning, inventory, and management approaches are adjusted over time based upon new data and changing circumstances in our forests. The statewide planning and inventory should be updated at least every 10 years after completion of the first Statewide inventory.

Recommendation 9:

The NJDEP must recognize the significant variation in our forests, both on a macro (landscape) level and micro level as a guiding principle of the planning and rule-making process. For example, the uniqueness of the Pinelands and other regions of the state should be acknowledged as well as the variations that occur at a much finer spatial scale within a forest.

Forest Management Planning and Implementation

Recommendation 10:

NJDEP must protect and manage NJ's public forestlands to maintain and enhance carbon sequestration and storage as necessary to advance state climate goals* while advancing equally important goals of ecological health, biological diversity, climate resiliency, and protection of water and soil resources while providing low-intensity, safe public recreation opportunities.** Planning and inventories should guide the prioritization of management goals in specific areas, recognizing that these goals will be achieved across the aggregate of acres owned by the state rather than on one single acre in any specific area. Meeting these goals requires multiple management, restoration, and protection approaches which must be guided by sound science and be consistent with and guided by the inventory and planning process.

**State climate goals - NJ's Global Warming Response Act 80x50 Report, pp 153-160. (https://www.nj.gov/dep/climatechange/mitigation/index.html#:~:text=Global%20Warming%20Response%20Act%20%E2%80%94%20Legislation,below%202006%20levels%20by%202050)*

***Low intensity recreation as defined means non-motorized outdoor, nature-based recreational activities, including, but not limited to, boating, swimming, fishing, hiking, hunting, trapping, picnicking, nature observation, photography, horseback riding, tent and shelter camping, cross-country skiing, bicycling, snowshoeing, rock climbing, ice climbing, and enjoyment of open space.*

Recommendation 11:

NJDEP forest management plans on public land must be developed in accordance with the process established through rulemaking noted in the previous section (Recommendations 2 and 3).

Recommendation 12:
The NJDEP should continue to use fire as an important management tool based upon sound science. The most significant action the agency can take on this issue is to fully implement the Prescribed Burn Act, which outlines processes for the use of prescribed burning as an effective tool for forest management and public safety. NJDEP should assist other land managers to use fire as a management tool in accordance with the Act. This assistance includes appropriate training to land managers to further expand the use of prescribed fire. In addition, the legislature and NJDEP should identify and address any legal barriers that hinder the use of prescribed fire by trained land managers.

Recommendation 13:
The NJDEP should be directed to amplify efforts to address the impacts of invasive non-native species, including insects, animals, plants, pathogens, and microorganisms. These efforts include re-convening The NJ Invasive Species Council, created in 2004 but currently dormant, and charging them with updating and implementing a state-wide strategic plan to address the issue. The NJDEP should develop regional collaborations with neighboring states including Pennsylvania and New York and other regions that have addressed this issue. See Appendix F for written testimony to the NJ Senate Environment and Energy Committee in relation to Senate Bill 2186 that bans the sale of nonnative species in NJ. In addition, the proposals* approved by Task Force participants include directing the legislature to do the following - consider passing legislation that establishes and funds a youth conservation corps with a focus on invasive species removal and increase funding for NJ Dept of Agriculture Alampi Lab to expand their work on invasive species control.
**Proposals are included in Appendix E.*

Recommendation 14:
The NJDEP should be directed to measure and reduce deer densities in our public forestlands to ecologically sustainable levels, with guidance from the Science Advisory Panel.*
Specifically, the NJDEP should identify and implement new and innovative steps,** such as establishing a pilot program for commercial sale of venison, exploring the role of natural predators in deep forests, providing a stable source of funding for hunters helping the hungry, implementing fertility control (including sterilization), and considering revisions to current guidelines on baiting and feeding (i.e., food plots). NJDEP should evaluate these and other steps with public input and report back with recommendations to the legislature within one year.
**The science advisory panel should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists) - the panel should be a new committee of the NJDEP Science Advisory Board or be modeled similar to the NJ Endangered and Nongame Species Advisory Committee or NJ Forest Stewardship Advisory Council or similar. There should be no Governor or legislative approvals needed for appointments to move forward.*
***Proposals are included in Appendix E.*

Recommendation 15:
The NJDEP should not include commercial profit as a goal in any forest management plan* on public land. Commercial timber management should not be a goal for any forest management plan on public land. Wood products can be sold in instances where cutting and removal of

wood is a necessary part of an approved plan with ecological health, climate, or other non-commercial goals.
**Includes Ecological Restoration Plans, Natural Resource Stewardship Plans or other plans on public forested lands*

Recommendation 16:
The legislature and others must identify and implement funding mechanisms to ensure success of the recommendations in this report. Many elements and goals of this framework cannot move forward without significant resources and staffing to NJDEP. All recommendations discussed above require funding in the form of staffing and resources in order to be successful. Funding should include increased appropriations via the annual state budget, new state funding sources, external grant programs, and other government entities that can assist the agency in completing these goals. Specifically and immediately, the legislature/agencies should direct funding from the federal Inflation Reduction Act to advance the initiatives in this framework. Proposals* approved related to new funding sources include increased block rate pricing on water use to recognize the impact of forest protections on availability of clean water; extending the realty transfer fee progression to sales of homes $1 million and above; reallocation of Green Acres funding to include management activities; tapping carbon markets including RGGI funding; and other federal funding sources.
**Proposals are included in Appendix E.*

V. Participant Response to Framework Recommendations, Results, and Commentary

Task Force participants were invited to review three iterations of the framework and to provide comments on individual sections. For the fourth and final framework, we asked participants to support or not support the framework in its entirety, even if there might be some aspects that they do not agree with completely. The co-chairs felt that having one cohesive compilation of specific recommendations was more meaningful than pieces. While comments were solicited and reviewed for each individual recommendation in the framework, support was requested for the framework as a whole.

The survey templates utilized to collect input on the three versions of the framework appear in Appendix D.

By the end of the Task Force discussions, a supermajority of participants supported the final framework recommendations. In total, 113 responses were recorded from organization representatives and individuals. There were 49 organizations with formal authorized representatives responding and 64 individual New Jersey residents responding to the survey. Responses from organizations and individuals resulted in the same levels of support - 67% supported the framework while 33% did not.

ORGANIZATIONS

(a full listing of organizations appears in Appendix A)

49 organizations
33 support framework (67%)
16 do not support framework (33%)

Organizations supporting the framework (67%)

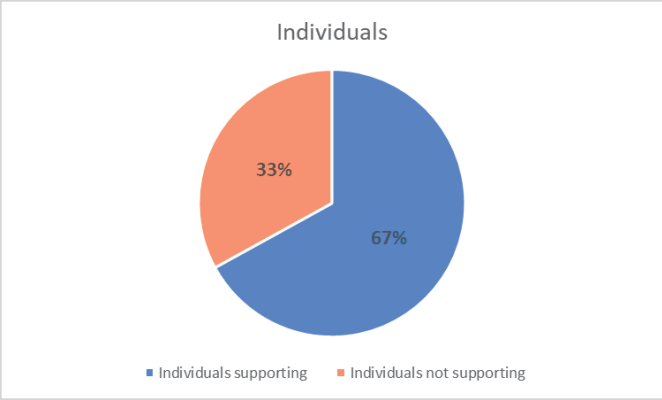
Allegheny Society of American Foresters (NJ Division)
Appalachian Mtn Club
Association of NJ Environmental Commission
Beaver Lake Realty Company
Duke Farms
Friends of Hopewell Valley Open Space
Great Egg Harbor Watershed Association
Hackensack Riverkeeper
Lebanon Township Environmental and Open Space Commission
Monmouth County Audubon
Morris County Park Commission
National Wild Turkey Federation, NJ Chapter
NJ Audubon
NJ Conservation Foundation
NJ Forestry Association
NJ Nursery & Landscape Association
NJ Outdoor Alliance PAC
NJ State Federation of Sportsmen's Club
NJ Tree Farm
Ocean County Dept Parks and Recreation
Pinelands Preservation Alliance
Princeton Environnmental Commission
Princeton Shade Tree Commission
Raritan Headwaters Association
Raritan Twp. Environmental Commission
Sierra Club, NJ Chapter
Somerset County Parks
The Nature Conservancy
The Wildlife Society, NJ Chapter
Tri-County Sustainability
Union County Parks
USDA NRCS, NJ State Office
UUFaithActionNJ

Organizations not supporting the framework (33%)

Animal Protection League of NJ (APLNJ)
Empower NJ
Environmental Education Fund
Friends of the Drew Forests
Great Swamp Watershed Association
Highlands Coalition
League of Humane Voters
NJ Environmental Lobby
NJ Forest Watch
NY NJ Trail Conference
Passaic River Coalition
Ridgeview Conservancy
Sourland Conservancy
Support Roaring Rock Park
Thonet Associates
Woods and Wayside

INDIVIDUALS

(a full listing of individuals appears in Appendix A)



64 individuals:
43 support framework (67%)
21 do not support framework (33%)

Individuals supporting the framework (67% of respondents)

Ann M Cahill-Makowsky
Barbara Cuthbert
Bill Beren
Bill Honachefsky Jr.
Clifford Paino
Constance Katzenbach
Dan Murnick
Dan Ross
Daniel P. Duran
Daniela Shebitz
David Jenkins
Deborah J. McConnell
Ingro Desvousges
Douglas Reid-Green
Elaine Mann
Gary Thein
James A. Quinn
James Engel
Jared Rosenbaum
Jean Montgomerie
Jeanne M. Fox
Jim Lyons
John Parke
Kenneth Rendall
Kristin A. Ace
Matthew Olson
Matt Polsky
Melanie H. McDermott

Michael J. Monahan
Michael Virgi
Michael W. Shier
Paul Rinear
Peter Delman
Rebecca Canright
Rita M. Alzamora
Salvatore Vaspol
Samantha Hartford
Scott Sillars
Steven Mitchell
Theodore Chase Jr.
Vinh Lang
Wayne Huntington
Wendy Mager

Individuals not supporting the framework (33% of respondents)

Anthony Maciorski
Cynthia Soroka-Dunn
Douglas Meckel
James D. Sabol
Jean Publiee
Joe Attamante
Joe Basralian
John Landau
John Saponara
Kate Krehel
Katherine Evans
Kimi Wei
Larry Baum
Leslie J Sauer
Margaret Wood
Matt Smith
Nicholas Homyak
Robert W Moss
Susan Michniewski
Thomas Conway
Wilma Frey

VI. Summary of supporting and dissenting opinions

The co-chairs accepted all supporting and dissenting opinions and included them in Appendices B (supporting) and C (dissenting). In some cases, an organization with a formal representative submitted multiple opinions. For survey purposes, only the authorized representative from an organization could provide a response representing that organization. But for these opinions, the co-chairs included all opinions from organization members in addition to the authorized representative.

Some participants combined submissions under both supporting and dissenting opinions, so there are some dissenting opinions expressed under supporting opinions, and some supporting opinions expressed under dissenting opinions. In this section, the co-chairs are attempting to identify the topics that were raised most frequently.

Main topics in the supporting opinions

All supporting opinions are presented in Appendix B.

The most common topic from participants who submitted supporting opinions concerned ensuring adequate funding for resources and staff to NJDEP to carry out the recommendations in the framework.

Overall, supporting commenters thought the process used by the co-chairs was robust and fair and, given the large number of participants, the optimal way to identify and categorize consensus and non-consensus participant opinions about forest protections and forest management in the state.

Main topics in dissenting opinions

All dissenting opinions are presented in Appendix C.

In summary, the most common topic from participants who submitted dissenting opinions concerned "logging," which participants suggest means virtually any removal and sale of wood products. Some participants opined that logging is occurring on state land and that it should not be. This topic was raised at every Task Force meeting (*in fact, the Task Force dedicated two full meetings to this topic*). Participants who provided dissenting opinions on logging also tended to report that the only goal for the Task Force to consider for managing state forests was climate change, specifically carbon sequestration and carbon storage. Biodiversity, wildlife protections, water quality, building resilience to impacts from climate change, and other ecological goals were considered subordinate or should not be considered at all alongside carbon sequestration and storage. A subset of these participants also called for a moratorium on the implementation of any new or existing forest management plans on state lands and urged that a moratorium be put in place indefinitely or until the Task Force report was finished.

The Sparta Mountain Forest Management Plan, managed by NJDEP, was mentioned several times by commenters as an example of the logging concerns noted above. Although individual management plans were not discussed at Task Force meetings, the plan on Sparta Mountain was raised frequently by several participants in the dissenting opinions and at Task Force meetings.

Another common theme in the dissenting opinions focused on process. Some participants viewed the structure of the Task Force as an expert group that should have provided opportunity for debate and discussion on the science of forest ecology and management. Some also felt that formal voting by participants rather than a consensus approach should have been used in determining topics of majority interest and during the drafting and editing of the framework. A description of the approach the Task Force chairs agreed to is provided in the process section of the report.

Several commenters wanted the term "proforestation" to be included in the recommendations.

Interestingly, several commenters who disagreed with the framework overall and provided dissenting opinions actually favored all or most of the individual recommendations in the framework. The rationale for dissenting focused on the perception that there were unnecessary redundancies within the framework and the use of what they considered to be vague terminology that needed further definition.

VII. Overview of the Task Force stakeholder process

As stated in earlier sections, Senator Bob Smith formed the NJ Forest Stewardship Task Force in February 2022. According to Senator Smith, "The purpose of the Task Force will be to study and identify ways in which the State can best manage its forests in order to fight climate change, prevent forest fires, improve ecosystems, and protect soil and water quality, among other things. The Task Force will take feedback from interested parties and then compile a report on consensus and non-consensus issues with respect to forest stewardship for submission to the Committee."

The Senator invited "anyone with an interest" to participate in the Task Force including experts, professionals, advocates, and individuals living or working in NJ and having an interest in NJ public forestlands. After the initial announcement of the formation of the Task Force, the co-chairs created a Google-based email and shared drive to handle Task Force activities. Within the first several weeks, nearly 1200 individuals requested to be included in the distribution list and to be kept apprised of activities of the group. In addition, the co-chairs used the Task Force Google mail system to send invitations to join the Task Force to multiple email lists related to forests and forestry; the goal was to spread the net far and wide. As per Senator Smith's directive, "anyone with an interest" could participate by sending an email to the Task Force Gmail account. Over time, the number of active participants decreased but there were regularly 100 or so participants attending meetings throughout the course of the Task Force process. These email addresses were tracked in google mail.

Early in the discussions, the Task Force co-chairs and participants agreed that representation from Native American Tribes should be encouraged. Chief Vincent Mann of the Ramapough Lenape Turtle Clan agreed to participate and was asked to address the Task Force at an early meeting.

Given the diversity of interested parties, the co-chairs determined that a participant process to include both expert and nonexpert opinions during the course of discussions would be the appropriate way to move forward. Generally, task forces are work groups composed of experts in specified areas of knowledge or practice. They tend to be small groups of people brought together to accomplish a specific objective, with the expectation that the group will disband when the objective has been completed. A stakeholder group, on the other hand, is any party with an interest or concern in a subject and who may be positively or negatively impacted by a project, initiative, policy, or regulation.

Because the Senator asked the co-chairs to identify consensus and non-consensus issues, the co-chairs immediately began researching standards for reaching consensus and evaluated recommendations from The Consensus Council, Inc., Group Facilitation, The Democracy Project, and the National Academies of Science, Engineering, and Medicine – The Consensus Study Process. The co-chairs also met with the co-chairs of another task force that had been formed by Senator Smith several years earlier (2016) to learn about how that group identified consensus and non-consensus issues. Conversations were had with the four co-chairs of the Public Access Task Force to learn from their process. They were: Sara Bluhm, NJ Business & Industry Association; Tim Dillingham, American Littoral Society; Michael Egenton, NJ State Chamber; and Debbie Mans, NY/NJ Baykeeper.

Time went into planning the logistics of the public participant process and topic areas to prioritize. The first step was to prioritize general topic areas that participants thought were important pertaining to NJ public forests. A survey instrument (Appendix D-4) using Google Forms was prepared to gather information about what participants considered priority issues in NJ.

The co-chairs determined that the best mechanism for understanding participants' priorities was to invite them to submit their ideas, or proposals, via a survey mechanism (see proposal template in Appendix E).

On April 28, 2022, the Task Force kicked off its first public meeting (via Zoom) with 410 people registering (338 actually attending). The group included individuals, experts in forest science, forestry practitioners, environmental non-profit workers, and representatives from government agencies such as the NJ Department of Environmental Protection (NJDEP). The co-chairs opened the meeting with a general request for all participants to follow the Rules for Engagement (Appendix D-1) and discussed the results of the prioritization survey. They also presented instructions for proposal submission. Collaborations were encouraged, and a collaboration table (Appendix D-5) was created so participants could share ideas and work together on their narratives.

Senior staff from NJDEP presented background information at the initial meeting and at several additional meetings when requested. This was done so that all participants had the same baseline information about how the regulatory agency responsible for managing public lands currently implements its authority. NJDEP representatives attended meetings to address any questions about the agency's role but did not serve as a participant in the Task Force for the purpose of supporting or not supporting the Framework.

All Task Force meetings were recorded and shared via a shared Google YouTube channel.

During the kick-off meeting and all subsequent Task Force virtual zoom meetings, any Task Force participant was invited to use the raise hand feature to ask a clarifying question or make a comment, or they could ask questions or make comments to the co-chairs via the chat feature. Given that there were regularly over 100 people on anyone meeting call, it was necessary to have a process whereby participants could be heard but not interrupted.

Participants who had multiple questions or comments were asked to take turns to maximize the number of people participating.

In June, two workgroups were formed - an Ecological Health Workgroup and a Climate Workgroup. The Ecological Health workgroup, co-chaired by Murphy and Gilbert, identified strategies related to the ecological health of our public forests including matters such as biodiversity, overabundant deer, invasive species, pests, and pathogens. This workgroup examined what policy or management decisions are needed on our public forestlands to ensure their ecological health. The Climate Workgroup, co-chaired by Ramos-Busot and Bennett, identified strategies related to climate change on our public forests including matters such as carbon sequestration, climate resilience/adaptation, and the risks of wildfire. This workgroup aimed to examine what policy or management decisions are needed on our public forestlands in response to climate change.

One hundred thirty-two proposals were submitted between the two workgroups, each with references and specific legislative recommendations within the Task Force's scope. The proposal topics spanned categories such as invasive species, deer populations, natural areas, public education, and timber harvesting. The co-chairs developed a set of criteria for accepting proposals for group discussion (*criteria are presented in Appendix E*). Proposals that identified a single recommendation that could be developed into a legislative action were prioritized. Some proposals partially fulfilled the criteria, but had more than one idea included or needed some focus. In addition, some proposals were not true proposals but were opinion pieces from interested participants and were therefore not accepted for discussion. However, due to fervent requests from several Task Force participants, we include all submitted proposals in Appendix E.

Every two weeks, the co-chairs hosted two meetings lasting at least two hours each to go over participant-designed proposals. As mentioned earlier, each meeting included over 100 participants. Upon each discussion, the group would evaluate how to improve these ideas and express their support or opposition to the proposals. While a voting process was considered, participants could not agree on how to differentiate between organization voting and individual voting. The co-chairs determined that use of a consensus approach rather than a voting approach would work best. Objections raised in conversation or sent as emails were recorded and reviewed. Informal Zoom polls were used to gauge the status of agreement or disagreement among participants on proposals.

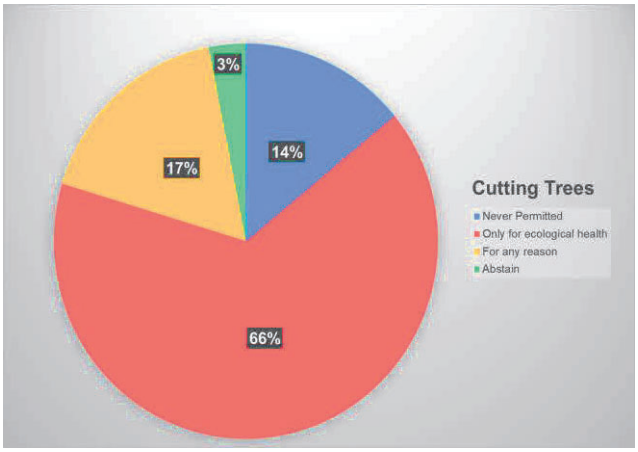
After hearing from NJDEP and others on the topic of how New Jersey public forests are regulated, participants formed a Regulatory subgroup in an effort to develop a common understanding of what regulations currently apply to forestry on public lands. After several discussions, the subgroup learned that, unlike for private land, there is not currently a formal process, established through rule-making that governs review of forest management plans on public lands. There are exceptions such as in the Pinelands and Natural Areas where some formal regulations governing forestry exist. No formal rule or guidance for forest management on public lands outside of these specifically regulated areas exists in law, statute, or regulation.

The NJDEP explained that it follows the guidelines that are in place for developing plans on private land for public land. Also, the NJDEP communicated that the agency follows the Land Management Review process and the 14-step process (NJDEP internal process) for all forest management plans on public lands. While not formally established by rule (internal operations of agencies do not go through the rule-making process), staff are required to adhere to the internal processes, standard operating procedures, policies, and training requirements. The Regulatory subgroup agreed that a formal rule-making process governing forest management on public lands should be required and established.

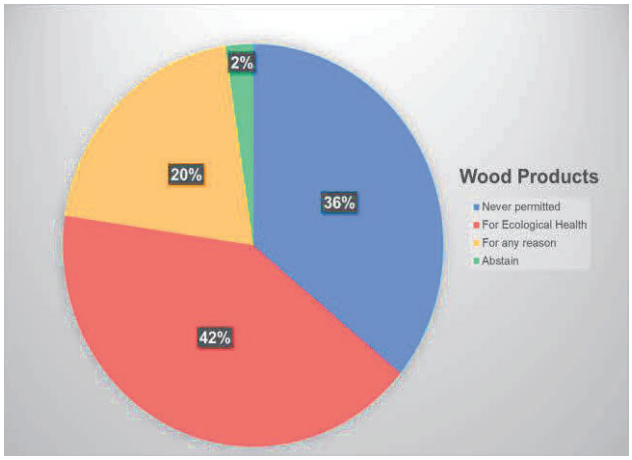
Originally, the agendas for Task Force subgroup meetings highlighted discussion of accepted proposals. However, stakeholders continued to direct comments and conversation away from the substance of the proposals and toward specific issues of proforestation, tree cutting and removal, and the forest management plan at Sparta Mountain. Individuals would not agree to support any proposals without first discussing these topics.

Consequently, the co-chairs addressed these issues by 1) inviting a panel of national experts to speak on proforestation (link to webinar here); 2) created an informal survey on participants' opinions on tree cutting and wood removal (Appendix D-2); and 3) dedicated two full meetings to the topic of "logging."

In an effort to hear all views, two two-hour meetings were held to discuss issues surrounding tree cutting and removal of wood products. The sponsors of proposals related to these issues were invited to discuss their proposals, and discussion was open to all interested participants. After hours of discussion, it seemed clear to the co-chairs that consensus among the participants on the Zoom call would not be reached on these issues no matter how many additional hours might be spent discussing them. It was unclear what the majority view was. A survey using Google Forms was created and sent to all Task Force participants to ascertain participants' positions on these issues. Results of those surveys can be found on the next two pages.



The tree cutting survey results showed that a majority of respondents (83%) supported allowing the cutting of trees to meet ecological objectives or other reasons. A minority of participants (14%) indicated that trees should never be cut for any reason, while 17% responded that trees can be cut for any reason including the generation of revenue. The largest contingent (66%) supported cutting trees only for ecological health purposes.



The wood removal survey results showed that a majority of respondents (62%) supported allowing the removal of wood to meet ecological goals or for other reasons. A minority of participants (36%) indicated that wood should never be removed for any reason, while 20% responded that wood could be removed for any reason including revenue generation. The largest contingent (42%) supported the removal of wood only for ecological health purposes.

Throughout the time that the Task Force met, opposition continued to be raised about the implementation of one particular existing forest management plan at Sparta Mountain. Because the charge of the Task Force was more general than any one individual management plan, the co-chairs directed discussion away from any individual plan and focused instead on more general management of all forested public lands in the state. Nonetheless, all four co-chairs visited Sparta Mountain together in order to observe the various project sites.

Because discussions on proposals were difficult due to continued distraction on the issues described above, the co-chairs moved away from proposal discussion (since we could not move forward on these) and opted to create a conceptual framework based on topics where there seemed to be some broad agreement among participants.

There were three versions of the framework recommendations developed for participant review and comment (*see Appendix D for the surveys for each draft version*). The co-chairs strived to incorporate language that addressed compromises on issues with widely ranging opinions among participants. Each draft represented an attempt to address participant comments on the framework.

For the draft frameworks, the co-chairs asked participants to provide input on each individual recommendation. However, for the final version, the co-chairs asked participants if they could support the framework as one comprehensive recommendation, rather than 16 separate parts. The rationale for this was to develop a holistic approach to stewarding New Jersey's public forests, rather than 16 specific recommendations found in the framework. This approach also acknowledged the idea that along the way, as the draft frameworks were being discussed and refined, compromises were being made on specific recommendations in order to move towards broad agreement on the full package of recommendations. The four co-chairs worked to be responsive to and reconcile different perspectives in order to build broad support for the recommendations. Our hope was that even if participants did not agree with every recommendation, they could support the holistic package because their priorities were

included. We understood that some organizations would not support the entire framework even if one recommendation was not exactly what they wanted.

After discussing the framework, meetings toward the end of the process addressed several topic areas of interest to participants where there seemed to be some general consensus. Those who submitted proposals on the topics of the use of fire in forest management, Natural Areas and Ecological Reserves, invasive species and deer management were invited to present their proposals to the rest of the Task Force for discussion. Areas of broad agreement from these discussions were then reflected in the final framework recommendations.

In December, as the Task Force was discussing proposals related to invasive species, a bill was introduced in the Senate Environment and Energy Committee focused on invasive species. The co-chairs quickly formed an Invasive Species Subgroup to address the Task Force recommendations on this topic. A team of seven participants (plus the four co-chairs) prepared written testimony (Appendix F) in support of Senate Bill 2168, and three subgroup members provided oral testimony at the Dec 15 public Senate Environment and Energy Committee hearing. Sixty Task Force participants (in addition to the four co-chairs and the seven subgroup members) signed in support of the written testimony. Their testimony was covered in the press (NJ Spotlight News; NJ Monitor).

The final framework was circulated to all Task Force participants in mid-December with an opportunity to indicate whether they wished to support the recommendations or not support, and to provide statements for inclusion in the final report. By this time, there were 49 organizations actively participating.

VIII. Appendices

Appendix A: Framework Supporters and Dissenters

Appendix B: Supporting opinions

Appendix C: Dissenting opinions

Appendix D: Forms, Surveys, Documents
- Appendix D-1: Rules of Engagement
- Appendix D-2: Cutting and wood removal survey
- Appendix D-3: Organization Authorization
- Appendix D-4 Framework surveys
- Appendix D-4a: First Draft Framework Survey – 124 Respondents
- Appendix D-4b: Revised Framework Survey – 102 Respondents
- Appendix D-4c: Third Revised Framework Survey – 63 Respondents
- Appendix D-4d: Final Framework Survey – 111 Respondents
- Appendix D-5: Original topic prioritization survey
- Appendix D-6: Collaboration Table

Appendix D-7: Flyer for panel discussion, “Exploring Conservation and Proforestation options for NJ Forests”

Appendix E: Proposals

Appendix E-1: Blank proposal form

Appendix E-2: Criteria for acceptance for discussion

Appendix E-3: Proposals that were accepted, discussed, and reached consensus. At least three of four co-chairs agree that the proposal met criteria.

Appendix E-4: Proposals that were accepted and discussed during Task Force meetings, but consensus not reached. At least three of four co-chairs agree that the proposal met criteria.

Appendix E-5: Proposals that were accepted but not discussed. At least three of four co-chairs agree that the proposal met criteria.

Appendix E-6: Proposals that needed revision or co-chairs were split on acceptance (fewer than three of four co-chairs accepted)

Appendix E-7: Proposals that were not accepted: At least three of four co-chairs agree that proposal did not meet criteria.

Appendix F: Invasive Species subgroup written testimony to Senate Environment & Energy Committee

Appendix G: Glossary of terms

Appendix A: Framework Supporters and Dissenters

Task Force participants were invited to review several iterations of the framework and to provide comments on individual sections. For the final framework, we asked participants to support or not support the framework in its entirely, even if there might be some aspects that they not agree with completely. The co-chairs felt that a cohesive support was more meaningful than pieces. While comments were solicited and reviewed for each individual recommendation in the framework, support was requested for the framework as a whole.

The surveys used to collect input on the three versions of the framework appear in Appendix D.

113 Responses to Framework (after removing duplicates, etc.)

All Respondents – 113
- 76 support framework (67%)
- 37 do not support framework (33%)

49 organizations
- 33 support framework (67%)
- 16 do not support framework (33%)

64 individuals:
- 43 support framework (67%)
- 21 do not support framework (33%)

Organizations supporting the framework (67%)

Organization (if you are submitting on behalf of an organization)	Name of Submitter (point of contact)	Please list any academic credentials and certifications that you have*	Do you serve on the Board or as a Trustee or decision-maker on any organizations (include the one you are representing)? Please list (include the one you are representing).
Allegheny Society of American Foresters (NJ Division)	Steven Kallesser	Certified Forester	
Appalachian Mtn Club	Dawn Riley	Masters in Environmental Science	
Association of NJ Environmental Commission	Jennifer Coffey Executive Director	dual Masters degrees in Environmental Policy and Environmental Science from NJIT	
Beaver Lake Realty Company	Susan Elizabeth Dorward		Highlands Glacial Lakes Initiative
Duke Farms	Thomas Almendinger	MS in Ecology & Evolution from Rutgers University, ESA certified ecologist	NJ Invasive Species Strike Team, NJ Wildlife Society
Friends of Hopewell Valley Open Space	Michael Van Clef	Ph.D. Ecology	No
Great Egg Harbor Watershed Association	Fred Akers		
Hackensack Riverkeeper	Hugh M. Carola		EarthShare NJ, Waterspirit
Lebanon Township Environmental and Open Space Commission	Nancy Roberts-Lawler	BA Biology University of Pennsylvania	Board Chair PEACE New Jersey
Monmouth County Audubon Soc	Colette R Buchanan	Juris Doctor	Yes
Morris County Park Commission	Kelli Kovacevic	B.S. Natural Resource Mgt - Rutgers, 2002; M.S. Biology; Montclair University, 2013	I am not on the board but serve as a department director
National Wild Turkey Federation, NJ Chapter	Miriam Dunne	B.S. Natural Resources Management (Cook College, Rutgers University, M.S. Biology (E. Stroudsburg University)	no
NJ Audubon	Alex Ireland President and CEO	PhD, Geological and Earth Sciences	

NJ Conservation Foundation	Emile DeVito	Ph.D. Ecology	Pinelands Preservation Alliance (Trustee), NJ Natural Lands Trust (Trustee), Highlands Coalition Natural Heritage Committee
NJ Forestry Association	Richard B Kelsky	BSCE; JD; Spotted Lanternfly Permitholder; Certified Tree Farm Owner; Forest Landowner and Operator	
NJ Nursery & Landscape Association	Elmer Platz		
NJ Outdoor Alliance PAC	Larry Herrighty	B.S. Wildlife M	NJ Hunters Helping Hungry, State Federation Of Sportsmen's Clubs
NJ State Federation of Sportsmen's Club	Frank Virgilio	Chairman, New Jersey, Fish, and Game Council	New Jersey Wildlife Foundation, New Jersey Fish and Game Council
NJ Tree Farm	Alex Kelchner		
Ocean County Dept Parks and Recreation	Geoffrey Lohmeyer		
Pinelands Preservation Alliance	Jaclyn Rhoads	Doctorate degree in environmental policy	
Princeton Environmental Commission	Tammy L Sands		
Princeton Shade Tree Commission	Sandra Chen	M.S., Ed.D.	Appointed to Princeton Shade Tree Commission
Raritan Headwaters Association	William Kibler	J.D.	
Raritan Twp Environmental Commission	Amy S Greene	Certified Senior Ecologist Ecology Society of American, Professional Wetland Scientist, Bachelors in Biology, Masters in Ecology, 48 years professional and volunteer experience in Environmental Studies and Permitting	
Sierra Club, NJ Chapter	Taylor McFarland		
Somerset County Parks	Shauna Moore	Master of Landscape Architecture	
The Nature Conservancy	Eric Olsen		
The Wildlife Society, NJ Chapter	Brian Kirkpatrick	BS, Certified Wildlife Biologist	Yes

Tri-County Sustainability	Sean Mohen		Yes
Union County Parks	Daniel J. Bernier		
USDA NRCS, NJ State Office	Don Donnelly	NJDEP Approved Forester, NJ Licensed Tree Expert #376	
UUFaithActionNJ	Peggy Middaugh	none	New Jersey Tree Foundation

Organizations not supporting the framework (33%)

Organization (if you are submitting on behalf of an organization)	Name of Submitter (point of contact)	Please list any academic credentials and certifications that you have*	Do you serve on the Board or as a Trustee or decision-maker on any organizations (include the one you are representing)? Please list (include the one you are representing).
Animal Protection League of NJ (APLNJ)	Angi Metler		League of Humane Voters
Empower NJ	Ken Dolsky	BA in physics	Highlands Coalition Natural Heritage Committee, VP NJ Forest Watch, Don't Gas the Meadowlands Coalition
Environmental Education Fund	Erica Cowper	BS in Biology from Drew University	New Jersey Environmental Lobby
Friends of the Drew Forests	Sara Webb	Ph.D., Ecology, M.S. Ecology and Forest Resources	Highlands Coalition Trustee
Great Swamp Watershed Association	Dorothea Stillinger	Degrees from University of Rochester and Yale	NJ Forest Watch, NJ Highlands Coalition Natural Heritage Committee
Highlands Coalition	Elliott Ruga		
League of Humane Voters	Doris Lin	B.S. in Applied Biological Sciences, MIT J.D., University of Southern California Law School	Animal Protection League of NJ
NJ Environmental Lobby	Anne O. Poole	MBA	Environmental Education Fund; Seaside Apt. Condominium Association.
NJ Forest Watch	Silvia Solaun	MS, Nutrition	
NY NJ Trail Conference	Timothy McKenna	25 years as an executive in the paper and forest product industry	
Passaic River Coalition	Laurie Howard		
Ridgeview Conservancy	Mitalee Pasricha		
Sourland Conservancy	Joe Kazimierczyk		
Support Roaring Rock Park	Laura Oltman		NJ Highlands Coalition, Trustee

			NJ Highlands Coalition Natural Heritage Committee
Thonet Associates	John A. Thonet	BS & MS degrees in Forestry, SUNY College of Environmental Science and Forestry; Licensed Professional Engineer and Professional Planner in New Jersey	Association of New Jersey Environmental Commissions, New Jersey Highlands Coalition, and New Jersey Environmental Lobby
Woods and Wayside	Christopher Barr	BSc (Univ. California, Berkeley); MSc (Cornell Univ.); 30+ years as professional analyst of forestry issues globally; Center for International Forestry Research (CIFOR), 1998-2009.	Ridgeview Conservancy

Individuals supporting the framework (67% of respondents)

Name of Submitter (point of contact)	Please list any academic credentials and certifications that you have*	Town of Residence	County of Residence
Ann M Cahill-Makowsky	None that applies. Have a Bachelor of Arts	Bordentown	Burlington
Barbara Cuthbert	Ed.D.	Princeton	Somerset
Bill Beren		Upper Montclair	Essex
Bill Honachefsky Jr. Clifford Paino	 LEED Green Associate	Clinton Lincoln Park	Hunterdon Morris
Constance Katzenbach		Hopewell township	Mercer
Dan Duran	B.S, M.S., Ph.D.	Mantua	Gloucester
Dan Murnick	PhD, Professor Emeritus of Applied Physics, Rutgers University	Bernardsville	Somerset
Dan Ross		Long Valley	Morris
Daniela Shebitz	Ph.D. Ecosystem Science	Cranford	Union
David Jenkins	B.S. Natural Resources - Conservation, Cook College - Rutgers University, 1978. Graduate studies Wildlife Ecology - University of Wisconsin 1978-1982, Rutgers University non-matric Ecology and Natural Resources.	Milford	Hunterdon
Deborah J McConnell	BA Communications	Whiting	Ocean
Desvousges Ingro	BA Zoology and ISA Certified Arborist	Flemington	Hunterdon
Douglas Reid-Green		Flemington	Hunterdon
Elaine Mann	n/a	Colts Neck	Monmouth
Gary Thein		Livingston	Essex
James A. Quinn		New Brunswick	Middlesex
James Engel	None	Long Valley	Morris

Jared Rosenbaum		Pohatcong	Warren
Jean Montgomerie		Freehold	Monmouth
Jeanne Fox	BA Douglass College; JD Rutgers Law School; Certificate Harvard JFK School, Former BPU President	New Brunswick	Middlesex
Jim Lyons	BS, Cook College, Rutgers University; Master of Forestry, Yale School of the Environment	West Milford	Passaic
John Parke	senior professional wetland scientist (SWS) Certified Ecologist(ESA), BA in Environmental Studies (Ramapo State College of NJ)	Independence	Warren
Kenneth Rendall	BS Business Administration	Peapack-Gladstone	Somerset
Kristin A Ace	BFA / extensive training for Shade Tree Commission work	Morristown	Morris
Matt Polsky	MA, MBA	Belvidere	Warren
Matthew Olson	Ph.D in Forest Resources, UMaine	Buena Vista	Atlantic
Melanie H. McDermott	Ph.D. Environmental Science, Policy & Mgt., UC Berkeley; MSc., Forestry, University of Oxford	Highland Park	Middlesex
Michael J Monahan	BS - Business, Fellow Healthcare Financial Management	Ramsey	Bergen
Michael Virgil	NJ Licensed Tree Expert #593 Tree registered business	Hackettstown	Warren
Michael W Shier		Stockton	Hunterdon
Paul Rinear	AAS Computer Science, BA Physics, MA Math	Aberdeen	Monmouth
Peter Delman	none in this field	Jersey City	Hudson
Rebecca Canright		Asbury	Hunterdon
Rita M Alzamora	BFA, IT certifications	Lk Hiawatha	Morris
Salvatore Vaspol	BS Natural Sciences	Oak Ridge	Morris
Samantha Hartford	MSc Experimental Archaeology	Morristown	Morris
Scott Sillars	BS in Forestry	Princeton	Mercer
Steven Mitchell		Somerville	Somerset

Theodore Chase Jr	Ph.D. (in biochemistry)	Franklin Two., Somerset Co.	Somerset
Vinh Lang	Master of Forestry, Yale University; Bachelor's of Environmental Science, Stockton University; NJ State Approved Forester	Riverside	Burlington
Wayne Huntington		Bridgewater	Somerset
Wendy Mager	Law degree	Princeton	Mercer

Individuals not supporting the framework (33% of respondents)

Name of Submitter (point of contact)	Please list any academic credentials and certifications that you have*	Town of Residence	County of Residence
Anthony Maciorski		Lake Hopatcong	Morris
Cynthia Soroka-Dunn	AS Broadcasting Bergen Community College, BA Communications SUNY New Paltz	Haworth	Bergen
Douglas Meckel		Hopewell NJ	Mercer
James D. Sabol	Bachelors Degree, Biological Science, Certified Wildlife Biologist, The Wildlife Society	Pompton Lakes	Passaic
Jean Publiee		Flemington	Hunterdon
Joe Attamante		Morris Township	Morris
Joe Basralian	I have already completed. BA, MBA, Rutgers Environmental Steward, NYU graduate class in Sustainability, various Rutgers Cooperative Extension workshops on nature	Chatham Township	Morris
John Landau	Rutgers Environmental Steward, NJ Forestry Association Woodland Steward, Rutgers GI Champion, UN Convention on Biological Diversity 10 week MOOC "Ecological Restoration"	Morristown	Morris
John Saponara	PhD in ecology and evolutionary biology from Cornell, 1994	Ringoes	Hunterdon
Kate Krehel		Princeton	Mercer
Katherine Evans	Employment-NJ Div. Parks & Forestry, Clean Water Action, MA Audubon	Stockholm	Sussex
Kimi Wei		Fair Lawn	Bergen
Larry Baum	Minor in Mathematics; BSc. in Conservation Biology, Biology and Physics; Ph.D. in Theoretical Physics; have been involved with forest conservation issues since the early 90s; have done extensive reading on mature and old-growth forests; have grown up in an old forest and visited many mature and old-growth forests in the region and across parts of the U.S.	Rockaway	Morris
Leslie J Sauer	Assoc. prof UPENN, founder emeritus of Andropogon Associates. an environmental consulting firm, founding partner Society for Ecological Restoration	Sergeantsville	Hunterdon

Margaret Wood	(1) Bachelors degree in Aerospace Engineering, 1979, Polytechnic Institute of New York, (merged with NYU and now known as New York University Tandon School of Engineering). (2) Master's degree in Aerospace Engineering, 1981, from Polytechnic University, (merged with NYU and now known as New York University Tandon School of Engineering). (+) Continued to take additional graduate school courses for 2+ years beyond the Masters Degree. (Same University as above).	West Milford	Passaic
Matt Smith		New Brunswick	Middlesex
Nicholas Homyak		Lake Hiawatha	Morris
Robert W Moss	BA Economics	Bloomfield	Essex
Susan Michniewski	NA	Hopewell township	Mercer
Thomas Conway		Ringwood	Passaic
Wilma Frey	MLA (Landscape Architecture) Harvard GSD; MPA- MidCareer, Harvard Kennedy Sch. Govt.	Tewksbury Township	Hunterdon

*Optional – participants were asked to provide any credentials (education, experience) voluntarily. Some provided this information and others did not. The absence of credentials does not necessarily imply that the participant does not have a degree or experience.

Appendix B. Supporting Opinions

Following the conclusion of workgroup meetings and framework development, participants were given opportunity to express their final report commentary to be included in this report.

The following comments were submitted by participants and organizations **in support** of the final framework. Participants were given 2500 characters.

A total of 35 responses were recorded – 16 were submitted on behalf of organizations and 19 were submitted by individuals representing themselves.

Supporting Opinions of Organizations:

Several organizations designated a Task Force representative to participate on behalf of an organization's viewpoint. There are 16 organizations that signed off on a response in support of the framework.

Ocean County Dept Parks and Recreation
Representative: Geoffrey Lohmeyer, *County Park Manager*

> The framework presented to group is a good start. Before we are able to go in depth on specific topics I agree with the chairs that we must first agree on the broad topics that would outline how we breakdown into deeper discussions.

Great Egg Harbor Watershed Association
Representative: Fred Akers, *Operations Manager*

> The process was robust, inclusive, and deliberative. The final Task Force Framework was an iterative compromise carefully crafted to maximize a consensus for forest managment in NJ.

The Wildlife Society, NJ Chapter
Representative: Brian Kirkpatrick, *President*

> Providing forests in varying stages of succession is critical to maintaining diverse wildlife populations. With regard to carbon sequestration and storage multiple age structures are likewise important. General young forests are more efficient at removing carbon from the atmosphere while older forests contain more carbon storage. At some point time time forests become net emitters of carbon and other pollutants (e.g., VOCs). Commercial harvest options

should be considered as viable option for forest management as it provides economic benefits and potential for reduced fossil fuel consumption and long term storage of carbon in production of durable products (e.g., lumber)

Friends of Hopewell Valley Open Space

Representative: Michael Van Clef, *Stewardship Director*

"The co-chairs did an extremely good job synthesizing diverse opinions to create a framework that has the potential to significantly improve forest stewardship, both in stakeholder/public perception and stewardship outcomes. The use of expert panels is key to moving forward in a way that allows the multiple perspectives required to steward public lands for multiple purposes.

I strongly support the framework and all of its elements. Given my particular experience/interest on invasive species, I most strongly support this element."

NJ Audubon

Representative: Alex Ireland, *President and CEO*

"Overall, the proposed framework represents a balanced approach to mapping resources, developing plans, and managing publicly owned forests. Inclusion of critical concepts like scale, variability in forest ecosystems, and application of adaptive management frameworks make it possible for me to support this framework. I appreciate the inclusion of properly credentialed science advisory groups as a mechanism to weigh trade-offs and drive thoughtful decisions.

I have three broad areas of potential concern, which I list below in order of importance.

First, I have some concern that the framework overemphasizes the importance of biological carbon sequestration and overstates by implication the potential for NJ forests to offset emissions (all natural sinks only offset ~8% of 2018 emissions within the state, https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf). As the state progresses, it will be critical to maintain focus on habitat and biodiversity needs, managing for structural and compositional diversity at the landscape-scale. Singular focus on maximizing biological carbon sequestration could have severe ecological consequences through simplification while delivering negligible absolute benefits to the global climate system.

Second, I am somewhat concerned that proposed formal rulemaking processes for management plans could take longer than anticipated and once completed the resulting administrative burden could further reduce the rate at which scientifically defensible management actions occur in publicly owned forests.

Third, the framework of course proposes an aggressive agenda for an already overburdened agency. While the framework clearly calls for added resources to DEP, the magnitude of the added charge could well outstrip the willingness of the legislature to provide additional funding."

Allegheny Society of American Foresters (NJ Division)

Representative: Steven Kallesser, *Chair Emeritus*

"The New Jersey Division of the Allegheny Society of American Foresters generally supports the framework, as written. This organization does so, largely as an acceptance of the compromises made on most -- if not all sides -- of this issue.

Our greatest concern is an issue that was part of the charge of the task force, and therefore has been treated as out-of-bounds by the co-chairs. Specifically, the task force's recommendations are to apply to all public lands within the state. Any subsequent action taken by legislative or executive action must reflect the enormous disparity in resources between the NJDEP and the average municipality. It is not reasonable to subject a municipality with no full-time staff relying on a local Boy Scout troop for manpower on a 30 acre property to the same standards as a branch of the NJDEP with a suite of full-time employee subject matter experts and significant stewardship budget managing a property of 1,500 acres or more. We trust that policymakers will recognize this simple fact.
In general, we still believe that the framework contains too many advisory groups and recommends hiring too many additional full-time employees, all with too little benefit given the cost. This cost is not only measured in dollars and cents, but also in NJDEP (and NJDA) staff time to oversee, and also in dilution of the expertise of the local land manager (be it State Park Service Superintendent, Forest Service Forester, or Fish & Wildlife Land Manager, etc.). We trust that policymakers will only implement those parts of this framework that pass a rudimentary cost/benefit analysis.

Lastly, we believe that a key finding of any legislative or executive action based on this framework must include the fact that New Jersey's forests are disturbance-dependent ecosystems. While this is most obvious in the Pinelands, it is also incontrovertibly true throughout the rest of the state. As such, a decision (or a non-decision) that results in non-management must be viewed as a management decision that will result in consequences. While not explicitly stated, the tone of the framework is tilted away from active management. We trust that policymakers will treat any decision not to manage as a management decision, subject to all of the analysis demanded of any other management decision. Being pro-active gives the NJDEP -- acting in accordance with its various legislative mandates -- a fighting chance of meeting its goals."

New Jersey Forestry Association

Representative: Richard B. Kelsky, *Member & Board of Directors*

"The New Jersey Forestry Association ("NJFA") appreciates the opportunity to participate in the NJ Forest Task Force ("Task Force") and comment on its "Conceptual Framework of Recommendations" ("Framework") for NJ's public forests.

Since the Framework is a "starting point" of "ideas" with the "details still to be worked out in legislation and rulemaking," NJFA believes that line-by-line comments would be counter-productive at this time. Our general comments are below.

1.Framework Support

The NJFA supports the Framework, consistent with this response.

2.Renewed Focus on Public Forests

The NJFA supports a renewed focus on NJ's public forests, which have been overlooked and under-funded.

3.Forest Management

The NJFA supports planned proactive management of NJ's public forests utilizing recognized science-based management activities to achieve a broad range of goals.

4.Range of Goals

The NJFA recognizes that forest management goals are broad and diverse, for example, forest sustainability, ecological health, habitats, diversity, fire-risk management, climate resiliency, water and soil resources, and recreation.

5.Funding

The NJFA recognizes that responsible forest management of NJ's public forests will require significant funding and that some funding may come through economic recovery from forest products removed during approved forest management activities intended to achieve other primary goals.

6.Legislation and Rulemaking Realities

The NJFA recognizes that the legislative and rulemaking processes will take years, and that in the interim, proactive forest management must proceed to achieve the broad range of forest management goals and reduce risks to NJ's public forests and residents.

7.Forest Uniqueness

The NJFA recognizes that each of NJ's public forests is an individual ecosystem which exists for various purposes and must be analyzed and managed for the intended results within that forest taking into consideration the overall goals for NJ's public forests.

8.The 80x50 Report

The NJFA supports implementation of the Carbon Sequestration Pathways identified in NJ's Global Warming Response Act 80x50 Report - 2020 (pp. 153-156).

Conclusion

The NJFA recognizes the challenges in producing a framework that satisfies most constituents, while remaining focused on the goal of ensuring sustainability of NJ's public forests. We look forward to working with the Task Force, Senator Smith, the Legislature, NJDEP and NJ Parks & Forestry."

NJ Nursery & Landscape Association

Representative: Elmer Platz, *Member*

NJNLA endorses and supports the opinions provided by NJFA

Raritan Headwaters Association

Representative: William Kibler, Director of Policy

"Re: Recommendation 1: The Science Advisory Panel should be separate from DEP

Re: Recommendation 3: The rulemaking and guidelines for developing forest management plans on public forests should include the most stringent protections of streams, wetlands, vernal pools, soil, and steep slopes (including limits on disturbance within buffers); should prohibit commercial logging; should protect mature and maturing forests and with very few exceptions allow tree cutting (but not removal) for active, small-scale habitat management and invasive control. See RHA's proposal to the NJ forest taskforce calling for protection of forested watershed health."

NJ Highlands Coalition

Representative: Elliott Ruga, *Policy & Communications Director*

"Rec. 1: We agree with the concept of statewide planning and the recommendation overall; however, the scientific advisory panel should be independent from the NJDEP and must include a balance of experts from biogeochemistry, ecology, forestry, and wildlife biology such that no group is overrepresented while maintaining an appropriate span of expertise. Without

this clarification we will move to a dissenting opinion on this recommendation due to its potential for greater harm than help.
Rec. 2: We agree with this recommendation.
Rec. 3: We agree with the recommendation only if a moratorium on timber harvesting for the duration of the one-year interim rule making.
Rec. 4: We agree with this recommendation.
Rec. 5: We agree with this recommendation.
Rec. 6: We agree but with the same stipulation as recommendation 1 for both the science advisory panel and the oversight council. Additionally, appointments must be made directly by the DEP Commissioner without delegation.
Rec. 8: We agree but the first sentence should read similar to the following: "… importance of adjusting ecological goals over time due to new data and changing circumstances in our forests...". The term adaptive management is a term used in forestry which may include timber harvesting.
Rec. 9: We agree with this recommendation.
Rec. 10: We agree with this recommendation.
Rec. 11: We agree with the same stipulation as recommendation 3.
Rec. 12: We agree with this recommendation.
Rec. 13: We agree with this recommendation.
Rec. 14: We agree with the same stipulation as recommendation 1.
Rec. 16: We agree with this recommendation."

NJ Tree Farm

Representative: Erica Muller, *Member*

I support the final framework as written and appreciate the hard work that has been put into this!

Princeton Shade Tree Commission

Representative: Sandra Chen, *Member*

The Princeton Shade Tree Commission finds that many of the recommendations in the Conceptual Framework pertain to State agency matters that lie outside its purview. But we do appreciate and support the recommendations for State-wide efforts to reduce deer densities, a ban on the sale of invasive species, and enhancement of the capacity for use of prescribed burns as an ecological management tool. These measures have the potential to strengthen our ability to sustain the health of our municipal forestlands.

National Wild Turkey Federation, NJ Chapter

Representative: Miriam Dunne, *Advisor*

"NJNWTF supports sound management of NJ's forests, and the efforts of the task force to

consider all goals in the management of public lands. Biodiversity goes hand in hand with climate considerations, and managing for biodiversity also enables forests to be more resilient to the expected perturbations that will occur with climate change. Biodiversity is an important a goal as climate resilience, and management needs to take place on public lands at a scale in order to benefit imperiled species. We support the points in the framework that promote prescribed burning, sound scientific-based deer management, and invasive species control.

NJ's forests are valuable to its residents, and the interests in the management of our forests are substantial and increasing. DEP must be given tools (funding and staff) as well as autonomy from political control over the direction that forest management takes. We support the public input process and the addition of councils to help guide DEP's work, but ultimately DEP must be the arbiter of any challenges to its science and policies, and it must not be beholden to the politics of the angry mob. DEP must have the final word on where management takes place and at what scale.

DEP should be able to use commercial harvesting of wood products as a tool to accomplish management goals, whether they be primarily forest health or wildlife management goals. DEP should not be hampered by whether or not a "profit" is realized in the sale of wood products from state land. The state should not have to apologize for saving the taxpayers a little money while accomplishing its management goals."

NJ Outdoor Alliance PAC

Representative: Larry Herrighty, *Board Trustee*

"New Jersey Outdoor Alliance (NJOA) supports the following recommendations:
Recommendation (R) 4. NJOA supports the Natural Areas Program and agrees it needs adequate funding to accomplish its mission.
R 6. NJOA supports establishment of a Science Advisory Panel provided members are appointed by the DEP Commissioner and have term limits.
R 8. NJOA supports adaptive management of all forest lands.
R 9. NJOA recognizes there is significant variation in our forests, both at a landscape and micro level and this should be considered as a guiding principle in forest planning.
R 10. NJOA recognizes forests should be protected and managed to support climate goals while advancing equally important goals as stated.
R 12. NJOA recognizes the use of fire as an important management tool as practiced by DEP.
R 14. NJOA supports the recommendation to adequately fund NJ Hunters Helping the Hungry in order to expand their ability them to pay for the processing of donated deer as outlined in proposal #117.
R 16. NJOA supports increased funding by the legislature in order to implement supported recommendations.
NJOA has reservations concerning the following recommendations:
R 5 & 6. NJOA recognizes that existing old growth or mature forest stands have value that should be protected and that adaptive management should be practiced in order to preserve

and enhance their value, including for carbon sequestration. However, we note that the science on forest management and forest age necessary to optimize carbon sequestration is unsettled. Therefore, the size and amount of such carbon reserves must be carefully considered, given the equally important ecological and societal goals that public forests provide to New Jersey citizens."

NJ Conservation Foundation

Representative: Emile DeVito, *Manager of Science and Stewardship*

"NJ Conservation is honored to have been among the co-chairs of this effort. We appreciate the many hours of dialogue and work by our fellow co-chairs and Task Force members. A consensus process involving a large number of stakeholders with diverse backgrounds will never be 100% to any participants liking. However, we believe that these recommendations reflect broad agreement among many participants and, if implemented effectively, will significantly advance protection and management of NJ's public forestlands.

In particular, we are enthusiastic about the recommendations calling for comprehensive, science-based planning, formal rules governing forest management plans, revitalization of the Natural Areas Program, establishment of carbon reserves to protect mature forests, steps to address invasive species and reduce the deer population, and increased funding to accomplish these goals.

Many of the recommendations will simply be impossible to implement unless NJ DEP has significantly increased funding and staffing, including comprehensive planning for public forestlands, rule-making regarding forest management plans, revitalization of the Natural Areas Program, and addressing invasive species.

Many of these recommendations will also falter if NJ DEP fails to take new, innovative steps to reduce the deer population. Our forests will simply fail to regenerate in many areas, and efforts to increase carbon sequestration through afforestation and reforestation will be frustrated as well. NJ DEP must have clear direction from the legislature to manage the deer population for ecological sustainability rather than for recreational purposes.

The recommendation to establish carbon reserves is critical in light of the state's goal to maintain and enhance carbon stored in natural lands to help meet emissions targets under the Global Warming Response Act. Recent science affirms that allowing intact, mature forests to further mature into old growth forest is an effective sequestration strategy. The forest planning process should identify significant acreage of mature forest cover for designation as carbon reserves, including forests not previously cleared for agriculture that can be identified in the late 1800s C.C. Vermeule forest cover maps and 1930s aerial photography maps. Such forests tend to be the most ecologically intact and have significant potential for carbon sequestration and other ecological benefits if allowed to mature into old growth."

Sierra Club, NJ Chapter

Representative: Greg Gorman, *Conservation Chair*

The proposed framework is an excellent tool to address the development of appropriate legislation and regulation for managing NJ forests. The framework promotes a science-based approach to achieve climate and ecological objectives. We encourage a continuation of an active stakeholder process to ensure the adequacy of forest stewardship plans and prescription.

Supporting Opinions of Task Force Individual Participants:

There are 18 individuals that shared a comment in support of the framework.

Name of Submitter: Rebecca Canright
Credentials: B.A. Evergreen State College
County of Residence: Hunterdon
Affiliated Organization:

> As a young person, I strongly support the ecological protection goals of the task force. It is hard to work together and compromise but I feel you have done an excellent job to the best of your ability. I strongly commend your work to combat invasive species, as well as protect as much forest as possible, while minimizing logging as much as possible. Yeah I think that in this time of climate change, forests are an essential resource for sequestering carbon and protecting biodiversity. New Jersey is a special place of ecological biodiversity, especially our forests, but all of them deserve protection. Thank you for your time and consideration!

Name of Submitter: Elaine Mann
Small Farm Owner
County of Residence: Monmouth

> I fully support

Name of Submitter: Vicki Schwartz
Credentials: PhD, Neuroscience and Behavior, Rutgers
County of Residence: Somerset

> This seems like a very responsible plan. I'm especially happy to see that Recommendation 15 states that commercial profit should not be a goal in any plan on public land. I support the overall goals as well.

Name of Submitter: Matt Olson
Credentials: Ph.D. in Forest Resources
County of Residence: Atlantic

> Many thanks to the co-chairs for leading us to this stage. I'm fine with vision and language of the framework.

Name of Submitter: Gary Thein
Credentials: Master Mechanical Engineering
County of Residence: Essex

"I congratulate the Co-Chairs for their hard work in developing this framework. Participation in the stakeholder process has been educational and led me to a number of conclusions regarding NJ and GHG management. I am indebted to them and Senator Smith for this opportunity. The 'broad agreement' is a form of least common denominator that most of the participants could accept. I believe it could be improved in the following area.

Carbon sequestration in biomass is the only offset to GHG emissions in the NJDEP emissions inventory, accounting for nearly 10% of current emissions. As NJ strives to meet its 2050 GHG goal biomass offsets will become critical. All forestry projects should include a carbon sequestration impact evaluation as a primary criterion.

The NJ Global warming response Act 80x50 Report referenced by the framework requires a 33% increase in biomass sequestration to meet the 80x50 GHG target, presuming NJ meets all of the reduction strategies such as removing all gasoline powered light duty vehicles by 2035 and 100% clean energy generation by 2050! It appears obvious to me that additional sequestration will be necessary to offset shortfalls in these ambitious goals. The report also states:
'State government operations should lead by example by expanding the scope of its land preservation efforts. Executive Order 215 (1989) requires departments, agencies, and authorities of the state to submit environmental assessments or environmental impact statements to the DEP for state-funded or state-initiated construction projects greater than $1 million. This Executive Order should be updated to include consideration of climate change and impacts to natural carbon sinks.' (page 157)

Carbon sequestration in forests is maximized when trees are mature, typically 80 to 100 years after sprouting and continues for centuries. Cutting mature or maturing trees has a negative impact for the remainder of the 21st century. Maintaining the current forested ecosystems is critical. (For example, upland forests store 81.7 tons carbon per acre and are critical to meeting this goal.) The framework specifically avoids recommending proforestation, a crucial error. Afforestation and reforestation projects (Recommendation 10) are admirable but only have long term impact."

Name of Submitter: Ingro Desvousges
Credentials: BA Zoology and ISA Certified Arborist
County of Residence: Hunterdon

Due to the number of invasive species (stilt grass, olive species, barberry, etc.) forests need help to maintain the biodiversity of species acclimated to NJ. Without help, the forests will still look green but the greenery will not be supporting the extent of wildlife it could if invasives were first controlled. Sparta Mountain work by the NJDEP needs to continue.

Name of Submitter: Clifford Paino

Credentials: LEED Green Associate
County of Residence: Morris

I support this framework in general. One concern that I have is regarding the funding that is mentioned throughout the framework. There should be a strong third-party oversight committee in place, to ensure that tax-payer funds are being utilized properly.

Name of Submitter: Bill Beren
County of Residence: Essex
Affiliated Organizations: Sierra Club, Montclair Bird Club

I generally support the principles as enunciated, particularly the emphasis on complying with the state's climate goals and the creation of carbon reserves and enhancing carbon sequestration. I am concerned that Recommendation 12 includes language that prescribed fires should be expanded and that barriers hindering the use of prescribed burns should be overcome prior to the publication of the state forest management plan. I would also strengthen the language in Recommendation 15 - not only should commercial timber management not be a goal for any plan on public lands, but the sale of wood products should only be considered when there is no feasible alternative to leaving timber or other plant materials in place, such as when the plan calls for removing invasive plant or pests or removing diseased wood.

Name of Submitter: Steven Kallesser
Credentials: CF (Certified Forester?)
County of Residence: Hunterdon
Affiliated Organization: Allegheny Society of American Foresters (NJ Division)

"The New Jersey Division of the Allegheny Society of American Foresters generally supports the framework, as written. This organization does so, largely as an acceptance of the compromises made on most -- if not all sides -- of this issue.

Our greatest concern is an issue that was part of the charge of the task force, and therefore has been treated as out-of-bounds by the co-chairs. Specifically, the task force's recommendations are to apply to all public lands within the state. Any subsequent action taken by legislative or executive action must reflect the enormous disparity in resources between the NJDEP and the average municipality. It is not reasonable to subject a municipality with no full-time staff relying on a local Boy Scout troop for manpower on a 30 acre property to the same standards as a branch of the NJDEP with a suite of full-time employee subject matter experts and significant stewardship budget managing a property of 1,500 acres or more. We trust that policymakers will recognize this simple fact.

In general, we still believe that the framework contains too many advisory groups and

recommends hiring too many additional full-time employees, all with too little benefit given the cost. This cost is not only measured in dollars and cents, but also in NJDEP (and NJDA) staff time to oversee, and also in dilution of the expertise of the local land manager (be it State Park Service Superintendent, Forest Service Forester, or Fish & Wildlife Land Manager, etc.). We trust that policymakers will only implement those parts of this framework that pass a rudimentary cost/benefit analysis.

Lastly, we believe that a key finding of any legislative or executive action based on this framework must include the fact that New Jersey's forests are disturbance-dependent ecosystems. While this is most obvious in the Pinelands, it is also incontrovertibly true throughout the rest of the state. As such, a decision (or a non-decision) that results in non-management must be viewed as a management decision that will result in consequences. While not explicitly stated, the tone of the framework is tilted away from active management. We trust that policymakers will treat any decision not to manage as a management decision, subject to all of the analysis demanded of any other management decision. Being pro-active gives the NJDEP -- acting in accordance with its various legislative mandates -- a fighting chance of meeting its goals."

Name of Submitter: Salvatore Vaspol
Credentials: BS Education
County of Residence: Morris

I support the current suggestion as described above

Name of Submitter: Rita M Alzamora
Credentials: BFA, IT certifications
County of Residence: Morris
Affiliated Organization: NJ Historical Garden Foundation (Cross Estate) - not representing

"I am voting for the framework to go forward, yet I do want to voice my opinion on some reservations.
While this document has some merit, it suffers from ambiguous and subjective language resulting in lack of clarity in places. Recommendation 1 is really 2 statewide initiatives: mapping process and planning process, predicated on the assumption that they don't exist today. Re: 'mapping', DEP presentations to NJFTF often contain old data slides and refer to years old studies. This might point to a lack of centralized information of our state's current landscape inventory, history, health, research and analysis regarding the same. Understanding the data are prerequisites for Reqs 4 - 9 and for any planning. And data should be fresh (not every 10 years! Re: Req 8) especially if the planners have any hope of being adaptive to our changing environment. My hope is that a focus on methodologies to collect, store, share and model data will be developed.
Furthermore, in good faith, I am expecting the 'scientific advisory panel' to include the diverse

viewpoints enjoyed in the NJFTF.
I am not sure what issue Req 12 is attempting to solve. The DEP should continue to do a lot of things, why single out fire? What is meant by 'fully implement'? Req 15 still leaves a money incentive for harvesting whether the goal is explicitly stated or not.
Lastly, planning should always keep in mind the objective and an idea of what success looks like in meeting those objectives. Potential adverse effects should also be documented."

Name of Submitter: Constance Katzenbach
County of Residence: Mercer
Affiliated Organization:

We are generally in support of the Task Force framework. We do have reservations regarding #13 and the endorsement of proposed Bill S2186 which includes a list of plants to be prohibited, and an unwieldy and unfunded permitting process. That list erroneously includes sericea lespedeza, which is valuable and irreplaceable for small ruminant producers. However these objections do not preclude our overall support.

Name of Submitter: Wendy Mager
Credentials: Law degree
County of Residence: Mercer
Affiliated Organizations: NJCF, Friends of Princeton Open Space, Watershed Institute Advisory Board

Progress on invasive species, protecting natural areas, outlawing commercial logging and requiring science-based forest management are all great things.

Name of Submitter: Matt Polsky
Adjunct Professor
County of Residence: Warren
Affiliated Organization: H

"I support the final product of the NJFTF.
They did a very good job, overall, in what was an impossible task, with very different opinions amongst the participants. They found much more common ground than it often appeared possible.
I do wish some of my views were considered more than they were, but as someone with very different ideas, that historically often take years to enter the mainstream, that was not unexpected. And the group had very fixed topics upon which they wanted to focus. By the end, at least some of my ideas, at least in indirect form, found their way in, although that might have happened regardless.
This initiative is very important, even more so than just because of the given topic. It could be

a precedent for how NJ approaches other difficult issues.
In general, people had a chance to express themselves.
At least once, prominent experts on both sides of a key issue were brought in to discuss their perspectives.
This was an opportunity for those willing to learn some things.
Some reflection, post-completion, on the process itself, and how even it could be improved, could be valuable and would make it an even better precedent for other tough issues.
If there is a future effort to build on this work, the issues I wish it would focus more on are:

- Now that afforestation made its way in, what are some creative possibilities for it? Just because it was established that older, more mature trees are much better at sequestration, that doesn't mean young, newly established trees can't also have multiple benefits. It's not either-or
- More consideration of environmental justice, green jobs, civic science, research (All were originally missing, and it looked like they were rejected. But at least indirectly they came up by the end. However, much more might be possible.)
- Using Sustainability as a guiding framework, not just within one recommendation
- Allowing space for possible beneficial uses of invasives, especially as environments change and we may have to re-think thingsWhere possible, and taking advantage of
- the precedent of this process, calls for routine rulemaking should seek to replicate some of what was done here."

Name of Submitter: Lindsey Kayman
Credentials: Masters Degree: Double Major -Air Pollution Control and Environmental Health Sciences, Certified Industrial Hygienist
County of Residence: Mercer
Affiliated Organization: NJ Environmental Lobby, Environmental Education Fund (not authorized rep for either of these organizations)

"I agree with many of the recommendations. However, these recommendations can amount to secretly expanding the kind of egregious logging being done in Sparta throughout the state. There is a total lack of transparency with respect to logging. Most people don't know that ""logging for ecological health"" means the clear-cutting and extensive thinning of the biggest trees as has been done in Sparta, NJ. There was never any data presented that this type of logging has any benefit to biodiversity. In fact, it was discussed that the 10 years of logging in Sparta failed in its objective of bringing back the golden winged warbler. There was extensive scientific studies presented that showed the harms of logging. There was never serious consideration that preserving forests can help sequester carbon and promote biodiversity. Pro-logging groups were invited to a DEP tour and discussion of unpublished data that were not made available to the rest of us. Why are we relying on unpublished data to damage our best control measure against climate change? Also, there are problems with transparency: the list of people on the task force was never provided but the number of members doubled in size after the deadline for joining. The framework was relabeled ""recommendations"" that

the chairs"believe enjoy broad agreement among diverse participants." This is false. Two surveys asked for feedback on each framework item but quantitative results were never provided. There was never concensus -to say that there is consensus about logging and wood removal is a lie. Logging and wood removal were the only issues that there was disagreement on and no one changed their point of view. "

Name of Submitter: John Parke

Credentials: Certified Senior Professional Wetland Scientist (SWS), Certified Ecologist (ESA), BA in Environmental Studies (Ramapo State College of NJ)

County of Residence: Warren

I support this proposal. NJ needs ecologically sound ACTIVE forest management along with other practices, but active management needs to be able to use all the tools in the tool box to be effective! We have a responsibility to ensure ecological forest heath for not just climate related issues, but also for the numerus wildlife and plant species that make NJ special and in many cases, active management is the right choice, in some cases it may be the only choice. If a forest advisory council is made down the line, all persons and organization(s) nominated for it MUST be properly vetted before being appointed, and should be disqualified from serving on it if found to have, or are related to, an incident connected to being issued a violation, warning, summons, or N.O.V. associated with any NJDEP Land Use regulations, rules, or code. If I took anything from participating in this task force, it is sadly in my opinion, how dysfunctional, Machiavellian (in a real bad way), and out of touch in the science and other related ecological, social, cultural, and economical considerations that go into these discussions some of the groups are, or have become. The bully tactics, inflammatory rhetoric and misinformation campaigns by some in the task force made for a very distrustful and non-professional atmosphere that was toxic to many who were really trying to work with all to find consensuses on the issues. Some groups and individuals could not even keep to the basic ground-rules of the task force and repeatedly broke the rules even when asked to stop. Those actions in my opinion were not productive, nor helped build trust amongst participants. Their bully-like actions truly cheapened the intent of why this task force was created. I found these actions to be undermining the very hope that we could work together for a better outcome and it ruined any chase for legitimate discussion on some topics. And political figures that actually entertain their misleading rhetoric, I personally have no use for also at this point. This exercise to "come to consensus" on something so big that will ultimately shape the future of our state in so many ways, as well as our natural heritage, clearly showed me that there is no place for bullies, hypocrites, deceivers, and distrustful manipulating tricksters at the table of environmental collaboration if we are truly going to make real progress in NJ.

Name of Submitter: Deborah J McConnell

Credentials: BA communications

County of Residence: Ocean

Affiliated Organization: Sierra Club, NJ Chapter Volunteer

"In 1992, I saw the Devistation in Washington state of the clear cutting of forest land, I came home from this sight of entire mountains burned, and charred, with a feeling that has never left me. I have seen in
My own county, the pinelands restored, although I have heard of the burning. To this date, I am a firm believer in the forests and the good they do."

Name of Submitter: David B. Donnelly
State Park Superintendent (Retired)
Credentials: BS - Natural Resource Management
County of Residence: Ocean

"A thank you first to all who worked on the 'Task Force'; all participants, invited speakers and especially Co-Chairs. I was originally told this project would be completed in the summer and here we are still typing in December; so special thanks to everyone for hanging in there!

I support the Task Force framework and I do believe we reached a point that we can move forward from. My main concern is Recommendation #16. My 27-yrs experience in the DEP has taught me that nothing gets done without proper resources. The Department has unfortunately become the under-funded, step-children of NJ Government. It Programs are used for pretty pictures to attract tourists, but then left to stagnate from exhausted investments and staffing levels alike. The DEP's original mission and vision has been lost for many years.

I feel there will be no success on any of the other fifteen recommendations unless elected officials put NJ's future ahead of their own careers and properly fund the DEP. As a Superintendent, I often got asked who was my favorite Park visitor. My response was always the same ""it is an 8-yr old child, born 30 years from now who comes into the Park long after I am gone and says ""wow, this place is amazingly full of plants and animals and things to do""!

I feel there is still hope as many talented and dedicated DEP staffers are still there who could pull this off, but the clock is ticking. It will take significant financial resources to get the DEP back up to speed and save the future of NJ's forests. "

Name of Submitter: Jeanne M. Fox
Adjunct Professor Columbia SIPA & Rutgers Bloustein; former BPU President, DEPE Commissioner/Deputy Commissioner, EPA Region II Administrator
Credentials: BA Douglass College; JD Rutgers Law; Harvard JFK School Certificate; Adjunct Professor Columbia SIPA & Rutgers Bloustein
County of Residence: Middlesex

First and foremost I am grateful that this Task Force was convened due to the existential World Climate Crisis. New Jersey has long been a leader in this fight for the future. My personal

purpose is to do my small part in the Climate struggle. I came into this Task Force effort with an open mind. To me, the prime issue for this Task Force and for the Legislature is how New Jersey can best mitigate GHG reductions. Clearly, carbon sequestration is a significant part of the mitigation efforts. So, the question is "how can we best sequester carbon with this existing public asset - our State forests." I will place more specific comments on that in the "DISSENT" section.

The final report has much to be commended and to most of it, I concur.

Invasive species that harm trees and other vegetation must be addressed now. The Invasive Species subgroup has developed an excellent proposal for the Legislature. I have the privilege of participating with this group of experts and am thrilled with their reasonable recommendations. The full Task Force concurred with the proposal.

Also, a significant reduction in our huge, destructive deer population must also be a high priority. In addition to vehicle impacts, they eat new growth in our forests. I also believe there is agreement on several Pinelands issues, e.g. prescribed burns approved by forest ecologists after the planning is concluded. A separate plan must be done for our precious and unique Pinelands. This plan, as with other plans must be based upon scientific peer-reviewed studies as well as include a robust public participation process. These important topics with recommendations are included in the final report.

I sincerely thank the Task Force Chairs for all their time and effort dedicated to this important effort. I am also personally gratified by the keen public interest. I haven't been very vocal during the Zoom meetings because there are so many participants who need to express their concerns and ideas. It's marvelous to know that so many New Jerseyans are concerned about this critical topic.

Appendix C. Dissenting Opinion

Following the conclusion of workgroup meetings and framework development, participants were given opportunity to express their final report commentary to be included in this report.

The listed comments are from participants and organizations who **disagree** with the framework. Participants were given 2500 characters.

A total of 41 responses for dissenting comments were recorded – 18 opinions from 16 organizations and 23 from individual participants representing themselves.

Dissenting Comments Signed by Organizations:

Many organizations designated a Task Force representative to participate on behalf of an organization's viewpoint. The authorized representative participated in surveys and represented the organization in discussions and in the consensus process. Some of them provided supporting opinions to the framework. Sixteen organizations provided a dissenting comment. Some organizations had more than one dissenting opinion – we received 18 dissenting opinions representing 16 organizations.

Organization: **Animal Protection League of NJ (APLNJ)**
Representative: Angi Metler
Affiliations with Other Organizations: League of Humane Voters of NJ

We oppose the framework in both the process of its adoption & conclusion. It is the status quo, vague, and relies on a "scientific advisory panel. Confirmation bias will play a role in adopting any forest policy using this criterion. Using the DEP rule-making process to dissent is wrong because the DEP adopts rules even when opposition is high. #15 allows for the sale of wood. This incentivizes cutting trees & removing wood. There is no ecological need for this, so remove the sale of wood. Increasing funding to the DEP is premature when the policies are in progress. The statement "all recommendations discussed above require funding" is untrue when some recommendations are vague, and some (i.e., cessation of deer feeding plots on state lands) requires no funding. We oppose prescribed burns for climate & health. It also creates deer habitat, thus growing the deer herd. We reject blaming deer for forest issues because the destruction is caused by other factorsâ€"developers and loggers fragment forests for commercial & residential expansion. Hunters in sync with the DEP use clearcutting to create edge habitats for deer. DEP also uses clearcutting & food plots to grow the deer herd. DEP works with private hunting clubs to plant deer-preferred crops and rewards them when they kill the biggest deer with the largest antlers in its annual deer classic. APLNJ objects to "None of the recommendations are intended to interfere with current approved forest management plans and their associated activities." The state should be reassessing its forest plans, so why wait for those plans to expire before adopting new plans that fight climate change, sequester carbon, protect trees, and preserve wildlife habitat?

The co-chairs wrote the framework. Communication was discouraged between members. The co-chairs decided which proposals would be included in the framework or discussed at meetings. The chat was disabled during Zoom calls, so the co-chairs controlled the discussion.

- Since members did not communicate, this framework does not represent the views of the NJFTF members.
- NJFTF deadlines for proposals & commenting on the final framework were limiting. Finalizing the framework during the December holidays was problematic.
- The voting process was opaque and unjust. While the votes of groups would count more than individuals is fair, some organizations were given more votes than others based on an unfair assessment of whether an organization's members count as "members."

Organization: **Empower NJ**
Representative: Ken Dolsky BA Physics
Affiliations with Other Organizations: Steering Committee EmpowerNJ, VP NJ Forest Watch, Co-leader Don't Gas the Meadowlands Coalition

The framework was originally separate topics. The decision to compile them into a single document is greatly distorting readers' understanding of the positions of participants
This framework is now labeled as Recommendations that the leaders "believe enjoy broad agreement among diverse participants." This is false/misleading. Two surveys asked for feedback on each framework item but quantitative results were never revealed. THERE WAS NEVER ANY FORMAL CONSENSUS ON ANY ELEMENT OF THIS PROJECT. This allowed the leaders to imply agreement but it was never proven. We never agreed to call these Recommendations
This report is a consensus of the chairs, not the participants
As proof, consider item 15. The second sentence says it is OK to continue the logging on public forest land that brought about the task force. While appearing to follow DEP processes and produce beneficial actions, this is misleading: it is based on false science (regarding true biodiversity objectives and environmental and climate change impacts of wood removal), incomplete and biased assessment of the harms/benefits tradeoffs of these activities, revenue generation for private entities (from land purchased with public funds) and no recognition of the importance of public forests in efforts to mitigate climate change. It is not based on any experiential evidence demonstrating that cutting and selling wood products achieves climate goals.
The framework fails to address a primary goal of this task force-an effective response to climate change through forest management. It offers only lip service to climate change filled with loopholes. It offers no plan to manage logging impacts on carbon storage and sequestration and the leaders refused to include proforestation, which many of us support and refused to even consider a moratorium on logging despite many calls for this during the task force meetings.
None of the following key science findings made it into the Framework:
-New insights on carbon sequestration being a function of leaf area (with trees increasing or holding steady on sequestration for hundreds of years)
-Newly logged areas being net emitters of carbon for decades
-The ecological importance of leaving cut wood on the ground and lack of need to remove wood for any ecological purpose
Not including any of these scientific principles has deliberately deprived us of the ability to support such principles and the Framework has many more negative than positive positions.

Organization: **Environmental Education Fund**
Representative: Erica Cowper BS in Biology from Drew University
Pursuing MS in Earth & Environmental Science from Lehigh University
Affiliations with Other Organizations: New Jersey Environmental Lobby

This framework seems to be more of a consensus of the chairs, not the participants. The framework fails to address the primary goal of this task force, to address climate change through forest management. It does not offer a plan to manage the impacts of logging on carbon storage & sequestration. Many members of the task force, including myself, called for a moratorium on logging until a (real) consensus was found, but this was refused by the chairs. Several points, supported by recent science, were left out of this framework including carbon sequestration as a function of leaf area, newly logged areas being net emitters of carbon dioxide for decades, and the ecological importance of leaving fallen or cut trees.

Organization: **Friends of the Drew Forests**
Representative: Judy Kroll
Affiliations with Other Organizations: Yes. Friends of the Drew Forest

The Friends of Drew Forest (FODF), an all volunteer 501c 3 corporation cannot support the proposed framework of the NJ Forest Task Force for the following reasons:

- The framework, though thoroughly reviewed and commented upon extensively, fails to protect NJ public forests, including mature native forests, from current and on-going desecration, including logging, clearing of tree canopy, egregious destruction of forest floors from heavy machinery and large vehicles, removal of logs and resulting devastation to wildlife habitat. In fact, the framework contains the following caveat on page one: "None of the recommendations are intended to interfere with current approved forest management plans and their associated activities." FODF's volunteers joined the Task Force to try to mitigate these exact practices, and were vocal and consistent about this critical need, so it is unfortunate that the Task Force Co-Leaders instead chose to codify the status quo.
- Old forests provide the most climate carbon capture, and are critical to mitigation of our growing climate crisis. Climate change MUST be foremost in any policy making and implementation. To avoid worsening climate change, our public forest policies must: stop cutting mature native trees, stop clearing the canopy, and stop removing logs, stop clearing old forests to grow young forest. The scientific proof for large trees sequestering the most carbon is unquestionable.
- The framework contains far too many vague and undefined terms, leaving many opportunities for interpretations that will not support the goal NJFTF was given in the first place.

Organization: **Friends of the Drew Forests**
Representative: Sara Webb Ph,D. Ecology, M.S. Ecology and Forest Resources
Affiliations with Other Organizations: Trustee Highlands Coalition

This Task Force was created in response to widespread citizen concern about logging of northern NJ's public forests. This practice steeply depletes climate resilience and sacrifices forest-interior biodiversity, where deer and invasive species prevent recovery.

Unfortunately, the proposed framework fails to address these concerns. No protection from short-sighted logging management is called for despite our public forests' great importance today, both for climate defense and for the species reliant on unfragmented mature forests. Proforestation, protecting mature trees for climate defense, was supported by a vast majority of the task force in an early straw poll.

But logging policy is missing from the Framework and was not voted on, though it is a central issue and focus of many proposals. Science is clear: logging our most mature, carbon-rich forests sacrifices both climate defense and biodiversity. Ignoring these concerns in the Framework perpetuates the status quo of problematic deforestation. The Framework offers loopholes and vague language that permit canopy clearance, when it should center on canopy protection. Task force participants submitted extensive research on this subject.

For climate resilience, large trees and mature forests absorb AND store the most planet-warming carbon, per tree and per acre, far more than young or managed forests. This carbon is stored for centuries, and sequestration rates and storage increase exponentially with age for 87% of tree species.

Biodiversity in northern NJ is also threatened by today's logging approach and wood removal, which deplete habitat and soil organic matter. Forest interior species are far more threatened than those of New Jersey's abundant openings and edges, especially as the climate warms. Any creation of young forest habitat should not carve out century-old forests but use New Jersey's abundant young invaded woods and clearings. We support efforts to control deer and invasive species, and emphasize that both threats are exacerbated by opening the canopy. Canopy clearance and the mechanized transport and harvest of timber also impact soil, hydrology, water, vernal pools, and the future forest of young trees. We hope the Task Force report will strongly support ecological stability and restrict intensive management that impairs biodiversity in this time of a warming climate.

Organization: **Great Swamp Watershed Association**
Representative: Dorothea Stillinger
Affiliations with Other Organizations: Great Swamp Watershed Association, NE Forest Watch

Great Swamp Watershed Association's comments on the New Jersey Forest Task Force's final recommendations
(D.K. Stillinger 12-18-22)

1. Very good. Except: Scientific advisory panel must include a forest ecologist plus research professionals in a number no less than equal to the number of individuals certified in commercial forest and timber management.
2. Very good. Except: Until the rule making is complete there has to be a moratorium on logging on public forests.
3. Very good. Except: The statement should read "newly initiated plans will not be approved until the interim rule making is complete." It makes no sense to allow unapproved plans to proceed.
4. Excellent. Well done and badly needed.
5. This item is essentially included in Item 1 so is not needed. As written it is vague and poorly worded and uses jargon. Item 5 should be a clearly worded outline for how public forests can sequester carbon plus the addition of broad immediate and long term goals with requirements to publish results annually.
6. Very good. Commendable and needed.
7. Not needed since it is assumed under Item 6. As written Item 7 uses catch phrases that are not defined and are susceptible to misinterpretation.
8. The first sentence again uses jargon and undefined terms, is implied by other items and should be eliminated. The second sentence is imperative.
9. Excellent.
10. Eliminate the term "ecological health." It is meaningless unless carefully defined. Otherwise very good.
11. Redundant and should be eliminated. Included in other items.
12. Good. The use of fire badly needs to be reevaluated.
13. Excellent.
14. Excellent.
15. Eliminate the third sentence. It includes specifics that should be decided within individual plans rather than in a broad framework. In any event there should be no cutting, removal or sale of wood on and from public forests without public input, peer-reviewed scientific justification, and adherence to restrictions in all documents and deeds , Green Acres restrictions, and wetlands restrictions for the specific tract. Again, the term "ecological health" should not be used unless well defined.
16. Excellent.

= = = = =

Organization: **Highlands Coalition**
Representative: Elliott Ruga
Affiliations with Other Organizations: No

Rec. 1: Without additional language and clarification this recommendation has the potential to cause more harm than good. Specifically, the scientific advisory panel should be independent from the NJDEP and must include a balance of experts from biology, ecology, forestry, and wildlife biology such that no group is overrepresented while maintaining an appropriate span of expertise.
Rec. 7: We agree that at times an intervention is necessary, however, we disagree with the recommendation as stated because active management implies that timber is allowed to be removed from the forest for the purposes mentioned, which we oppose.
Rec. 15: We disagree. This recommendation is egregiously misleading by seeming to prohibit an activity that most agree is wrong in publicly owned forests, commercial timber harvesting. Then, the same activity, timber harvesting, is sanctioned if it is done in service of ecological goals. Today, forest management plans justify timber harvesting to achieve spurious ecological goals, or for legitimate ecological goals that could be accomplished with non-harvest alternatives, i.e., alternatives without the adverse impacts of mechanized harvesting and wood removal. This recommendation upholds the status quo and the continued adverse impacts of timber harvesting in our public forests.

Organization: **League of Human Voters of NJ**
Representative: Doris Lin B.S. in Applied Biological Sciences, Massachusetts Institute of Technology
J.D., University of Southern California Law School
Affiliations with Other Organizations: Legal Director, League of Humane Voters of NJ, Animal Protection League

The League of Humane Voters of New Jersey (LOHVNJ) objects to the NJ Forestry Task Force framework and to the process by which it was adopted.
The framework is vague and leaves too much discretion to a "scientific advisory panel." Science is not policy.
The reliance on public comments in the rulemaking process is misplaced. NJDEP has a history of adopting rules despite overwhelming public opposition.
Recommendation 15 creates an incentive to cut trees and remove wood. There is no ecological reason to remove wood, so allowing the sale should not be recommended at all.
Increasing funding to NJDEP is premature when the policies have not been developed yet. Some recommendations are vague and others (i.e. ending deer feeding plots) require no funding.
We object to prescribed burns, which create the edge habitat that is preferred by deer.
Furthermore, regarding deer, NJDEP has been managing state wildlife management areas for decades to increase the deer herd and grow trophy bucks through prescribed burns and clearcutting (to create edge habitat), food plots for deer and farm leases that require farmers to leave crops standing for deer.
NJDEP partners with hunting clubs to plant food plots for deer, and then gives awards to hunters who kill bucks with the biggest racks. The sale/donation of venison has nothing to do with reducing the deer herd when NJDEP keeps the deer herd artificially abundant for hunters.
We object to the statement that the recommendations are not intended to interfere with current forest management plans. The state should reassess their plans and there is no reason to wait.
LOHVNJ objects to the process of the task force. Task force members (TFMs) could submit proposals, but were not allowed to communicate with each other and were not allowed to author any part of the framework.
The entire framework was written by the co-chairs. TFMs were prohibited from emailing all other members, and chat among members was disabled during the Zoom calls. When a TFM was allowed to present their proposal, there was no vote on the proposal. The co-chairs decided how, if at all, a proposal would be included.
Also, the voting process is opaque and unjust, because some groups were given more votes than others based on an unfair assessment of whether a group's members count as "members."
Lastly, we were given unrealistically short deadlines and character limits, over holiday weekends, for submitting proposals and comments. (abbreviated to 2500 characters)

Organization: **National Wild Turkey Federation, NJ Chapter**
Representative: Miriam Dunne B.S. Natural Resource Management (Cook College, Rutgers University, M.S. Biology (E. Stroudsburg University
Affiliations with Other Organizations: no

Our forests need management, and we cannot wait until a formal rulemaking process is developed for existing plans to be implemented. Several wildlife species of special conservation concern are on the brink of requiring listing as threatened or endangered. Further delays in active forest management to address the needs of these species will result in continued declines in their populations. The state has expended considerable resources to develop plans for forests and Wildlife Management Areas. These plans have been vetted internally and externally and represent sound science. All existing plans should be able to be implemented with no "interim rule making process" to delay their implementation. Likewise DEP should not be prevented from finishing any plans that are in process while an interim process is developed. This delay tactic only serves the anti-management factions who don't believe that forest management can be beneficial for wildlife. There is, indeed, so little actual management taking place at present on state land that discussion of a moratorium on management is laughable. DEP needs to be encouraged to continue management as it has been doing with a robust internal vetting process, and an outreach effort that informs the public as is appropriate and seeks public input. Getting public consensus on stewardship plans will be impossible and it will have to be acknowledged that if biodiversity and forest health is a goal then some trees will have to be cut. It is hoped that the experts at DEP and other advisory professionals will prevail and enable the state to do the management necessary to protect biodiversity and ultimately benefit climate.

We do not support expanding the existing Natural Areas Program. Some NA represent unique habitats but many are designated arbitrarily and are no more unique than their surrounding landscape. Having more robust mapping for unique plant communities, and increasing communication within DEP between the NA manager and the program managers in P&F and DFW would be more beneficial to encouraging sound protection and management of these areas. Likewise we do not support the addition of an oversight council for old growth/carbon reserves. Since 99% of public land is not managed at present, there is a huge advantage to future old growth development. The planning process will identify older stands that can represent future old growth, and indeed define what is meant by old growth.

Organization: **NJ Forest Watch**
Representative: Silvia Solaun MS
Affiliations with Other Organizations: Yes

NJ Forest Watch CANNOT Support the Framework. NJ public forests need to be held to HIGHER Standards. The "Final" framework is biased and not representative of the public stakeholders and has misleading language of which allows the "status quo" to prevail. -Does not describe a plan to use forests to mitigate climate change by protecting and setting aside ALL of the 1M acres of public forests for climate change.-Excludes the concept of Proforestation and it was ridiculous how actual peer-reviewed science has been ignored. -Excludes the use of a moratorium and allows the foresters and NJ Audubon to continue to write plans on public lands with no rules or regulations. -Excludes the use of peer-reviewed science, in particular on carbon sequestration being a function of leaf area (with trees increasing or holding steady on sequestration for hundreds of years), newly logged areas being net emitters of carbon for decades, the ecological importance of leaving cut wood on the ground and lack of need to remove wood for any ecological purpose. -The timeframe for new regulations is too long. We want forest protections NOW. Public forests, like on Sparta Mtn are being destroyed now. Purposely put within the framework are buzz words like "ecological health" and these are too vague and allow the status quo to continue. Instead, NJ should enact a "Forever Wild" component to ALL of the 1 M acres of public lands as the climate crisis is real and cutting more forests down, is exacerbating the issue.
Now on with the issues with the NJFTF process as stated in our previous comments but worthy of repetition: More than half of the taskforce chairs & their organizations benefit from the writing, implementation and "stewardship" of public lands. This demonstrates that the taskforce is represented by biased, and financially motivated groups. These financial motives of these groups are for "self preservation" & are not in the best interest of the public! The Taskforce did not use promised consensus process, but instead only used surveys. There was never a reveal of last 2 rounds of surveys on the framework. Instead, all participants should have full disclosure of who participated in the surveys, and NO outside agencies should have been allowed to participate. There was never a debate process. There was no peer reviewed Science presented, instead it was all SPIN manufactured by the groups who benefit from the writing and implementation of logging plans throughout the state.

Organization: **NJ Outdoor Alliance PAC**
Representative: Larry Herrighty B.S. Wildlife Managment
Affiliations with Other Organizations: New Jersey Outdoor Alliance PAC, Nj Hunters Helping The Hungry, Nj State Federation Of Sportsmen's Clubs

The New Jersey Outdoor Alliance (NJOA) does not support the following recommendations:
Recommendation (R) 1. NJOA does not believe that DEP needs to be "directed" to initiate statewide planning and mapping of forest lands. DEP is already conducting these activities but is restrained by a lack of funding.
R 2. NJOA is satisfied with the 14-step process currently used by DEP to create Forest Management Plans.
R 3. NJOA does not believe rule-making is necessary for the DEP process of creating forest management plans and recognizes a thorough public process exists within the existing process.
R 7. NJOA does not believe DEP needs to be "directed" to identify where to practice active forest management since such management is already practiced to meet stated objectives.
R 11. NJOA believes the current DEP process is adequate and rulemaking is not necessary.
R 13. NJOA does not believe DEP needs to be "directed" to amplify efforts to combat invasive species. DEP's efforts are constrained by funding which should be increased to fully implement their effort.
R 14. NJOA does not believe the Science Advisory Panel is needed to guide DEP deer management as a public process through the Fish and Game Council rulemaking is adequate. Predators such as bobcats, bears and coyotes prey on deer. However, increasing bear and coyote populations such in order to manage deer in an undefined "deep forest" puts public safety at risk and is not necessary. The Fish and Game Council has already adopted regulations to allow fertility control of isolated deer populations. Fertility control has been proven to be ineffective on deer populations over the general landscape. NJOA opposes the development of a pilot program for commercial use of deer because it is not needed, it is inconsistent with the North American Model of Wildlife Conservation, is not cost-effective and no infrastructure for processing deer commercially exists in NJ or if created, likely not to be profitable. It is an inappropriate use of a public resource on public land. Recreational deer hunting is the most cost-effective means of controlling deer and when conducted on public land and unimpeded, has resulted in the ability to regenerate forests. The Fish and Game Council has the authority to adjust deer season length and bag limit if necessary to promote forest health.
R 15. DEP has not made commercial use of forest products as a primary goal in any forest management plan, therefore R 15 is not needed.

Organization: **NY NJ Trail Conference**
Representative: Timothy McKenna 25 years as an executive in the paper and forest product industry
Affiliations with Other Organizations:

While there are a number of valuable recommendations in the NJFTF Frameworkâ€"particularly the recommendations that the state DEP develop regulations governing forests and conduct an inventory of our public forestsâ€"the Framework presents a problem for those whose highest goal is to foster and preserve mature forests on New Jersey's public lands. Those of us on the conservation side of the issue believe that the crucial task is to halt current damage to our public forests created by logging and tree removal. The current framework leaves many of the critical concepts such as active management, protection and reforestation loosely defined such that they can be interpreted to justify the current status quo in NJ forests which most Task Force members oppose. Furthermore, the NY-NY Trail Conference, which I represent, strongly believes that our public forests, in a small, densely populated state, were set aside for the good of the public and those forests should be allowed to flourish in their natural state to provide recreation and appreciation of nature for as many as possible. As a former executive in the forest industry, I fully recognize there is a need for wood products and for cultivating tree farms that supply those products. However, I am also convinced that in New Jersey in natural areas set aside for the benefit of the public the highest and best use is to leave the forests in their natural state. I respectfully submit our comments and am grateful to the leaders and the Senator for establishing the task force, but I am convinced there is more work to do.

Organization: **Raritan Headwaters Association**
Representative: William Kibler J.D.
Affiliations with Other Organizations: Rariatn Headwaters

We support a pause on all new management plan approvals beginning immediately. We support a pause on current and new forest management projects until the legislative process has been completed and rules are adopted and implemented consistent with a robust public input process.

Organization: **Ridge and Valley Conservancy**
Representative: Christine Hepburn Ph.D. in Psychology (relevant for evaluating scientific papers)
Affiliations with Other Organizations: Ridge and Valley Conservancy, Friends of the Drew Forest

Despite agreeing with many of the Framework's Recommendations, RVC dissents from the Framework overall because:

The Framework does not express an overarching rationale or vision for the codification of the management of New Jersey's public forests. RVC believes that the primary rationale should be climate defense. In view of the existential crisis posed by climate change, and the indispensable role that trees play in carbon storage, all forest management activities should support this role. No activities should decrease a forest's contribution to climate mitigation, except for invasive species control. But the Framework nowhere recommends a prohibition on cutting of large trees and on removal of wood. Recommendation 10 for managing forests "as necessary to advance state climate goals" is weakened by the loophole of managing for other "equally important goals," when fully protecting forests for their climate-defense capabilities would automatically advance these other goals. The extensive tree cutting on Sparta Mountain WMAâ€"purportedly done to enhance biodiversityâ€"is an example of how this loophole can be exploited. Implementing policies based on climate defense would require DEP to rethink its approach to forest management, rejecting timber-production forestry methods in favor of proforestation, which allows for a variety of activities that do not involve significant tree-cutting or removal of wood. DEP is likely to resist such a paradigm shift and unlikely to effectively implement a statute that is not clearly based on a vision that demands change.

The Framework is not science-based. All efforts at introducing scientific proforestation concepts and language to the Framework were rejected. Many proposals for science-based management were never allowed to be discussed. The Framework's vague language (e.g., management for "future threats to ecological health") sounds good but would allow continuation of the current practice of logging mature forest timber under the guise, for example, of habitat creation for early successional bird species.

The Framework does not suspend already approved/ongoing logging activities on public forests prior to completion of rulemaking. The proposed rulemaking processes are welcome, as virtually no rules exist governing forestry on public lands. But given the 3-year window allowed for DEP rulemaking, this delay could allow for extensive areas of further logging in public forests, such as on Sparta Mountain WMA.

Organization: **Ridge and Valley Conservancy**
Representative: Susi Tilley Executive Director, Ridge and Valley Conservancy
Affiliations with Other Organizations: I am representing Ridge and Valley Conservancy's Board of Trustees

The Explanatory Statement for No Vote on the Forestry Task Force Conceptual Framework of Recommendations and the reasons despite agreeing in general with Recommendations 1, 2, 3, 4, 5, 9, 11, 12, 13, 14, and 16 in the Conceptual Framework of Recommendations will be emailed separately to the Task Force because it exceeds the 2500 characters allowed in this Google Form.

Organization: **Sourland Conservancy**
Representative: Joe Kazimierczyk
Affiliations with Other Organizations: Sourland Conservancy

Sourland Conservancy has concerns about recommendations regarding the time-frame for implementation. As currently written, the framework would allow new plans using existing questionable practices to proceed, if interim rules are not propagated within one year.
Another concern is that allowing the sale of wood products could become a loophole for commercial logging, and we hope that subsequent rules and legislation will prevent this.
Finally, we hope that the use of "ecological restoration" would not be used as a reason to fragment existing older growth forests.
Overall the Framework is an improvement over the exiting state of affairs, but we don't think it goes far enough.

Organization: **Support Roaring Rock Park**
Representative: Laura Oltman
Affiliations with Other Organizations: Support Roaring Rock Park, New Jersey Highlands Coalition

My comment on every round of feedback on this framework is that it lacks any statements of goals or policy to guide management decisions. This is a critical failing no matter what the desired outcome. No one knows for sure what the management recommendations should accomplish and therefore we have no assurance they won't result in damage to our forests. There is too much vague language around tree removal, leaving the likelihood that the door will be as least as wide open to timber harvesting after all this deliberation as it was before, and that is pretty wide open. Right now timber harvesting by itself is being described in logging plans as a conservation purpose to make trees in the forest more healthy. I strongly disagree with that position.

I strongly support the emphasis in the framework on the need to create regulations for forest management on public lands but that does not overcome my objections to other aspects of the framework. I don't know how regulations can be guided without a clear statement of policy.

Organization: **Thonet Associates**
Representative: John Thonet BS & MS degrees in Forestry, SUNY College of Environmental Science and Forestry; Licensed Professional Engineer and Professional Plannier in New Jersey
Affiliations with Other Organizations: Thonet Associates, Inc.; Association of New Jersey Environmental Commissions; New Jersey Highlands Coalitions; New Jersey Environmental Lobby.

Thonet Associates does not agree with Recommendations 7, 8, and 15 mostly because the NJFTF has acknowledged that evaluating "the science" is beyond its capabilities , and yet the NJFTF's recommendation nos. 7, 8. and 15, require some knowledge of "the science.." without which the NJFTF does not have an informed basis for making those recommendations.
Nonetheless, Thonet Associates supports Recommendation nods. 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16, which represent over 80% of the NJFTF's recommendations, and thanks the NJFTF for its efforts to achieve consensus.

Cynthia Soroka-Dunn
AS Broadcasting Bergen Community College, BA Communications SUNY New Paltz

Feel that this group doesn't consider the opinions of the group. Feel that anything that is said that doesn't agree with the people that head up this group they ignore. It is very upsetting and don't feel they are at all what they are supposed to be. They are slanted in their opinion to their own agenda and not what the people of NJ feel is right.

Nicholas Homyak

Volunteer in Parks since 1976 officially Member Invasives Strike Force

1: Inventory Planing: It must include terrestrial ecologist, not forester. What would the need of a forester be on a science advisory panel; especially if means silviculture, or obtaining wood-products. The Term must be clarified specifically in it's meaning. Forest Manage themselves through the phenomena of self-organization. Forestry is a form of disturbance, which weakens ecosystem biodiversity, and spreads invasive species through that disturbance.

2. 3-years is too long. Immediate set asides should be earmarked for all Public Forest Remaining, as their ecological services, (free of charge) are already working to mitigate climate change due to humans. Forests are important because they are removing nearly 30% of our emissions annually - the most of any ecosystem. They also store vast quantities of carbon in the wood of trees and in forest soils. It has been found that managing forest differently to let more trees reach a large size could store twice as much as they do.

Current practice of sustainable forestry - if it were practiced everywhere would keep the amount of carbon in forests forever at the current level. We need to be increasing the carbon stored in forests by proforestation management- letting more trees grow without harvest. Proforestation somehow has escaped this Task Force as a management Paradigm; Why?

3. logging or tree removal must not take place. This Recommendation seems unnecessary. The matter at hand for guidelines should be immediate Public Forest set asides, and a moratorium forbidding logging, or habitat creation through silviculture guise or ploys. Proforestation.

5. Proforestation as a compliment to afforestation and reforestation is absent.

6. Has loop-holes to continue disturbance activities within the 'ecological reserves", what is an ecological or safety threat in a forest reserve; especially in the Northern NJ Forest?

15. Is double talk. logging for ecological health, is absurd. The disturbance of ingress and egress and the required disciplines of any work force will surely injure and further contaminate any public forest remaining. Any disturbance should be for invasive curtailments and natural enhancements where the effort and cost would be worth it.

The Task Force overall has slipped away from the major background of it's intention. Climate Change or the role Forest can and do play in climate mitigation, through their ecological services and powers of self-organization. Proforestation a must.

jean publiee

many credits after b.s.

this committe was never fair. it did not listen to the attendees. it had its own agenda that was followed and was very unamerican in its treatmetn of attendees. in america, everybody is listned to. this group was determined to never listen to anybody but those it wanted to. the rest were disrespected

Renee Becker
private citizen

We failed Senator Smith. We were tasked to recommend proposals on how to mitigate the effects of climate change as our number one priority. However our meetings focused mainly on finding items of consensus. I commend our co-chairs for their tireless efforts. But the elephant in the room (climate change) was sidelined.
National Geographic's Magazine Special Issue "Saving Forests â€" They're Key to Protecting the Planet, Now They Need Our Help" contained a wealth of data. In its 144 pages, not one article refers to "clear cutting" or "creating young forests" as a solution. This magazine, a scientific authority, contained undisputed evidence that we need to put an end to logging. New Jerseyians deserve better. We need to create a moratorium to logging of Sparta Mountain and elsewhere in the state.
The American Legislative Exchange Council (ALEC) created terms such as "young forests" "healthy forests" or "clear cutting". This organization helps provide legislative bills for our congressmen. A major contributor to this group is David Koch, the owner of "Brawny" and other paper products. Koch is a proponent of logging. And ALEC promotes these terms. This is a marketing ploy to turn a negative (logging) into a positive (clear cutting). As a retired advertising executive, I know the jargon. And it works. Nonsense, don't let it fool us!
Some people may feel that revenue generated through logging creates opportunities to fund worthwhile projects. Raising money from commercial logging is short sighted. We need to protect our assets (our forests) now more than ever. The means does not justify the end. Once our most desirable trees are harvested they are gone forever. If there is a need to generate revenue, then we should grow tree farms for the purpose of harvesting timber as being done by the Wawayanda Tree Farm in Vernon.

Joe Basralian

BA, Cornell University; MBA, NYU; 23 years in financial services; 5 years in nature conservation; Rutgers Environmental Steward; Rutgers Cooperative Extension environmental coursework; Reader of 80 books on environmental conservation since 2014

Totally ineffectual wording of Recommendation #15 risks making the rest of the Framework look mostly like a fancy obfuscation to allow more materials removal for private gain from our public forestland. Several vocal participants of the NJFTF made it clear that they benefit financially -- personally and professionally -- from removing material from forests that belong to us taxpayers. At no point did these participants make formal disclosures of their conflict of interest. I also learned that New Jersey Audubon gets paid handsomely -- like a private consulting firm would -- for tagging trees for removal; yet NJA made zero disclosure of the revenue it makes from materials removal our public forests. This is one example of the conflict of interest evident during the NJFTF process.

Given that NJA and a forester who removes materials for private gain comprised half the members of the NJFTF, the odds were stacked against the 9 million New Jersey residents who have paid to protect our *public* forest land. This fundamental problem undermines the NJFTF's call for more stewardship on public land, reminds that me conflicts of interest are five in Administrative Procedures too (Recommendation #2, 3, 11), and tells me that any portion of NJ's publicly owned forests that don't receive additional protections will be left more vulnerable than before to streamlined forest products removal-for-private-financial-benefit.

This can be avoided if Recommendation #15 is re-worded to be given meaning. The current wording imposes absolutely no restriction on forest products removal for private gain. The word "should" invalidates the entire Recommendation (since it doesn't say "must"). The qualifier "as a goal" also invalidates the entire Recommendation because any actor can say, "that's not our goal".

Recommendation #15 ought to say, "As a condition to any updated public forest management rules, the NJDEP must prohibit sale or trade of forest materials

on public land." Anything other than strong, clear wording like that opens up more of our public forests to private gain, even as the Framework may add additional rationale for protecting a portion of public land.

I believe that an unconflicted version of the NJFTF would have further developed and expanded recommendations #16, 14, 13, 12. Let us urge the Legislature to take these up with gusto.

John Miraglia

none

Great recommendations are included in this Framework. CONGRATS to its contributors and authors. In several of the the recommendations carbon sequestration is consistently featured first as a benefit and goal. However, for many consumptive and non-consumptive users of NJ's forests other goals might have a higher priority, biodiversity for example. Given that the recommendations will require NJ citizen support to be funded & implemented, I have 2 recommendations: 1. rotate featuring other goals in the Framework, 2. while professionals in related fields should dominate execution of the recommendations, a greater variety of user groups interested in NJ forests should be included in developing & implementing the Framework's plans. Notably absent from the Framework sponsors are organizations representing non-commercial consumptive users of our forests...hunters and anglers.
On a related note, deer are the only animals specifically noted in the Framework. But NJ has issues/interests in other species: decline of several upland bird and none game species for example. Any action (or non-action) taken in our forests will have positive or negative impacts on different species. Recommendations or impacts on those threatened species should be included in any forest plan also.

Ken Dolsky

BA Physics

The framework was originally separate topics. The decision to compile them into a single document is greatly distorting readers' understanding of the positions of participants

This framework is now labeled as Recommendations that the leaders "believe enjoy broad agreement among diverse participants." This is false/misleading. Two surveys asked for feedback on each framework item but quantitative results were never revealed. THERE WAS NEVER ANY FORMAL CONSENSUS ON ANY ELEMENT OF THIS PROJECT. This allowed the leaders to imply agreement but it was never proven. We never agreed to call these Recommendations

This report is a consensus of the chairs, not the participants

As proof, consider item 15. The second sentence says it is OK to continue the logging on public forest land that brought about the task force. While appearing to follow DEP processes and produce beneficial actions, this is misleading: it is based on false science (regarding true biodiversity objectives and environmental and climate change impacts of wood removal), incomplete and biased assessment of the harms/benefits tradeoffs of these activities, revenue generation for private entities (from land purchased with public funds) and no recognition of the importance of public forests in efforts to mitigate climate change. It is not based on any experiential evidence demonstrating that cutting and selling wood products achieves climate goals.

The framework fails to address a primary goal of this task force-an effective response to climate change through forest management. It offers only lip service to climate change filled with loopholes. It offers no plan to manage logging impacts on carbon storage and sequestration and the leaders refused to include proforestation, which many of us support and refused to even consider a moratorium on logging despite many calls for this during the task force meetings.

None of the following key science findings made it into the Framework:

-New insights on carbon sequestration being a function of leaf area (with trees increasing or holding steady on sequestration for hundreds of years)

-Newly logged areas being net emitters of carbon for decades

-The ecological importance of leaving cut wood on the ground and lack of need to remove wood for any ecological purpose

Not including any of these scientific principles has deliberately deprived us of the ability to support such principles and the Framework has many more negative than positive positions.

Ally Karanikas

The NJ Student Sustainability Coalition does not approve of the framework and report.

John Thonet

BS & MS degrees in Forestry, SUNY College of Environmental Science and Forestry; Licensed Professional Engineer and Professional Plannier in New Jersey

Thonet Associates does not agree with Recommendations 7, 8, and 15 mostly because the NJFTF has acknowledged that evaluating "the science" is beyond its capabilities , and yet the NJFTF's recommendation nos. 7, 8. and 15, require some knowledge of "the science.." without which the NJFTF does not have an informed basis for making those recommendations.

Nonetheless, Thonet Associates supports Recommendation nods. 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, and 16, which represent over 80% of the NJFTF's recommendations, and thanks the NJFTF for its efforts to achieve consensus.

susan michniewski

NA

There are many things to like about the framework, including the proposals for deer and invasive species management. However, the framework does not go far enough in changing the current practices of logging on our public lands. Regulations are needed which put proforestation as the goal for managing public forests. The framework proposes rules be adopted within 3 years, which is reasonable. However, the proposed interim plan is not adequate as it allows for the current policies to continue if interim regulations are not adopted within 1 year. Having interim rules adopted in 1 year is highly unlikely due to the need to formulate those regulations, go through internal review, and then public review. I believe that a moratorium is needed to prevent the approval of plans that allow for mechanized logging until such time that formal rules are adopted which prioritize proforestation as the goal. No large native trees or mature forests should be logged, such as being done at Sparta Mountain. No large trees or mature forests should be cut to create "young forest". Climate mitigation and the ecological benefit of mature forests should be our priority.

Laura Oltman

My comment on every round of feedback on this framework is that it lacks any statements of goals or policy to guide management decisions. This is a critical failing no matter what the desired outcome. No one knows for sure what the management recommendations should accomplish and therefore we have no assurance they won't result in damage to our forests. There is too much vague language around tree removal, leaving the likelihood that the door will be as least as wide open to timber harvesting after all this deliberation as it was before, and that is pretty wide open. Right now timber harvesting by itself is being described in logging plans as a conservation purpose to make trees in the forest more healthy. I strongly disagree with that position.

I strongly support the emphasis in the framework on the need to create regulations for forest management on public lands but that does not overcome my objections to other aspects of the framework. I don't know how regulations can be guided without a clear statement of policy.

Kate Krehel

While I can support some of the individual recommendations, I feel that the framework is too broad to support overall. I think it needs to go further to fully and adequately respond to our extremely pressing climate crisis. There is global scientific consensus that forests are our best defense against climate change, and so it should ensure the protection of our forests to a greater degree in order to stray from the status quo and effectively respond to this climate crisis and help prevent species extinction.

Timothy McKenna

25 years as an executive in the paper and forest product industry

While there are a number of valuable recommendations in the NJFTF Frameworkâ€”particularly the recommendations that the state DEP develop regulations governing forests and conduct an inventory of our public forestsâ€”the Framework presents a problem for those whose highest goal is to foster and preserve mature forests on New Jersey's public lands. Those of us on the conservation side of the issue believe that the crucial task is to halt current damage to our public forests created by logging and tree removal. The current framework leaves many of the critical concepts such as active management, protection and reforestation loosely defined such that they can be interpreted to justify the current status quo in NJ forests which most Task Force members oppose. Furthermore, the NY-NY Trail Conference, which I represent, strongly believes that our public forests, in a small, densely populated state, were set aside for the good of the public and those forests should be allowed to flourish in their natural state to provide recreation and appreciation of nature for as many as possible. As a former executive in the forest industry, I fully recognize there is a need for wood products and for cultivating tree farms that supply those products. However, I am also convinced that in New Jersey in natural areas set aside for the benefit of the public the highest and best use is to leave the forests in their natural state. I respectfully submit our comments and am grateful to the leaders and the Senator for establishing the task force, but I am convinced there is more work to do.

Erica Cowper
BS in Biology from Drew University
Pursuing MS in Earth & Environmental Science from Lehigh University

This framework seems to be more of a consensus of the chairs, not the participants. The framework fails to address the primary goal of this task force, to address climate change through forest management. It does not offer a plan to manage the impacts of logging on carbon storage & sequestration. Many members of the task force, including myself, called for a moratorium on logging until a (real) consensus was found, but this was refused by the chairs. Several points, supported by recent science, were left out of this framework including carbon sequestration as a function of leaf area, newly logged areas being net emitters of carbon dioxide for decades, and the ecological importance of leaving fallen or cut trees.

Dorothea Stillinger

Great Swamp Watershed Association's comments on the New Jersey Forest Task Force's final recommendations

(D.K. Stillinger 12-18-22)

1. Very good. Except: Scientific advisory panel must include a forest ecologist plus research professionals in a number no less than equal to the number of individuals certified in commercial forest and timber management.

2. Very good. Except: Until the rule making is complete there has to be a moratorium on logging on public forests.

3. Very good. Except: The statement should read "newly initiated plans will not be approved until the interim rule making is complete." It makes no sense to allow unapproved plans to proceed.

4. Excellent. Well done and badly needed.

5. This item is essentially included in Item 1 so is not needed. As written it is vague and poorly worded and uses jargon. Item 5 should be a clearly worded outline for how public forests can sequester carbon plus the addition of broad immediate and long term goals with requirements to publish results annually.

6. Very good. Commendable and needed.

7. Not needed since it is assumed under Item 6. As written Item 7 uses catch phrases that are not defined and are susceptible to misinterpretation.

8. The first sentence again uses jargon and undefined terms, is implied by other items and should be eliminated. The second sentence is imperative.

9. Excellent.

10. Eliminate the term "ecological health." It is meaningless unless carefully defined. Otherwise very good.

11. Redundant and should be eliminated. Included in other items.

12. Good. The use of fire badly needs to be reevaluated.

13. Excellent.

14. Excellent.

15. Eliminate the third sentence. It includes specifics that should be decided within individual plans rather than in a broad framework. In any event there should be no cutting, removal or sale of wood on and from public forests without public input, peer-reviewed scientific justification, and adherence to restrictions in all documents and deeds , Green Acres restrictions, and wetlands restrictions for the specific tract. Again, the term "ecological health" should not be used unless well defined.

16. Excellent.

= = = = =

joe attamante

I have attended and participated in every “Ecological Health” session of the task force.
I have previously messaged the chairs of my disappointment that the task force only considered and discussed fewer than half of the submitted proposals, some were not deemed acceptable for discussion or submission to the DEP, while several of those that were presented were only given cursory discussion. Moreover, there was never a yea or nay vote on them, nor, particularly egregiously, was there a vote on whether we should recommend a moratorium on logging and wood removal until the legislature and the DEP had time to consider and decide how best to manage our remaining public forests.
The only proposals on which I saw substantial agreement, amounting to consensus, and with which the chairs concurred, were those that addressed the necessity to mitigate the deer problem and the proliferation of invasive plant species.
There was much good that came out of these meetings: the recommendation that a science panel be established and empowered to evaluate all DEP recommendations vis-Ã -vis forest management, and that certain portions of the remaining forested lands be set aside for their special ecological, cultural value, as well as for carbon sequestration. In addition, a key recommendation was to revitalize and implement the moribund “Natural Areas Program”.
The chairs had the daunting task of managing 100+ participants with diverse views and positions, and were charged to recommend changes in legislation and policy to address the need to maintain and enhance our remaining forested lands and to propose specific management means to achieve those ends. Unfortunately, the current framework and recommendations, though including many that are worthy of implementation, nevertheless omit many sound proposals and their principal recommendations, such as those addressing pro-forestation and banning logging in all public forests.
The Framework does not reflect a consensus of the participants as votes were not officially taken.
For the above reasons the framework does not adequately satisfy Senator Smith’s charge and goals.
Additionally, the Framework's second sentence that "None of the recommendations are intended to interfere with current approved forest management plans and their associated activities", says that ongoing, problematic plans such as at Sparta Mountain WMA are grandfathered in, OK and may continue business as usual.
I cannot support the current framework.

William Kibler

J.D.

We support a pause on all new management plan approvals beginning immediately. We support a pause on current and new forest management projects until the legislative process has been completed and rules are adopted and implemented consistent with a robust public input process.

Judy Kroll

The Friends of Drew Forest (FODF), an all volunteer 501c 3 corporation cannot support the proposed framework of the NJ Forest Task Force for the following reasons:

- The framework, though thoroughly reviewed and commented upon extensively, fails to protect NJ public forests, including mature native forests, from current and on-going desecration, including logging, clearing of tree canopy, egregious destruction of forest floors from heavy machinery and large vehicles, removal of logs and resulting devastation to wildlife habitat. In fact, the framework contains the following caveat on page one: "None of the recommendations are intended to interfere with current approved forest management plans and their associated activities." FODF's volunteers joined the Task Force to try to mitigate these exact practices, and were vocal and consistent about this critical need, so it is unfortunate that the Task Force Co-Leaders instead chose to codify the status quo.
- Old forests provide the most climate carbon capture, and are critical to mitigation of our growing climate crisis. Climate change MUST be foremost in any policy making and implementation. To avoid worsening climate change, our public forest policies must: stop cutting mature native trees, stop clearing the canopy, and stop removing logs, stop clearing old forests to grow young forest. The scientific proof for large trees sequestering the most carbon is unquestionable.
- The framework contains far too many vague and undefined terms, leaving many opportunities for interpretations that will not support the goal NJFTF was given in the first place.

Elliott Ruga

Rec. 1: Without additional language and clarification this recommendation has the potential to cause more harm than good. Specifically, the scientific advisory panel should be independent from the NJDEP and must include a balance of experts from biology, ecology, forestry, and wildlife biology such that no group is overrepresented while maintaining an appropriate span of expertise.
Rec. 7: We agree that at times an intervention is necessary, however, we disagree with the recommendation as stated because active management implies that timber is allowed to be removed from the forest for the purposes mentioned, which we oppose.
Rec. 15: We disagree. This recommendation is egregiously misleading by seeming to prohibit an activity that most agree is wrong in publicly owned forests, commercial timber harvesting. Then, the same activity, timber harvesting, is sanctioned if it is done in service of ecological goals. Today, forest management plans justify timber harvesting to achieve spurious ecological goals, or for legitimate ecological goals that could be accomplished with non-harvest alternatives, i.e., alternatives without the adverse impacts of mechanized harvesting and wood removal. This recommendation upholds the status quo and the continued adverse impacts of timber harvesting in our public forests.

John Landau

Rutgers Environmental Steward, NJ Forestry Association Woodland Steward, Rutgers GI Champion. UN Convention on Biological Diversity 10 week MOOC "Ecological Restoration"

I regret that I cannot support this Framework of Recommendations, which includes good work but in general lacks the firm bones to build sustainable legislation and policy upon. More work is needed to build upon this to get to recommendations.

In my opinion a Public Forests Management Framework should be built upon two pillars (ie needs more specificity re framework recommendations 1 and 2):

1. A planning pillar that requires all public forest lands to be subject to a sound two-level land use governance structure.

A. An ongoing inventory-based Master Plan which requires public land to explicitly and only be managed for balanced public ecosystem service objectives: carbon storage, water management, biodiversity, cultural, recreational and educational services.

i. The Highlands RMP and the Pinelands Comprehensive Master Plan should approve and govern Public Forest MPs in their regions.

ii. A similarly independent group should be accountable for Forest MPs elsewhere in the state.

B. Individual local public forestry management applications from the land manager (NJFW, a County Parks Commission, etc) must conform to the locally appropriate Master Plan. (not unlike development site applications).

i. Each Forestry Management plan must assess its positive and negative impacts on each of ecosystem services objectives in its relevant MP.

ii. Management plan approval should belong to the Highlands Council, The Pinelands Commission, or a neutral NJ governance body for other regions in the state.

2. A policy rules and practices pillar (perhaps a Forestry Management Council similar to the requested Invasive Species Council) that defines top-level rulemaking policy and best practices for public forest management planning and implementations.

a. This council should be “of-but-not-in” NJDEP and include a breadth of qualified private and academic professionals and key conservation stakeholders.

b. This council would develop and continuously improve the policy and best practices for deer management, prescribed burns, invasive species management, active management and other public forest treatments that may be needed to meet the ecosystem services objectives.

c. More responsible and accountable than the "Science Advisory Panel"

Lastly, the one element that I STRONGLY OPPOSE is recommendation 6 “to designate carbon reserves”. This is not impactful and will unnecessarily waste resources.

EVERY NJ public forest is a public carbon reserve.

Susi Tilley

Executive Director, Ridge and Valley Conservancy

The Explanatory Statement for No Vote on the Forestry Task Force Conceptual Framework of Recommendations and the reasons despite agreeing in general with Recommendations 1, 2, 3, 4, 5, 9, 11, 12, 13, 14, and 16 in the Conceptual Framework of Recommendations will be emailed separately to the Task Force because it exceeds the 2500 characters allowed in this Google Form.

Douglas Meckel

There are many things to like about the framework, I see the carbon reserve, reforestation, afforestation and taking Native American concerns into account as areas of great progress. However, the framework does not go far enough in changing the current practices of allowing logging on our public lands. Regulations are needed which put proforestation as the goal for managing public forests. The allowance of the sale of timber as long as profit is not the primary reason behind the harvest is seen as a large loophole. The framework proposes rules be adopted within 3 years, which is reasonable. However, the proposed interim plan is not adequate as it allows for the current policies to continue if interim regulations are not adopted within 1 year. Having interim rules adopted in 1 year is highly unlikely due to the need to formulate those regulations, go through internal review, and then public review. I believe that a moratorium is needed to prevent the approval of plans until such time that formal rules are adopted. The plan includes a loophole which would allow projects such as Sparta mountain to continue as long as the stated goal was ecological restoration. Given that the whole impetus for this Task force was Sparta mountain any plan that would allow another Sparta mountain type Project is seen as a nonstarter . No large trees or mature forests should be cut to create "young forest". Climate mitigation and the ecological benefit of mature forests should be our priority. Additionally, the invasive species response is much improved but just " looking at food plots and baiting"as suggested in the framework is not enough. The fact that we can't agree to stop requiring farm leaseholders to feed deer while simultaneously trying to extirpate them from the landscaper shows we have not gone far enough. As you are aware food availability controls fertility & Population densities .

john saponara

phd in ecology and evolutionary biology from Cornell, 1994

The NJFTF framework will not prevent more Sparta Mountain projects, but more importantly, is not guided by the overarching importance of forests in climate mitigation. "Ecological health, biological diversity, and climate resiliency" are not "equally important" next to carbon sequestration and storage. Storing carbon as forests is by far the single most cost-effective tool we have in the climate struggle. Without effective climate mitigation, all of our climate resiliency measures will be overwhelmed. Moreover, unmitigated climate change will become the biggest threat to forest ecological health and biodiversity. Biodiversity is of course critical, but can be met without cutting trees (eg by controlling deer and managing powerline corridors). The gathering tsunami of climate will eventually cure us all of the illusion that any other objective is "equally important", but after Sandy and Ida, and as we lose our hemlocks, isn't it already evident? As 1.5 Celsius slips out of our grasp and we begin to come to grips with the even more monumental challenges of 2.0 Celsius, the droughts and heat waves and fires will continue to worsen, and forests will become vulnerable to new threats. Will climate change leave us with any forests to argue about? Would we today even recognize those climate-ravaged future forests? If as blue and wealthy and educated a state as New Jersey fails to lead on climate, who will?

Sara Webb

Ph,D. Ecology, M.S. Ecology and Forest Resources

This Task Force was created in response to widespread citizen concern about logging of northern NJ's public forests. This practice steeply depletes climate resilience and sacrifices forest-interior biodiversity, where deer and invasive species prevent recovery.

Unfortunately, the proposed framework fails to address these concerns. No protection from short-sighted logging management is called for despite our public forests' great importance today, both for climate defense and for the species reliant on unfragmented mature forests. Proforestation, protecting mature trees for climate defense, was supported by a vast majority of the task force in an early straw poll.

But logging policy is missing from the Framework and was not voted on, though it is a central issue and focus of many proposals. Science is clear: logging our most mature, carbon-rich forests sacrifices both climate defense and biodiversity. Ignoring these concerns in the Framework perpetuates the status quo of problematic deforestation. The Framework offers loopholes and vague language that permit canopy clearance, when it should center on canopy protection. Task force participants submitted extensive research on this subject.

For climate resilience, large trees and mature forests absorb AND store the most planet-warming carbon, per tree and per acre, far more than young or managed forests. This carbon is stored for centuries, and sequestration rates and storage increase exponentially with age for 87% of tree species.

Biodiversity in northern NJ is also threatened by today's logging approach and wood removal, which deplete habitat and soil organic matter. Forest interior species are far more threatened than those of New Jersey's abundant openings and edges, especially as the climate warms. Any creation of young forest habitat should not carve out century-old forests but use New Jersey's abundant young invaded woods and clearings. We support efforts to control deer and invasive species, and emphasize that both threats are exacerbated by opening the canopy. Canopy clearance and the mechanized transport and harvest of timber also impact soil, hydrology, water, vernal pools, and the future forest of young trees. We hope the Task Force report will strongly support ecological stability and restrict intensive management that impairs biodiversity in this time of a warming climate.

Steve Opresnick

Removal of trees should NOT be allowed science and supporting data should be cited for all decisions, especially when removal trees is recommended. Heavy equipment should be limited or not allows due to the ecological impact.

Leslie J Sauer

Assoc prof. UPenn for 20 years, restoration practitioner 45 years

I do not support these recommendations due to their failure to address a primary goal of this task force- an effective response to climate change and forest management. I believe that Senator Smith wanted to be a leader in addressing climate change. These recommendations amount to maintaining the status quo for at least three of the critical few years we have left to act. State-level climate planning has ignored the most effective climate defense-protecting public forests from logging and wood removal. Most of the proposals protecting public forests were not reviewed. The relationship between logging and climate was avoided. While many of the recommendations are worthwhile such as increasing deer and exotics management, delaying protection until inventories are complete is unacceptable.

It is not clear that there will be any effective climate management with these recommendations. There are no climate goals such as the importance of saving larger trees or how much of our forest should be designated as carbon reserves.

The language for the carbon reserves is fuzzy and manages to include logging without stating so- "to maintain and enhance carbon sequestration and storage as necessary to advance state climate goals while advancing equally important goals of ecological health, biological diversity, climate resiliency, and protection of water and soil resources while providing low-intensity, safe public recreation opportunities." Where active management is needed the report also refers to the 80x50 report,* which discusses proactive management for carbon defense including thinning and burning but ignoring protecting existing forests from logging. The associated impacts of logging are ignored altogether such as soil damage and carbon loss. The statement that wood removal is OK when a necessary part of an approved plan is another meaningless loophole that Sparta would slip thorough.

This report is a consensus of the chairs, not the participants. It reflects their bias, apparent from the outset. When 84% of the participants supported proforestation in an informal poll it was not good enough for consensus.

Debate was squashed. Time was consumed by DEP presentations, such as the inaccurate statements about how well deer are managed in public forests. Too much time diverted to the consensus ballot with no real revisions ever made. Meetings were cancelled. Proposals were never posted.

Lindsey Kayman

Masters Degree: Double Major -Air Pollution Control and Environmental Health Sciences, Certified Industrial Hygienist

I agree with many of the recommendations. However, these recommendations can amount to secretly expanding the kind of egregious logging being done in Sparta throughout the state. There is a total lack of transparency with respect to logging. Most people don't know that "logging for ecological health" means the clear-cutting and extensive thinning of the biggest trees as has been done in Sparta, NJ. There was never any data presented that this type of logging has any benefit to biodiversity. In fact, it was discussed that the 10 years of logging in Sparta failed in its objective of bringing back the golden winged warbler. There was extensive scientific studies presented that showed the harms of logging. There was never serious consideration that preserving forests can help sequester carbon and promote biodiversity. Pro-logging groups were invited to a DEP tour and discussion of unpublished data that were not made available to the rest of us. Why are we relying on unpublished data to damage our best control measure against climate change? Also, there are problems with transparency: the list of people on the task force was never provided but the number of members doubled in size after the deadline for joining. The framework was relabeled "recommendations" that the chairs"believe enjoy broad agreement among diverse participants." This is false. Two surveys asked for feedback on each framework item but quantitative results were never provided. There was never concensus -to say that there is consensus about logging and wood removal is a lie. Logging and wood removal were the only issues that there was disagreement on and no one changed their point of view.

Lisa Leone

B.A

The proposed framework fails to mention anything regarding a logging policy. Logging of our mature, biodiverse forests negatively impacts biodiversity and climate resilience. The framework fails to address loopholes regarding logging and canopy clearance

Wilma Frey

MLA (Landscape Architecture) Harvard Grad. School of Design, MPA-Mid-Career (Public Administration) Harvard Kennedy School of Government

Regretfully, I cannot support the Framework Recommendations because they do not clearly and purposefully address Sen. Smith's charge to the Task Force to "study and identify ways in which the State can best manage its forests in order to fight climate change...." Climate change was named first on his list in the directive. This was not, I think, accidental, strongly suggesting that addressing climate change should be the top priority. It is not, however, treated as top priority in the Framework.

It appears to me that, in order to meet its stated carbon sequestration climate defense goals, New Jersey needs to manage ALL of its mature and maturing public forest lands using the "proforestation" management model, which entails no cutting of mature trees, and, for ecological and carbon storage reasons, no removal of logs or other vegetative forest material from the forest site. To meet NJ climate defense goals, management of New Jersey's mature public forests should be proforestation. I would urge that Recommendation #6 be extended to be the default designation for the vast majority of the state's mature public forests.

I support Recommendation #5: There is a need for afforestation - planting new forests on lands that may have been agricultural in the past. There is also a need for reforestation, of lands that were formerly forested. Both of these categories will need planning and design and planting and care and maintenance to shepherd them into maturity - much more maintenance than existing mature forests managed with proforestation principles.

I question Recommendation #12, as I am not convinced that the use of fire should be greatly increased.

I am strongly opposed to Recommendation #15, whose second sentence would continue to authorize and permit the kind of management/logging activities that have created devastation at sites in the Sparta Mountain WMA. The logging projects there have all been described as fostering wildlife habitat goals. They should never have taken place. Recommendation #15 is a continuation of the status quo, and is a deal-breaker with regard to the Task Force recommendations.

Thank you for your consideration of my comments.

Wilma Frey

Larry Baum

minor in mathematics; BSc. in conservation biology, biology and physics; Ph.D. in Theoretical Physics (& worked with forest conservation since the early 90s; read and studied lots on mature and old-growth forest issues; talked with leading eastern old-gro

Need more space(2500chars(not even words!)absurd limit2seriouslydiscuss anything&not even enough4full rant)&time(holiday season).It's especially galling considering many proposals were never presented&most meetings were half propaganda speeches from DEP (were not even supposed to have part in).All framework does is provide more green washing cover4current abuses&does not1thing to protect our forests, not even mature1s,not even ancient 1s,as they will now try to claim broad conservation group support (1 hopes NJ Sierra Club under new leadership remains last true group&refuses to sign off on this).See nothing but gifts for NJAudubon/DEP&Forestry industry here but not even the most basic proposals from NJCons.or Sierra in framework!It will allow4total violation of public trust/Green Acres charter&violations of intent&law of the Highlands Protection Act.It provides more ways4 profiteers to get more tax$to abuse our forests4personal profit while letting them now claim that things like proforestation are controversial,never mind came closer to consensus than active management (almost universally so, were those with$conflicts of interest discounted;press kept out in the claim of 'full transparency' too (?????)).A few minor good elements about fire in Pinelands(but also worse than questionable implications for it's use elsewhere in the state).A few good bits on invasive species.Otherwise, it's toothless or worse.It ask4 more tax $ for plan writing&destructive make work to line the pockets of 0.00001%of the state&subsidize a long gone industry in the state.Says no commercial logging but allows4selling timber!Naive joke to think that allowing sales from 'conservation oriented' projects means anything less than anything goes.We already see it at work in NJ.Say only if follows science but this taskforce didn't even follow what little science was allowed to be presented!USFS/USDA plan2log1of greatest remaining ancient forests in WVa. as part of a 'conservation' goal for (yet) more young forest (when ancient forests is the rarest of all and mature forest the next most rare). Look at the history of forest conservation&such things are proven beyond meaningless.Anything can be called for some conservation goal.Say you have a goal for a clearing,then anything goes, log over a vernal stream,log a 100, a 200, a 400 year old forest,a steep slope, whatever, it fulfills a goal of a clearing.See what happened under cover of local Audubon groups in MA, PA, WI, MI already.

Sharon Wander

B.S. (Wildlife Management) Cook College; Ph.D. (Ecology) Rutgers University

I agree with many of the Framework recommendations, including instituting rulemaking, conducting inventories to inform a planning process, creating a scientific advisory board, improving control of deer and invasive species, protecting the values of Indigenous peoples, and adequately funding the entire endeavor. Nevertheless, in my opinion the Framework does not adequately protect NJ's public forests. It does not recognize their critical importance (through carbon sequestration and storage) in defending our densely populated state against the ongoing damage of climate change. These (free!) services demand the utmost protectionâ€"by prohibiting cutting of large trees and removal of woodâ€"but the Framework fails include such a recommendation. The discussion of scientific proforestation concepts, and of proposals based on them, was largely denied to Task Force participants. The Framework makes no mention of proforestation, but rather includes vague language such as managing to "address threats to ecological health" or to "maintain biodiversity," or the use of "multiple management approaches." All such terms are simply ways of leaving the door open to continuation of traditional timber harvesting such as is currently ravaging Sparta Mountain WMA, where the century-old habitat of Endangered and Threatened forest birds is being sacrificed (in the name of biodiversity) to "create habitat" for young-forest birdsâ€"when other WMAs include thousands of acres of open fields better suited to accommodating these species. Since the Framework as written will not protect New Jersey's public forests from industries, agencies, organizations, and individuals who seek to profit from them or misuse them, I cannot support it.

Christine Hepburn

Ph.D. in Psychology (relevant for evaluating scientific papers)

Despite agreeing with many of the Framework's Recommendations, RVC dissents from the Framework overall because:

The Framework does not express an overarching rationale or vision for the codification of the management of New Jersey's public forests. RVC believes that the primary rationale should be climate defense. In view of the existential crisis posed by climate change, and the indispensable role that trees play in carbon storage, all forest management activities should support this role. No activities should decrease a forest's contribution to climate mitigation, except for invasive species control. But the Framework nowhere recommends a prohibition on cutting of large trees and on removal of wood. Recommendation 10 for managing forests "as necessary to advance state climate goals" is weakened by the loophole of managing for other "equally important goals," when fully protecting forests for their climate-defense capabilities would automatically advance these other goals. The extensive tree cutting on Sparta Mountain WMAâ€"purportedly done to enhance biodiversityâ€"is an example of how this loophole can be exploited. Implementing policies based on climate defense would require DEP to rethink its approach to forest management, rejecting timber-production forestry methods in favor of proforestation, which allows for a variety of activities that do not involve significant tree-cutting or removal of wood. DEP is likely to resist such a paradigm shift and unlikely to effectively implement a statute that is not clearly based on a vision that demands change.

The Framework is not science-based. All efforts at introducing scientific proforestation concepts and language to the Framework were rejected. Many proposals for science-based management were never allowed to be discussed. The Framework's vague language (e.g., management for "future threats to ecological health") sounds good but would allow continuation of the current practice of logging mature forest timber under the guise, for example, of habitat creation for early successional bird species.

The Framework does not suspend already approved/ongoing logging activities on public forests prior to completion of rulemaking. The proposed rulemaking processes are welcome, as virtually no rules exist governing forestry on public lands. But given the 3-year window allowed for DEP rulemaking, this delay could allow for extensive areas of further logging in public forests, such as on Sparta Mountain WMA.

Joe Kazimierczyk

Sourland Conservancy has concerns about recommendations regarding the time-frame for implementation. As currently written, the framework would allow new plans using existing questionable practices to proceed, if interim rules are not propagated within one year.
Another concern is that allowing the sale of wood products could become a loophole for commercial logging, and we hope that subsequent rules and legislation will prevent this.
Finally, we hope that the use of "ecological restoration" would not be used as a reason to fragment existing older growth forests.
Overall the Framework is an improvement over the exiting state of affairs, but we don't think it goes far enough.

Miriam Dunne

B.S. Natural Resource Management (Cook College, Rutgers University, M.S. Biology (E. Stroudsburg University

Our forests need management, and we cannot wait until a formal rulemaking process is developed for existing plans to be implemented. Several wildlife species of special conservation concern are on the brink of requiring listing as threatened or endangered. Further delays in active forest management to address the needs of these species will result in continued declines in their populations. The state has expended considerable resources to develop plans for forests and Wildlife Management Areas. These plans have been vetted internally and externally and represent sound science. All existing plans should be able to be implemented with no "interim rule making process" to delay their implementation. Likewise DEP should not be prevented from finishing any plans that are in process while an interim process is developed. This delay tactic only serves the anti-management factions who don't believe that forest management can be beneficial for wildlife. There is, indeed, so little actual management taking place at present on state land that discussion of a moratorium on management is laughable. DEP needs to be encouraged to continue management as it has been doing with a robust internal vetting process, and an outreach effort that informs the public as is appropriate and seeks public input. Getting public consensus on stewardship plans will be impossible and it will have to be acknowledged that if biodiversity and forest health is a goal then some trees will have to be cut. It is hoped that the experts at DEP and other advisory professionals will prevail and enable the state to do the management necessary to protect biodiversity and ultimately benefit climate.

We do not support expanding the existing Natural Areas Program. Some NA represent unique habitats but many are designated arbitrarily and are no more unique than their surrounding landscape. Having more robust mapping for unique plant communities, and increasing communication within DEP between the NA manager and the program managers in P&F and DFW would be more beneficial to encouraging sound protection and management of these areas. Likewise we do not support the addition of an oversight council for old growth/carbon reserves. Since 99% of public land is not managed at present, there is a huge advantage to future old growth development. The planning process will identify older stands that can represent future old growth, and indeed define what is meant by old growth.

Larry Herrighty

B.S. Wildlife Managment

The New Jersey Outdoor Alliance (NJOA) does not support the following recommendations:
Recommendation (R) 1. NJOA does not believe that DEP needs to be "directed" to initiate statewide planning and mapping of forest lands. DEP is already conducting these activities but is restrained by a lack of funding.
R 2. NJOA is satisfied with the 14-step process currently used by DEP to create Forest Management Plans.
R 3. NJOA does not believe rule-making is necessary for the DEP process of creating forest management plans and recognizes a thorough public process exists within the existing process.
R 7. NJOA does not believe DEP needs to be "directed" to identify where to practice active forest management since such management is already practiced to meet stated objectives.
R 11. NJOA believes the current DEP process is adequate and rulemaking is not necessary.
R 13. NJOA does not believe DEP needs to be "directed" to amplify efforts to combat invasive species. DEP's efforts are constrained by funding which should be increased to fully implement their effort.
R 14. NJOA does not believe the Science Advisory Panel is needed to guide DEP deer management as a public process through the Fish and Game Council rulemaking is adequate. Predators such as bobcats, bears and coyotes prey on deer. However, increasing bear and coyote populations such in order to manage deer in an undefined "deep forest" puts public safety at risk and is not necessary. The Fish and Game Council has already adopted regulations to allow fertility control of isolated deer populations. Fertility control has been proven to be ineffective on deer populations over the general landscape. NJOA opposes the development of a pilot program for commercial use of deer because it is not needed, it is inconsistent with the North American Model of Wildlife Conservation, is not cost-effective and no infrastructure for processing deer commercially exists in NJ or if created, likely not to be profitable. It is an inappropriate use of a public resource on public land. Recreational deer hunting is the most cost-effective means of controlling deer and when conducted on public land and unimpeded, has resulted in the ability to regenerate forests. The Fish and Game Council has the authority to adjust deer season length and bag limit if necessary to promote forest health.
R 15. DEP has not made commercial use of forest products as a primary goal in any forest management plan, therefore R 15 is not needed.

Margaret Wood

- Master's Degree in Aerospace Engineering, Polytechnic University (merged with NYU)
- Bachelor's Degree in Aerospace Engineering, Polytechnic Institute of Technology (merged with NYU)
- Completed an additional 2+ years of graduate courses beyond the MS d

NJFTF Conceptual Framework: “The 'Co-Chairs' reached agreement on these recommendations.... and 'believe' that the framework includes ideas that enjoy 'broad' agreement among diverse Task Force participants.” (emphasis mine)

Upon registering with the NJFTF, a screen appeared defining the 'Charge to the Workgroup'. It said, “Provide a set of recommendations to the Senate Environment and Energy Chair Senator Bob Smith and members of the Senate Environment and Energy committee that include (1) consent and (2) nonconsent items (which can include majority and minority reports) by Dec 31, 2022 regarding management of forested public lands.”

I signed up under the premise that I and my fellow participants were to provide recommendations to the SE&E, not the Co-Chairs.

We worked hard! We used the proposal system described on 6/6/22. We researched facts, used scientific papers, and wrote proposals to achieve solutions. The proposals with the most votes were supposed to be submitted to Senator Smith as recommendations.

Only a few proposals were heard, 'hand-selected' by the Co-Chairs. The 'Co-Chairs' dropped the others and created their own 'Framework' to be reviewed by Senator Smith. Our proposals were shunted to the Appendix in the back, which no one ever reads.

The Co-Chairs claim they 'believe' their Framework reflects the work of the participants. 'Belief' is NOT 'fact'! Factual evidence of proposal consensus requires a vote. The Co-Chairs never allowed a vote. We were only allowed to vote on the Framework authored by the Co-Chairs. The Framework never got consensus. We had a large voting block who consistently voted against it.

The Co-Chairs claim the framework represents “broad” agreement of the participants. “Broad” is subjective, NOT factual. Is broad 95%? 51%? We were not allowed to see the final vote tally. Perhaps “broad” is just the 4 votes of the Co-Chairs.

The number of participants drops each month as they become fed-up with the co-opting of the process by the Co-Chairs.

This process was changed/'fixed', to keep the status quo. The Framework does NOT reflect our proposals. We were adamant about removing loop-holes. The Co-Chairs added more loop-holes with each draft. Our efforts and time were wasted. We were cheated. The Co-Chairs stole our opportunity to be heard, appropriated it, turned it into an opportunity to achieve their own agendas of maintaining the status quo.

Global warming climatologists are needed on your panels of experts.

Mark Lohbauer

BA, Rider University; JD, Rutgers University

While I do agree with some of the provisions of the framework regarding invasive species and control of the deer population, I disagree with the central premise of the framework regarding forestry on public lands. We are now in an era of climate crisis and healthy forests represent our best defense in mitigation of that crisis. The framework allows for logging on public lands: specifically, it allows for the cutting and the removal of wood material from forests on public lands. It purports to do so in the name of healthy forest management, promotion of biodiversity, and even for wildfire suppressionâ€"yet none of those goals are consistent with the primary goal of carbon sequestration; further, none of those goals were proven to be supported by scientific data in our debates at NJFTF sessions. Rather, our forestry policy for public lands should be proforestation which allows for limited cutting (for example, to fell dead or diseased trees for pest or disease control) and no removal of wood material from the forest. This issue was central to our mission at the NJFTF, and not only does the framework fail to recognize it, our entire meeting and discussion process over the past year failed to give fair consideration to the proforestation concept. From the outset, a process that defined “consensus” as not a simple majority, but rather as near 100% of the group was doomed to fail in its effort to reach consensus. As a result, controversial discussions were blocked and avoided rather than heard. The public lands belong to all of the people of New Jersey, both for today as well as future generations. Our forestry policy should embrace the goal of preservation without qualification. That policy should be nothing less than proforestation, which the framework has not allowed. This is a fundamental failure of our charge from Senator Smith, so I register this dissent to the framework.

Doris Lin
B.S. in Applied Biological Sciences, Massachusetts Institute of Technology
J.D., University of Southern California Law School

The League of Humane Voters of New Jersey (LOHVNJ) objects to the NJ Forestry Task Force framework and to the process by which it was adopted.
The framework is vague and leaves too much discretion to a "scientific advisory panel." Science is not policy.
The reliance on public comments in the rulemaking process is misplaced. NJDEP has a history of adopting rules despite overwhelming public opposition.
Recommendation 15 creates an incentive to cut trees and remove wood. There is no ecological reason to remove wood, so allowing the sale should not be recommended at all.
Increasing funding to NJDEP is premature when the policies have not been developed yet. Some recommendations are vague and others (i.e. ending deer feeding plots) require no funding.
We object to prescribed burns, which create the edge habitat that is preferred by deer.
Furthermore, regarding deer, NJDEP has been managing state wildlife management areas for decades to increase the deer herd and grow trophy bucks through prescribed burns and clearcutting (to create edge habitat), food plots for deer and farm leases that require farmers to leave crops standing for deer.
NJDEP partners with hunting clubs to plant food plots for deer, and then gives awards to hunters who kill bucks with the biggest racks. The sale/donation of venison has nothing to do with reducing the deer herd when NJDEP keeps the deer herd artificially abundant for hunters.
We object to the statement that the recommendations are not intended to interfere with current forest management plans. The state should reassess their plans and there is no reason to wait.
LOHVNJ objects to the process of the task force. Task force members (TFMs) could submit proposals, but were not allowed to communicate with each other and were not allowed to author any part of the framework.
The entire framework was written by the co-chairs. TFMs were prohibited from emailing all other members, and chat among members was disabled during the Zoom calls. When a TFM was allowed to present their proposal, there was no vote on the proposal. The co-chairs decided how, if at all, a proposal would be included.
Also, the voting process is opaque and unjust, because some groups were given more votes than others based on an unfair assessment of whether a group's members count as "members."
Lastly, we were given unrealistically short deadlines and character limits, over holiday weekends, for submitting proposals and comments. (abbreviated to 2500 characters)

Angi Metler

We oppose the framework in both the process of its adoption & conclusion. It is the status quo, vague, and relies on a “scientific advisory panel.” Confirmation bias will play a role in adopting any forest policy using this criterion. Using the DEP rule-making process to dissent is wrong because the DEP adopts rules even when opposition is high. #15 allows for the sale of wood. This incentivizes cutting trees & removing wood. There is no ecological need for this, so remove the sale of wood. Increasing funding to the DEP is premature when the policies are in progress. The statement "all recommendations discussed above require funding" is untrue when some recommendations are vague, and some (i.e., cessation of deer feeding plots on state lands) requires no funding. We oppose prescribed burns for climate & health. It also creates deer habitat, thus growing the deer herd. We reject blaming deer for forest issues because the destruction is caused by other factorsâ€”developers and loggers fragment forests for commercial & residential expansion. Hunters in sync with the DEP use clearcutting to create edge habitats for deer. DEP also uses clearcutting & food plots to grow the deer herd. DEP works with private hunting clubs to plant deer-preferred crops and rewards them when they kill the biggest deer with the largest antlers in its annual deer classic. APLNJ objects to "None of the recommendations are intended to interfere with current approved forest management plans and their associated activities." The state should be reassessing its forest plans, so why wait for those plans to expire before adopting new plans that fight climate change, sequester carbon, protect trees, and preserve wildlife habitat?

The co-chairs wrote the framework. Communication was discouraged between members. The co-chairs decided which proposals would be included in the framework or discussed at meetings. The chat was disabled during Zoom calls, so the co-chairs controlled the discussion.

- Since members did not communicate, this framework does not represent the views of the NJFTF members.
- NJFTF deadlines for proposals & commenting on the final framework were limiting. Finalizing the framework during the December holidays was problematic.
- The voting process was opaque and unjust. While the votes of groups would count more than individuals is fair, some organizations were given more votes than others based on an unfair assessment of whether an organization’s members count as “members.”

Silvia Solaun
MS

NJ Forest Watch CANNOT Support the Framework. NJ public forests need to be held to HIGHER Standards. The “Final” framework is biased and not representative of the public stakeholders and has misleading language of which allows the “status quo” to prevail. -Does not describe a plan to use forests to mitigate climate change by protecting and setting aside ALL of the 1M acres of public forests for climate change.-Excludes the concept of Proforestation and it was ridiculous how actual peer-reviewed science has been ignored. -Excludes the use of a moratorium and allows the foresters and NJ Audubon to continue to write plans on public lands with no rules or regulations. -Excludes the use of peer-reviewed science, in particular on carbon sequestration being a function of leaf area (with trees increasing or holding steady on sequestration for hundreds of years), newly logged areas being net emitters of carbon for decades, the ecological importance of leaving cut wood on the ground and lack of need to remove wood for any ecological purpose. -The timeframe for new regulations is too long. We want forest protections NOW. Public forests, like on Sparta Mtn are being destroyed now. Purposely put within the framework are buzz words like “ecological health” and these are too vague and allow the status quo to continue. Instead, NJ should enact a “Forever Wild” component to ALL of the 1 M acres of public lands as the climate crisis is real and cutting more forests down, is exacerbating the issue.
Now on with the issues with the NJFTF process as stated in our previous comments but worthy of repetition: More than half of the taskforce chairs & their organizations benefit from the writing, implementation and “stewardship” of public lands. This demonstrates that the taskforce is represented by biased, and financially motivated groups. These financial motives of these groups are for “self preservation” & are not in the best interest of the public! The Taskforce did not use promised consensus process, but instead only used surveys. There was never a reveal of last 2 rounds of surveys on the framework. Instead, all participants should have full disclosure of who participated in the surveys, and NO outside agencies should have been allowed to participate. There was never a debate process. There was no peer reviewed Science presented, instead it was all SPIN manufactured by the groups who benefit from the writing and implementation of logging plans throughout the state.

Hilary Persky

I complement the framers on this attempt. My concerns are to do with a framework that maintains a DEP status quo that contributes to ecologically unsound logging in a time of climate crisis.

Jeanne Fox

Former BPU President

I thank the four Task Force leaders for your time, effort and commitment to this important topic. I also am grateful to the many forest experts and concerned citizens for their dedication to this effort.

I believe that the Chairs did gather a general consensus on most topics, such as the critical topics of invasive species; deer management; the necessity for establishing a good process for public comment/input; and a true rule-making with a one year deadline. The establishment of a diverse expert panel is a good step forward. I appreciate other changes made by the Chairs such as adding in Recommendation #6 “a primary goal of protecting mature forests and providing for future old growth forests (as defined by the science advisory panel) for their carbon benefit.” Old trees retain large amounts of carbon which is a necessity at this time. I also agree with most of the other Recommendations though I did wish for clarifications regarding some of them but I certainly do not have enough knowledge to object in any way.

At least in the near term (probably 20 years), mitigating the Climate Crisis must be THE priority goal in forest management. In fact, I believe that Recommendation 7 is misleading when stating “active management is needed to promote future carbon sequestration, maintain biodiversity, and to address current and future threats to ecological health.” Recommendation 7 cites consistency with the NJ Global Response Act 80X50 Report’s “carbon sequestration goals” “which discusses proactive management for carbon defense including thinning and burning." pp 153-160. So, I went to that section which speaks clearly to carbon sequestration’s 5 pathways: #1)reforestation, #2)avoided conversion of natural lands, #3)salt marsh and seagrass restoration and enhancement, #4)conservation management of agricultural lands, and 5)proactive forest management. Only Pathway #5 - pro-active forest management discusses “active forest management through thinning and selective burning.” The intent is to lessen the risks of severe wildfires and pest infestations. However, that pathway concludes that “additional analysis is needed, however, to fully understand the carbon gain potential (or avoided emissions) from carbon defense strategies such as active forest management through thinning and selective burning.” Thus, I urge that, until that critical analysis is done, crown separation and tree thinning not be permitted in old growth forests.

Appendix D. Forms, Surveys, Documents

Appendix D-1: Rules of Engagement
Appendix D-2: Cutting and wood removal survey - 127 Respondents
Appendix D-3: Organization Authorization
Appendix D-4: Framework surveys
- Appendix D-4a: First Draft Framework Survey – 124 Respondents
- Appendix D-4b: Revised Framework Survey – 102 Respondents
- Appendix D-4c: Third Revised Framework Survey – 63 Respondents
- Appendix D-4d: Final Framework Survey – 111 Respondents

Appendix D-5: Original topic prioritization survey - 413 Respondents
Appendix D-6: Collaboration Table
Appendix D-7: Flyer for “Exploring Conservation and Proforestation Options for NJ Forests” panel webinar

Appendix D-1: Rules of Engagement

NJ Forest Task Force

Rules of Engagement

Guidance to Task Force co-Chairs

- Act as primary points of contact for the Task Force.
- Manage workgroups in accordance with the shared values and make everyone feel welcome and exhibit healthy conflict resolution
- Collaborate and communicate with fellow co-chair(s) in a true partnership, including developing agendas and workflow for the Task Force.
- Facilitate discussion of topics to ensure accuracy of information and general consensus around recommendations presented.
- Provide guidance to workgroup co-chairs and participants.
- If a participating organization or individual is maligned, another co-chair should weigh in.

Guidance to Task Force Workgroup Co-Chairs

- Act as primary points of contact for workgroup to the Task Force.
- Manage workgroups in accordance with the shared values and make everyone feel welcome and exhibit healthy conflict resolution
- Assign tasks to workgroup members and monitor. Be aware of deadlines for materials and communicate that to workgroup members.
- Facilitate workgroup review materials to ensure accuracy of information and general consensus around recommendations presented.
- Participate in meetings and stay up to date on issues, representing all viewpoints and considerations discussed in workgroup.
- Provide guidance to workgroup participants. Ensure clear roles and responsibilities.
- Identify conflicts and work through them

Guidance to Participants

- Behave in a professional and respectful manner.
- Actively create space for the voices of all.
- Focus on the issues.
- Be open to other perspectives, opinions, and ideas.

- Arrive prepared and on time for all meetings.
- Review materials for accuracy and credibility.

Email etiquette

- Do not misrepresent your email as coming from the NJ Forest Task Force. Only email from "NJForestTaskForce@gmail.com" represent communications from the co-chairs.
- Do not send mass emails to the entire workgroup.
- Refrain from sending "reply all" responses to task-force-wide emails. Limit any replies to emails to those who need to know or to whom you are collaborating
- Do not forward workgroup emails to contacts outside the workgroup.
- Do not send attachments or information via email unless requested. Material submitted in support of a proposal should be submitted with the proposal. Any material submitted outside that process will not be reviewed or considered.

Zoom Guidelines

- Please do not share zoom links with external parties. These are unique to workgroup members for participation in working meetings.
- We expect your full attention and participations on all meetings. Please avoid external conversations or distractions.

Removal of Participants

Wanton or repeated violation of these expectations is grounds for remove from the working group

- Removal will be determined by the task force co-chairs.

Appendix D-2: Cutting and wood removal survey

NJFTF Survey - timber harvest/commercial logging

As it relates to the stewardship and care of our state forests, please indicate your agreement/disagreement with the following statements by choosing agree or disagree. For the purpose of this exercise cutting will mean just that (cutting trees to the ground) and removal will mean just that (removing the trees from the woods).

* Required

1. Email *

2. Your Name *

3. Who you represent *

Mark only one oval.

- ◯ Self
- ◯ Organization
- ◯ Government entity

4. If you represent an organization or government entity, please name. *

5. Please select the ONE answer that best describes your position about cutting trees. *

Mark only one oval.

- ◯ Cutting trees should never be permitted
- ◯ Cutting trees is an activity and/or tool that can only be used as part of an approved plan so long as the objective pertains to the overall ecological health (current & future) of that particular forest.
- ◯ Cutting trees is an activity and/or tool that can be used as part of an approved plan for a variety of objectives, including the generation of revenue for the NJDEP.
- ◯ Abstain

6. Please select the ONE answer that best describes your position about wood products. *

Mark only one oval.

- ◯ The removal of wood products should never be permitted.
- ◯ The removal of wood products is an activity and/or tool that can only be used as part of an approved plan so long as the objective pertains to the overall ecological health (current & future) of that particular forest (and therefore, the removal of the product is required to meet said ecological goal)
- ◯ The removal of wood products is an activity and/or to tool that can be used as part of an approved plan for a variety of objectives, including the generation of revenue for the NJDEP.
- ◯ Abstain

Organization Authorization

Participating organizations should identify one person who will formally represent the organization on the NJ Forest Task Force. There is no limit on how many individuals may participate in discussions or submit proposals, but only one individual will represent the organization when seeking consensus or voting.

* Required

1. Name *

2. Date *

3. Name of organization *

4. Address of organization headquarters *

5. Name of President, Executive Director, or otherwise named leader of organization *

6. Number of staff at organization *

7. Number of members in organization *

8. If your organization has a board, how many people serve on the board? *

9. Name of Authorizing Individual - Climate Workgroup *

10. Is this your primary representative for the Task Force? *

Mark only one oval.

- Yes
- No

11. Name of Authorizing Individual - Ecological Health Workgroup *

_____

12. Is this your primary representative for the Task Force? *

Mark only one oval.

- Yes
- No

13. Title of Authorizing Individual *

_____

14. Is the person(s) named herein authorized to represent the organization in the NJ Forest Task Force. *

Mark only one oval.

- Yes
- No

15. Authorizing letter on organization letterhead

Files submitted:

NJFTF Conceptual Framework for Public Forests in NJ

Please indicate your level of support for the bullets listed as well as the two broad sections, and overall conceptual framework. Where appropriate, note your comments for the individual bullets. Comment only on bullets where you are suggesting revisions or additions.
NOTE: The goal is consensus.

Please complete by

Monday, October 10th.

Introduction
from Senator Smith

"Forests are critical to the environmental welfare of our State. They can play a major role in mitigating climate change by sequestering carbon dioxide; providing habitats for endangered wildlife; helping clean and protect drinking water sources; and stabilizing soils. Proper management of forests is also necessary for preventing wildfires which are becoming more frequent and intense. For decades, we have been debating what proper management of the State's forests should look like, and what the State's policies for forest stewardship should be. We've assembled this task force in order to

identify and debate the major issues and ultimately develop consensus solutions which could form the basis for future legislation."

Mission
of the Task Force

The purpose of the task
force will be to study and identify ways in which the State, counties, municipalities and other entities responsible for land acquired through public sources can best manage its forests in order to fight climate change, prevent forest fires, improve ecosystems, and protect soil and water quality, among other things. The task force will take feedback from interested parties and then compile a report on consensus and non-consensus issues with respect to forest stewardship for submission to the Committee.

* Required

1. Your Name *

2. Please indicate if you are the authorized representative of an organization and the name of that organization. *

3. Level of support for overall framework. *

Mark only one oval.

- ◯ Agree/support
- ◯ Likely to support with some revisions
- ◯ Not likely to support without significant revisions
- ◯ Disagree/not support

4. Comment on overall framework

5. Level of support for Statewide Planning and Inventory section *

Mark only one oval.

- Agree/support
- Likely to support with some revisions
- Note likely to support without significant revisions
- Disagree/not support

6. Comment on Statewide Planning and Inventory section

7. Level of support for Forest Management and Implementation section *

Mark only one oval.

- Agree/support
- Likely to support with some revisions
- Note likely to support without significant revisions
- Disagree/not support

8. Comment on Forest Management Planning and Implementation section

9. **1. Statewide Planning and Inventory:** Protection and management of NJ's public forests must be based upon a comprehensive planning and mapping process at the landscape level based upon sound science and data including appropriate inventories of all biota. This planning process should include a scientific advisory panel, as well as require robust public participation throughout the process.

10. **2. Statewide Planning and Inventory:** A formal rulemaking process, in accordance with Administrative Procedures Act, is needed to guide the development of forest management plans on public lands including consistency with statewide planning and inventory efforts.

11. **3. Statewide Planning and Inventory:** The planning process must identify additional areas that should be designated as natural areas. Toward this end, the Natural Areas Program at NJDEP should be updated and expanded.

12. **4. Statewide Planning and Inventory:** The planning process must create a new designation to be identified as ecological reserves (i.e., set-asides with management as necessary to address ecological threats and as determined by an oversight council) whose primary function is to promote maturing forests where possible and to provide for future old growth forests.

13. **5. Statewide Planning and Inventory:** The planning process must also identify areas where more active management is needed to address current and future threats to ecological health or to address goals as identified in the planning process.

14. **6. Statewide Planning and Inventory:** The planning process must recognize the importance of adaptive management, whereby management approaches are adjusted over time based upon new data and changing circumstances in our forests.

15. **7. Statewide Planning and Inventory:** The planning process must consider the significant variation in our forests, such as the uniqueness of the Pinelands.

16. **8. Forest Management Planning and Implementation:** NJ's public forestlands must be protected and managed to maintain and enhance carbon sequestration and storage as necessary to meet state climate goals while meeting equally important goals of ecological health, biological diversity, climate resiliency, and protection of water and soil resources while providing low-intensity, safe public recreation opportunities. Planning and inventories should guide the prioritization of management goals in different areas.

17. **9. Forest Management Planning and Implementation:** All forest management plans must be reviewed in accordance with the process established through rulemaking noted in the previous section and guided by statewide planning and inventory.

18. **10. Forest Management Planning and Implementation:** Meeting these goals requires multiple tools and approaches all of which should be guided by sound science consistent with and guided by the inventory and planning process.

19. **11. Forest Management Planning and Implementation:** Prescribed burns are a necessary management tool to reduce the catastrophic fire risk in ecosystems like the Pine Barrens and to meet other critical ecological objectives throughout the state.

20. **12. Forest Management Planning and Implementation:** A more intensive effort is needed to address the impacts of invasive species. The NJ Invasive Species Council, created in 2004 but currently dormant, should re-convene and be charged with developing a state-wide strategic plan to address the issue.

21. **13. Forest Management Planning and Implementation:** Steps are needed to reduce deer densities in our public forestlands to ecologically sustainable levels to enable our forests to regenerate.

22. **14. Forest Management Planning and Implementation:** Increased funding and staff to NJDEP is necessary to carry out these activities and address these goals.

Appendix D-4b: Revised Framework Survey – 102 Respondents

Revised Framework

Changes from the original framework narrative appear underlined in the following sections.

* Required

1. Name *

2. Please indicate if you are the authorized representative of an organization and the name of that organization. *

3. Level of support for overall framework. *

Mark only one oval.

- ◯ Agree/support
- ◯ Likely to support with some revisions
- ◯ Not likely to support without significant revisions
- ◯ Disagree/not support

4. Comment on overall framework

5. Level of support for Statewide Planning and Inventory section *

Mark only one oval.

- ◯ Agree/support
- ◯ Likely to support with some revisions
- ◯ Note likely to support without significant revisions
- ◯ Disagree/not support

6. Comment on Statewide Planning and Inventory section

_____

7. Level of support for Forest Management and Implementation section *

Mark only one oval.

- ◯ Agree/support
- ◯ Likely to support with some revisions
- ◯ Note likely to support without significant revisions
- ◯ Disagree/not support

8. Comment on Forest Management Planning and Implementation section

_____

9. **1. Statewide Planning and Inventory:** Protection and management of NJ's public forests must be based upon a comprehensive planning and mapping process at the landscape level based upon sound science and data including appropriate inventories of specific biota, as determined by the scientific advisory panel.* This planning process should include a scientific advisory panel as well as require robust public participation throughout the process. Initial inventory and planning process should focus on state owned lands and then extend to county, municipal and other lands acquired using state funding. *

** Science advisory panel should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists)*

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

10. 1. What would bring you to "agree/support?"

_____

11. **2. Statewide Planning and Inventory:** A formal rulemaking process for the development of Forest Stewardship Plans, Ecological Restoration Plans and other plans on public forested lands will be conducted in parallel with the inventory and planning process and in accordance with Administrative Procedures Act. The rulemaking will be informed by and consistent with statewide planning and inventory efforts. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

12. 2. What would bring you to "agree/support?"

_____

13. **3. Statewide Planning and Inventory:** A separate rulemaking process based on and starting with the internal NJDEP 14 step stakeholder process, developed in 2014, will be initiated and completed within one year. No newly initiated plans will be approved during this one year timeframe (except for necessary fire management activities or emergency scenarios like natural disasters). New modifications to approved plans shall be subject to the current NJDEP 14 step process while the rulemaking is being completed. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

14. 3. What would bring you to "agree/support?"

15. **4. Statewide Planning and Inventory:** The planning process should identify areas to be set aside through designations including ecological reserves and/or protected natural areas (as defined by the Natural Areas Program in NJ) which will act as set-asides with management as necessary to address ecological threats and as determined by an oversight council.* A primary goal for these areas is to promote growth of maturing forests and to provide for future old growth forests for their carbon and ecological benefits. In planning for set-asides, the national initiative to protect 30% of the land base by 2030** should be considered in evaluating what percentage of public lands should be designated. *

This may be accomplished through an overhaul and expansion of the current Natural Areas Program. Or, a new program and entity could be established for this purpose.

** Oversight council should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists)*

*** America the Beautiful Initiative*

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

16. 4. What would bring you to "agree/support?"

17. **5. Statewide Planning and Inventory:** The planning process must identify areas where active management is needed to address current and future threats to ecological health, such as invasive species proliferation, or to address goals as identified in the planning process. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

18. 5. What would bring you to "agree/support?"

_____

19. **6. Statewide Planning and Inventory:** The planning process must recognize the importance of adaptive management, whereby planning, inventory, and management approaches are adjusted over time based upon new data and changing circumstances in our forests. The statewide planning and inventory should be updated at least every 10 years after completion of the first Statewide inventory. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

20. 6. What would bring you to "agree/support?"

_____

21. **7. Statewide Planning and Inventory:** One guiding principle of the planning process must be to consider the significant variation in our forests, both on a macro (landscape) level and micro level. For example, the uniqueness of the entire Pinelands ecosystem compared to other regions of the state should be acknowledged as well as the variations that occur at a much finer spatial scale within a forest. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

22. 7. What would bring you to "agree/support?"

_____

23. **8. Forest Management Planning and Implementation:** NJ's public forestlands must be protected and managed to maintain and enhance carbon sequestration and storage as necessary to meet state climate goals* while meeting equally important goals of ecological health, biological diversity, climate resiliency, and protection of water and soil resources while providing low-intensity, safe public recreation opportunities.** Planning and inventories should guide the prioritization of management goals in specific areas, recognizing that these goals will be achieved across the aggregate of acres owned by the state rather than on one single acre in any specific area. Areas having historical, cultural and spiritual significance for Indigenous People should be characterized and protected. *

* *State climate goals - NJ's Global Warming Response Act 80x50 Report*

*** low intensity recreation as defined as means non-motorized outdoor, nature-based recreational activities, including, but not limited to, boating, swimming, fishing, hiking, hunting, trapping, picnicking, nature observation, photography, horseback riding, tent and shelter camping, cross-country skiing, bicycling, snowshoeing, rock climbing, ice climbing, and enjoyment of open space.*

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

24. 8. What would bring you to "agree/support?"

25. **9. Forest Management Planning and Implementation:** All forest management plans on public land must be developed in accordance with the process established through rulemaking noted in the previous section (bullets #2 and #3) and continuously guided by the statewide planning and inventory as it is developed. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

26. 9. What would bring you to "agree/support?"

_____

27. **10. Forest Management Planning and Implementation:** Meeting these goals requires multiple tools and approaches be guided by sound science as well as being consistent with and guided by the inventory and planning process. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

28. 10. What would bring you to "agree/support?"

_____

29. **11. Forest Management Planning and Implementation:** Prescribed burns are a necessary management tool to reduce the catastrophic fire risk in ecosystems like the Pine Barrens. Additionally, prescribed burns should be deployed in order to meet other critical ecological objectives throughout the state. The current rules related to burn plans and the use of fire should be revisited and revised in order to make this management tool one that can be more successfully utilized by the NJ Forest Fire Service and other trained experts.

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

30. 11. What would bring you to "agree/support?"

_____

31. **12. Forest Management Planning and Implementation:** A more intensive effort is needed to address the impacts of invasive non-native species. Efforts to address invasives must address insects, animals, plants, pathogens, and microorganisms. One approach is to re-convene The NJ Invasive Species Council, created in 2004 but currently dormant, and charge them with updating and implementing the state-wide strategic plan to address the issue. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

32. 12. What would bring you to "agree/support?"

_____

33. **13. Forest Management Planning and Implementation:** NJ DEP should be directed to identify and implement steps to measure and reduce deer densities in our public forestlands to ecologically sustainable levels to enable our forests to regenerate. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

34. 13. What would bring you to "agree/support?"

_____

35. **14. Forest Management Planning and Implementation:** Increased funding and staff to NJDEP is necessary to carry out these activities and address these goals. Funding can include increased funding through the annual budget, new state funding sources such as those identified in Task Force proposals, external grant programs and other government entities (such as funding through the Inflation Reduction Act) that can assist the agency in completing these goals. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

36. 14. What would bring you to "agree/support?"

_____

THIRD Survey - NJFTF Conceptual Framework

This THIRD Revision of the Framework. Here are some highlights of changes we made based upon input received:

- We removed the reference to the NJDEP 14-step process as the basis for the initial rule-making governing forest management plans.
- We removed the reference to the federal 30x30 initiative under ecological reserves and instead refer to a significant percentage of set-asides to be determined by the inventory and planning process.
- We added mention of identifying areas for afforestation and reforestation to advance carbon sequestration. (Suggested by Sen. Smith during a recent update. We agree.)
- We added language clarifying that commercial timber management should not be a goal of forest management plans on public land, but that wood products can be sold when cutting and removal is a necessary part of an approved plan to achieve ecological, climate or other non-commercial goals.

We believe that these changes clarify and strengthen the framework, address issues that have been raised, and reflect areas of broad agreement.

* Required

1. Name *

_____

2. Please indicate if you are the authorized representative of an organization and the name of that organization. *

_____

3. Level of support for overall framework. *

Mark only one oval.

- ◯ Agree/support
- ◯ Likely to support with some revisions
- ◯ Not likely to support without significant revisions
- ◯ Disagree/not support

4. What would bring you to "agree/support?"

_____

5. Level of support for Statewide Planning and Inventory section *

Mark only one oval.

- ◯ Agree/support
- ◯ Likely to support with some revisions
- ◯ Note likely to support without significant revisions
- ◯ Disagree/not support

6. What would bring you to "agree/support?"

_____

7. Level of support for Forest Management and Implementation section *

Mark only one oval.

- ◯ Agree/support
- ◯ Likely to support with some revisions
- ◯ Note likely to support without significant revisions
- ◯ Disagree/not support

8. Comment on Forest Management Planning and Implementation section

_____

9. 1. **Statewide Planning and Inventory:** Statewide Planning and Inventory: Protection and management of NJ's public forests must be based upon a comprehensive planning and mapping process at the landscape level based upon sound science and data. Additional appropriate inventories of significant biota and resources, as needed and feasible, should be included. This planning process should be directed by a scientific advisory panel* as well as require robust public participation throughout the process. Initial inventory and planning process should focus on state owned lands and then extend to significant forested parcels of county, municipal and other lands acquired using state funding (acreage to be determined in the rulemaking). *

** The science advisory panel should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists) - the panel should be a new committee of the NJDEP Science Advisory Board or be modeled similar to the NJ Endangered and Non-Game Species Advisory Committee or NJ Forest Stewardship Advisory Council or similar. There should be no Governor or legislative approvals needed for appointments to move forward.*

Check all that apply.

- ☐ Agree/Support
- ☐ Disagree

10. 1. What would bring you to "agree/support?"

11. **2. Statewide Planning and Inventory:** A formal rulemaking process for the development of Forest Stewardship Plans, Ecological Restoration Plans, Natural Resource Stewardship Plans, and other plans on public forested lands will be conducted in parallel with the inventory and planning process and in accordance with Administrative Procedures Act. The rulemaking will be informed by and consistent with statewide planning and inventory efforts. The rulemaking should not take longer than three years to be adopted. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

12. 2. What would bring you to "agree/support?"

13. **Revised to:** *

3. Statewide Planning and Inventory: A separate rulemaking process, consistent with the Administrative Procedures Act, will be initiated and completed within one year to govern the development of forest stewardship, ecological restoration, natural resource stewardship or other forest management plans on state as well as significant forested parcels of county or municipal lands acquired with state funding (acreage to be determined in the rulemaking). No newly initiated plans will be approved for one year after rulemaking begins (except for necessary fire management activities or emergency scenarios like natural disasters).

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

14. 3. What would bring you to "agree/support?"

15. **4. Statewide Planning and Inventory:** The planning process should identify areas to be set aside through designations including ecological reserves and/or protected natural areas (as defined by the Natural Areas Program in NJ) which will act as set-asides with limited management except as necessary to address ecological threats and as determined by an oversight council.* One of the primary goals for these areas is to promote growth of maturing forests and to provide for future old growth forests for their carbon and ecological benefits. While we anticipate that a significant percentage of public forest lands should be set aside for these purposes, the specific acreage and location of these lands should be determined through the inventory and planning process. *

This may be accomplished through an overhaul and expansion of the current Natural Areas Program. Or, a new program and entity could be established for this purpose.

The planning process should identify areas where afforestation and reforestation should occur on public lands, and measures needed to ensure success, consistent with the carbon sequestration goals identified in the NJDEP Global Warming Response Act 80x50 report.**

** The oversight council should consist of experts having appropriate professional and academic qualifications (such as foresters, ecologists, wildlife biologists and biogeochemists). There should be no Governor or legislative approvals needed for appointments to move forward.*
*** State climate goals - NJ's Global Warming Response Act 80x50 Report*

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

16. 4. What would bring you to "agree/support?"

17. **5. Statewide Planning and Inventory:** The planning process must identify areas where active management is needed to address current and future threats to ecological health, such as invasive species proliferation, or to address goals as identified in the planning process. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

18. 5. What would bring you to "agree/support?"

_____

19. **6. Statewide Planning and Inventory:** The planning process must recognize the importance of adaptive management, whereby planning, inventory, and management approaches are adjusted over time based upon new data and changing circumstances in our forests. The statewide planning and inventory should be updated at least every 10 years after completion of the first Statewide inventory. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

20. 6. What would bring you to "agree/support?"

_____

21. **7. Statewide Planning and Inventory:** One guiding principle of the planning and rule-making process must be to consider the significant variation in our forests, both on a macro (landscape) level and micro level. For example, the uniqueness of the entire Pinelands ecosystem compared to other regions of the state should be acknowledged as well as the variations that occur at a much finer spatial scale within a forest. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

22. 7. What would bring you to "agree/support?"

_____

23. **8. Forest Management Planning and Implementation:** NJ's public forestlands must be protected and managed to maintain and enhance carbon sequestration and storage as necessary to advance state climate goals* while advancing equally important goals of ecological health, biological diversity, climate resiliency, and protection of water and soil resources while providing low-intensity, safe public recreation opportunities.** Planning and inventories should guide the prioritization of management goals in specific areas, recognizing that these goals will be achieved across the aggregate of acres owned by the state rather than on one single acre in any specific area. Areas having historical, cultural and spiritual significance for Indigenous People should be characterized and protected. *

** State climate goals - NJ's Global Warming Response Act 80x50 Report*
**** low intensity recreation as defined means non-motorized outdoor, nature-based recreational activities, including, but not limited to, boating, swimming, fishing, hiking, hunting, trapping, picnicking, nature observation, photography, horseback riding, tent and shelter camping, cross-country skiing, bicycling, snowshoeing, rock climbing, ice climbing, and enjoyment of open space.*

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

24. 8. What would bring you to "agree/support?"

25. **9. Forest Management Planning and Implementation:** All forest management plans (forest stewardship, ecological restoration, natural resource stewardship etc,) on public land must be developed in accordance with the process established through rulemaking noted in the previous section (bullets #2 and #3) and continuously guided by the statewide planning and inventory as it is developed. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

26. 9. What would bring you to "agree/support?"

27. **10. Forest Management Planning and Implementation:** Meeting these goals requires multiple management, restoration and protection approaches that should be guided by sound science and be consistent with and guided by the inventory and planning process. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

28. 10. What would bring you to "agree/support?"

29. **11. Forest Management Planning and Implementation:** Prescribed burns are a necessary management tool to reduce risk of catastrophic fires in ecosystems like the Pine Barrens. Additionally, prescribed burns should be deployed in order to meet other critical ecological objectives throughout the state. The current rules related to burn plans and the use of fire should be revisited and revised in order to make this management tool one that can be more successfully utilized by the NJ Forest Fire Service and other trained experts.

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

30. 11. What would bring you to "agree/support?"

_____

31. **12. Forest Management Planning and Implementation:** A more intensive effort is needed to address the impacts of invasive non-native species. Efforts to address invasives must address insects, animals, plants, pathogens, and microorganisms. One approach is to re-convene The NJ Invasive Species Council, created in 2004 but currently dormant, and charge them with updating and implementing a state-wide strategic plan to address the issue. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

32. 12. What would bring you to "agree/support?"

_____

33. **13. Forest Management Planning and Implementation:** NJ DEP should be directed to identify and implement new and innovative steps to measure and reduce deer densities as necessary in our public forestlands to ecologically sustainable levels to enable our forests to regenerate. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

34. 13. What would bring you to "agree/support?"

_____

35. **14. Forest Management Planning and Implementation:** Commercial timber management should never be the goal for any forest plan on public land. Wood products can be sold in instances where cutting and removal of wood is a necessary part of an approved plan with ecological health, climate or other noncommercial goals. *

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

36. 14. What would bring you to "agree/support?"

_____

37. **15. Forest Management Planning and Implementation:** Increased funding and staff to NJDEP is necessary to carry out these activities and address these goals. Funding can include increased funding through the annual budget, new state funding sources* external grant programs and other government entities (such as funding through the Inflation Reduction Act) that can assist the agency in completing these goals. *

** Potential ideas to be detailed in the final report.*

Check all that apply.

- [ ] Agree/Support
- [ ] Disagree

38. 15. What would bring you to "agree/support?"

_____

NJFTF - Final Framework Sign-on

Please use this form to support or not support the nal framework overall.

The four
co-chairs have worked hard to nd common ground, which has required some give-and-take. We hope that Task Force participants will do the same and consider supporting the framework if you believe that on balance it includes signi cant steps forward on important issues, rather than judging it on the basis of whether you agree with every single recommendation and the way it is worded. Your endorsement of the overall framework does not imply that that you support every detail of the framework. Rather, it is a broad consensus on general topics on which we can agree.

DUE: **December 27**, 2022

If you are submitting on behalf of an organization, please ensure that your organization has reviewed and approved the submission.

* Required

1. Name of Submitter (point of contact) *

2. Please list any academic credentials and certifications that you have

3. Town of Residence *

4. County of Residence *

Mark only one oval.

- Atlantic
- Bergen
- Burlington
- Camden
- Cape May
- Cumberland
- Essex
- Gloucester
- Hudson
- Hunterdon
- Mercer
- Middlesex
- Monmouth
- Morris
- Ocean
- Passaic
- Salem
- Somerset
- Sussex
- Union
- Warren

5. Do you serve on the Board or as a Trustee or decision-maker on any organizations (include the one you are representing)? Please list (include the one you are representing).

6. Organization (if you are submitting on behalf of an organization)

Mark only one oval.

- Allegheny Society of American Foresters (NJ Division)
- Animal Protection League of NJ (APLNJ)
- Appalachian Mtn Club
- Beaver Lake Realty Company
- Coalition to Ban Unsafe Oil Trains
- Duke Farms
- Empower NJ
- Environmental Education Fund
- Friends of Hopewell Valley Open Space
- Friends of the Drew Forests
- Great Egg Harbor Watershed Association
- Great Swamp Watershed Association
- Hackensack Riverkeeper
- Highland Park Shade Tree Commission
- Highlands Coalition
- Highlands Commission
- League of Humane Voters of NJ
- Lebanon Township Environmental and Open Space Commission
- Monmouth County Audubon Soc
- Morris County Park Commission
- National Wild Turkey Federation, NJ Chapter
- NJ Audubon
- NJ Conservation Foundation
- NJ Environmental Lobby
- NJ Forest Watch
- NJ Forestry Association
- NJ Nursery & Landscape Association
- NJ Outdoor Alliance PAC
- NJ State Federation of Sportsmen's Club
- NJ Tree Farm

- [ ] Norwood Environmental Comm
- [ ] NY NJ Trail Conference
- [ ] Ocean County Dept Parks and Recreation
- [ ] Passaic River Coalition
- [ ] Pinelands Commission
- [ ] Pinelands Preservation Alliance
- [ ] Princeton Environmental Commission
- [ ] Princeton Shade Tree Commission
- [ ] Raritan Headwaters Association
- [ ] Raritan Twp Environmental Commission
- [ ] Ridge and Valley Conservancy
- [ ] Ridgeview Conservancy
- [ ] Save Barnegat Bay
- [ ] Sierra Club, NJ Chapter
- [ ] Somerset County Parks
- [ ] Sourland Conservancy
- [ ] Support Roaring Rock Park
- [ ] The Nature Conservancy, NJ Chapter
- [ ] The Watershed Institute
- [ ] The Wildlife Society, NJ Chapter
- [ ] Thonet Associates
- [ ] Tri-County Sustainability
- [ ] Turtle Can
- [ ] Union County Parks
- [ ] UUFaithActionNJ
- [ ] Woods and Wayside
- [ ] Other

7. Your position with the organization

8. Do you sign-off on the framework? *

Mark only one oval.

- Yes
- No

Appendix D-5: Original topic prioritization survey

NJ Forest Task Force

Test

* Required

1. Please rank the topics in order of priority for NJ (1 is the top priority) *

Mark only one oval per row.

	1 - Most Important	2	3	4	5	6	7
Economics	◯	◯	◯	◯	◯	◯	◯
Tree harvest/timber management	◯	◯	◯	◯	◯	◯	◯
Passive management/protected areas	◯	◯	◯	◯	◯	◯	◯
Fire	◯	◯	◯	◯	◯	◯	◯
Carbon storage/sequestration	◯	◯	◯	◯	◯	◯	◯
Climate change mitigation and adaptation	◯	◯	◯	◯	◯	◯	◯
Invasive species, pests, pathogens	◯	◯	◯	◯	◯	◯	◯
Illegal/Recreational use of off-road vehicles	◯	◯	◯	◯	◯	◯	◯
Species biodiversity and habitat	◯	◯	◯	◯	◯	◯	◯
Loss of private forestlands	◯	◯	◯	◯	◯	◯	◯
Deer	◯	◯	◯	◯	◯	◯	◯
Other	◯	◯	◯	◯	◯	◯	◯

2. Are you interested in serving on a subcommittee? *

Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Listen only

3. Do you represent *

Mark only one oval.

- ◯ A nonprofit organization
- ◯ A government entity
- ◯ Private resident
- ◯ Press
- ◯ Homeowners association

4. Would you like to receive updates from the NJ Forest Task Force? *

Check all that apply.

- ☐ Yes
- ☐ No

Appendix D-6: Collaboration Table

NJ Forest Task Force Proposal Topics

Purpose: *This page is intended as a space to collaborate and connect with other collaborations, organizations, and individuals who are interested in submitting a proposal to the NJ Forest Task Force. Projects should be collaborative by design, engage and benefit multiple stakeholders, and create shared tools that are widely beneficial to contribute your contact information and other relevant information on this page.*

Share your your project idea below

** Project areas of interest: biodiversity, climate, deer, fire, funding/economics, habitat, invasives, passive mangaemnt, recreation, stewardship/management, timber harvest, waster quality, other*

Project Idea (brief summary)	**Workgroup (Climate or Ecol Health)**	**Project area of interest***	**Geographic Focus (statewide, north, central, south, other)**	**Additional information you'd like to share**	Name	Organizaiton	Position	Email
EXAMPLE - Proposal to specify conditions to mitigate risks of catastrophic wildfires in the State.	Climate	Fire	South		First and Last name	ABC Commission	Executive Director	First.Last@abccomssion.org
EXAMPLE - Proposal to identify areas in the northern part of the state where invasive species need control.	Ecological Health	Invasives	North		First and Last name	ABC University	Professor	Professor@abcuniv.edu
			Statewide	Tree Loss Every day, a 40 foot tree takes in 50 gallons of dissolved nutrients from the soil, raises this mixture to it's upmost leaves,converts into 10 pounds of carbohydrates and releases about 60 cubic feet of pure oxygen into the air. *Soil Loss: "one percent of organic matter in the top six inches of soil holds approximately 27,000 gallons of water per acre! Removal of this minimal amount of organic matter can have significant water flow implications, especially in a flood prone area.	Name Nick Homyak	Highlands Coalition Parsippany Green Team	advocate	makunik52@yahoo.com
Proposal to make it illegal to transport Liquified Methane Gas produced by Hydraulic Facturing through New Jersey forests by rail, using any rail infrastructure, old, current, or new. **(NOT DONE)** I ran out of time to finish proposal writing. Instead, I just lumped this together with the moratorium on all new fossil fuel infrastructure in NJ. **(See #9 instead.)**	Climate	Halting the expansion of climate change. Preventing unprecedented devastating explosions, forest fires and/or suffocation of all terrestrial oxygen breathing lifeforms for miles. Prevention of the contamination of surface water, groundwater and soil on a massive scale.	Statewide	Looking for experts on LNG bomb trains and their hazards, waterflow though New Jersey, previous examples of accidents.	Margaret Wood	Resident (who lives in Northern NJ forest)	Aerospace Engineer	margaretaw@optimum.net
Proposal to make it illegal to transport Petroleum Oil through New Jersey forests by rail, using any rail infrastructure, old, current, or new. **(CHANGED)** Since Bakken is already being tranported by rail through the Highlands in Hunterdon, I thought it would be too hard to stop it. So I changed the proposal to make the Oil safer by reducing the Reid Vapor Pressure to 9.0 psi as it was before there was fracked Bakken. Then I also asked that the quantity transported should not be increased. Preventing increases is consistent with a moratorium on the expansion of fossil fuels. (DONE)	Climate	Halting the expansion of climate change. Preventing forest fires. Prevention of the contamination of surface water, groundwater and soil on a massive scale.	Statewide	Looking for experts on Oil bomb trains and their hazards, waterflow though New Jersey, previous examples of accidents.	Margaret Wood	Resident (who lives in Northern NJ forest)	Aerospace Engineer	margaretaw@optimum.net
Deer management in Public Forests: Increase it. Allow one doe per NJ resident hunter to be sold to Charities like HHH. To buy the does, the charity can hold fund-raising dinners serving venison. After expenses, profits are used to buy food for the hungry. State ads should run teaching the public the harms of deer overpopulation, promote hunting, promote eating hunted venison.	Ecological Health	Culling deer populations above 10/sq-mi.	Statewide	(PETA & Anti-gun media has created such a stigma on ALL gun owners and hunters that NJ residents have been discouraged from hunting. Gov Murphy created laws preventing some hunting on public lands. Present literature showing that deer in the wild live better lives than factory farmed animals,	Margaret Wood	Resident (who lives in Northern NJ forest)	Aerospace Engineer	margaretaw@optimum.net
Proposal to Recreate the New Jersey Invasive Species Council as an Empowered Governmental Entity (DONE)	Ecological Health	Invasives	Statewide	Gov. Christie disbanded the New Jersey Invasive Species Council after 2010. New Jersey is losing the war on long established invasives. We should look to states like Washington as an example to rebuild this council. There are modern apps and tools to help accomplish this goal. But it cannot be done with the participation of all of us, on both public & private lands, since invasives know no borders. Both citizen scientist surveyors and citizen strike force eradicators must come from the general public. The public must participate strongly. (There is not enough funding in the world to taclke this problem, without citizen volunteerism.)	Margaret Wood	Resident (who lives in Northern NJ forest)	Aerospace Engineer	margaret@optimum.net
Create a Statewide, friendly, civic-minded competition to remove invasives, as part of the Earth Day celebration. Award prizes for different catagories. Those who are paid to do such tasks (such as landscapers) are put in a separate category due to their unfair advantage over lay people. This can be similar to the "Adopt a Road" road clean-up crews that pick trash off the roadsides. The difference is they are picking garlic-mustard instead of trash. Businesses, organizations, and landscapers can get their business name put on a sign on the road they cleaned up, for free advertizing. Winning individuals can get their name in the local paper for their civic-service, plus a prize. (DONE)	Ecological Health	Invasive plants, such as garlic-mustard.	Statewide	Currently I am thinking of pulling up garlic-mustard, because I have experienced doing it this year on 3 acres of hilly woodland property. The mature plants are easily identified during the month leading up to Earth Day. They are easy to pick during the "April showers". They are often found along roadsides on the forest edges.	Margaret Wood	Resident (who lives in Northern NJ forest)	Aerospace Engineer	margaretaw@optimum.net
Proposal for on-line tools and on-phone apps to help New Jersians identify plants, shrubs, trees, insects, woodland animals This should include ALL types: native, cultivated, invasive, aggressive, imported. The on-line tool for vegetation should be similar to the one developed for New England at this link: https://gobotany.nativeplanttrust.org/simple/ . (DONE)	Ecological Health		Statewide	For vegetation: the main page of the on-line interactive tool should encourage removel of invasives and replacing them with natives, or non-spreading cultivated plants such as in a home garden. In the case of invasive bugs, the web page should describe means to report them or eradicate them. In the case on endangered species, the webpage should encourage taking a picture and give info on where to report the sighting.	Margaret Wood	Resident (who lives in Northern NJ forest)	Aerospace Engineer	margaretaw@optimum.net
Proposal to create a carbon market for NJ and earmark money gained from the market for conservation	Climate	Green economy, using carbon market to fund conservation	Statewide	I designed a carbon market for a political candidate in NJ who, unfortunately lost their run. I've also designed a carbon market for Ecuador on behalf of the Ecuadorian Minister for the Environment and Conservation International.	Gwen Macchione	Macchione & Associates	Founder, Sustainability Consultant	gmacchione@macchioneassociates.com
A proposal for the state to require environmental impact studies before any large building development projects can proceed.	Climate		Statewide	there is currently a proposed measure (A-1294), that would suspend certain zoning requirements for two years. This would allow the conversion of unused buildings (like office buildings, etc.) to residential housing. On the surface, this sounds like a good idea, especially from a green building perspective, (although this would require many additional public building – hospitals, schools, supermarkets - which all drain natural resources). The problem is, as the population of the state grows, our natural resources, like New Jersey forests and the watershed that they protect come under an unsustainable load. Besides the dependance of New Jersey residents on fresh water, the forests provide a much-needed open-space escape for recreation and overall mental well-being. Additionally, as urban and suburban sprawl expands in New Jersey, it encroaches on our forested areas, causing flooding and other water management issues. Building encroachment causes increased areas of impervious surfaces, resulting in the loss of rainwater.	Cliff Paino			cpaino@optonline.net
Proposal to fund school groups in studying forest health-for example, to study the impact of deer on juvenile trees and shrubs, the impact of invasive species on soil erosion	Ecological Health	Education of the Next Generation	Statewide	"Children are overlooked stakeholders that have the most to loose and in order to establish an informed citizenry that will support sound principles of forset health, they need a solid foundation and respect for logical scientific reasoning. Experience in the forest is also essential at a young age in order to establish a love of place, and a felt-need to protect. They also may disover vital information related to the charge of this program."	Paula Jakowlew	Princeton HS	horticulture and biological sciences	paulajakowlew@princetonk12.org
Interest in things like Green Amendment, legal protections for forests, wildlife, equitable access to forests	Ecological Health		State. regional, or local	I can provide GIS, research support, student engagement	Lisa Jordan	Resident	Teaching Professor	ljordan@drew.edu
Forest to Faucet Water Billing - A move to block-rate pricing for the biggest single-family houseold water users	Ecological Health	Revenue	Statewide	New Jersey can raise funds to pay for additional forest health initiatives by charging a small number of New Jersey's largest single-family home water users a little bit more per unit for water, after their usage has breached a threshold set far above the average resident's water usage. This is called increasing block rate pricing. New Jersey should move from its uniform rate structure to an increasing block rate structure. It is already very common in states, including Massachusetts, North Carolina, Georgia, Arizona and others. This will raise funds that should be strictly designated for improving NJ public forests' ecological function initiatives.	Joe Basralian	Chatham Township, NJ	Chair of Chatham Township Open Space Advisory Committee. The Committee	jbbasralian@gmail.com
A proposal to introduce joint state and tribal management of state parks	Climate	Equity	Statewide		Gwen Macchione	Macchione &	Founder,	gmacchione@macchioneassoc
Extend the Realty Transfer Fee rate progression to sales of homes	Climate	Revenue	Statewide	New Jersey can raise funds to pay for additional forest carbon sequestration strategies by	Joe Basralian	Chatham Township,	Chair of	jbbasralian@gmail.com
I'm looking to work with a group regarding legislation for invasives and	Ecological	invasives/reforestation	Statewide	***Disturbance/ Invasive Species: Disturbance/ Invasive Species***	Kristin Ace	Morristown	Chairperson	kakat3@verizon.net
Everytime in the past a Ban on Invasive sales was proposed landscaper				Please sign this item. Meanwhile can discussion go here? Eg, has there been an effort to				
Proposal for (1) the creation of specific resources for environmental	Climate	Urban Forest Stewardship, Employment, Environmental	Statewide		Cameron McKenzie	Resident, Northern	Master of	cameron.m.mckenzie@gmail.c
Deer management on Farmland in peri-urban zones: Increase it. Allow	Ecological	deer population management on suburban farmland.	Statewide	Farmers are complaining about crop losses due to deer. Rather than give them and	Margaret Wood	Resident (who lives in	Aerospace	margaretaw@optimum.net
Title Change: as has occured in the past for 12 times for New Jersey Division of Parks and Forestry to NJDEP/Deptment of Proforestation & Climate Sustainabilty / Invasive Species Task Force. Take Politics out put Science in. for example: NJ FOREST SERVICE Mission Develop and Implement the Management Strategy Based on the inventory analysis, one or more management plans are then developed to achieve the ownership objectives. These forest management plans are based on and limited by what is biologically/ecologically possible on the area, what is economically and organizationally feasible, and what is socially and politically desirable..Eliminate scially and politically desirable. No-Sides-In-Climate; Consensus. Public Forest are not Lumber Farms.	Workgroup (Climate or Ecol Health)	Project area of interest*	Geographic Area/ Northern. All Public Remaining Forest.	AT the very least no forest management plans for lumber extraction in remaining public forest should occur without a Voter Referendum. If we can't keep the politics out. Complete transparency, and public media exposure a must.	Nicholas Homyak	NJ Highlands Coalition /NYNJ Trail Conference Invasive Plant /Litter/Trash abatements; Pyramid Mountain. Volunteer National Parks Laborer Trash/Invasives Walpack, NJ region (over 46 years)	Advocate Laborer	Please add an email, I want to message you.
PLACING CHARGING STATIONS IN SELECT STATE FORESTS	Crossover:	"Easier to prevent than to Cure"- Ben Franklin	Statewide;	***https://drive.google.com/file/d/1o3d07iuxxUgUGCU8gq3njBGPYpU6r4Nc/view?usp=***	Jean Montgomerie	Retired State NJPC	Master of	jmontperson@gmail.com
Identifying the Role of the Green Economy in Thinking About NJ's Public	Climate	Green Economy/Green Jobs	Statewide	While the Green Economy (or the somewhat synonymous Green Jobs) hasn't come up, or	Matt Polsky	None especially	Long time	innovator3@hotmail.com
Transparent use of science at NJFS	Both climate	Transparency at NJFS	Statewide	Task force proposals are to be grounded in peer-reviewed science, so we should seek to	John Saponara	unaffiliated	into science	jsaponara@proton.me
Proforestation panel follow-up questions	climate	(not actually a proposal, forgive me!)		Not really a proposal, but: Should the task force be so bold as to further question the	John Saponara	unaffiliated	into science	jsaponara@proton.me
Evaluation of clearcut effectiveness	forest health	assessment	statewide	Any clearcuts that are performed should include funding for baseline and future evaluations	John Saponara	unaffiliated	into science	jsaponara@proton.me
Program to expand populations of threatened early successional species	forest health	species of concern	statewide	Existing populations of threatened ESOs (early successional obligates such as golden	John Saponara	unaffiliated	into science	jsaponara@proton.me
Watershed protections on public forestlands: Implement strong	Ecological	watershed protection	statewide		Kristi MacDonald	Raritan Headwaters	Director of	kmacdonald@raritanheadwater
New Jersey Wildlands & Old Forrest Protection Act	Ecological	Forrest Protection	statewide	Set aside most of the remaining old and older growth forests in ecologial reserves to allow	Douglas Meckel	Unaffiliated Forrest	Retired	vortex951@icloud.com
Funding for the planning, planting, and maintenance of urban forests	Climate	Urban heat islands	urban areas	Much research shows urban forests can significantly reduce the heat island effects in cities.	Anne Soos	Princeton	Commission	annesoos@aol.com

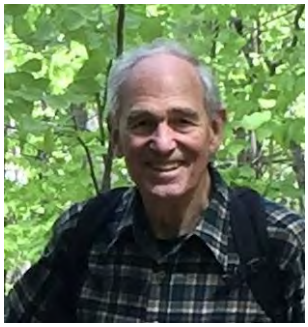
Exploring Conservation and Proforestation Options for NJ Forests

NEW JERSEY Forest Task Force

June 30, 2022 10 AM

REGISTER

NJFA NEW JERSEY FORESTRY ASSOCIATION
SIERRA CLUB NEW JERSEY CHAPTER
NEW JERSEY AUDUBON www.njaudubon.org
New Jersey Conservation FOUNDATION



William Moomaw, PhD: William Moomaw is Professor Emeritus, Tufts University and Distinguished Visiting Scientist at Woodwell Climate Research Center. He holds a PhD from MIT and previously taught chemistry and was Director of Environmental Studies at Williams College. He is a physical chemist who helped develop the first ozone layer protection legislation while working for the U.S. Senate and has been a lead author of five Intergovernmental Panel on Climate Change (IPCC) Reports including the 2007 report that shared the Nobel Peace Prize. He has published extensively on technical solutions to reduce climate altering emissions. He is currently working internationally and nationally to identify and implement Natural Climate Solutions that accumulate additional atmospheric carbon out of the atmosphere in forests, wetlands, and soils. In 2019, he was elected a Fellow of the American Association for the Advancement of Science for his "contributions to our understanding of climate change and its global impacts and to the work of the Intergovernmental Panel on Climate Change."

Ed Faison, PhD: Senior Ecologist, Highstead Foundation. Ed's work focuses on long-term forest change, deer-forest interactions, the ecology of wildlands, and natural climate solutions. Ed also advises conservation groups, educators, and land trusts about stewardship and forest monitoring. He holds master's degrees from the University of Vermont (Botany-Field Naturalist) and Harvard (Forest Science), and a PhD from the University of Massachusetts, Amherst (Dept. of Environmental Conservation).

Tony D'Amato, PhD: Professor of Silviculture and Applied Forest Ecology and Director of the Forestry Program at the University of Vermont. He received his B.S. in Forest Ecosystem Science from the University of Maine, M.S. in Forest Science from Oregon State University, and PhD in Forest Resources from University of Massachusetts. He was a faculty member for seven years at the University of Minnesota and Bullard Fellow at Harvard University's Harvard Forest prior to joining the University of Vermont in January 2015. His research focuses on long-term forest dynamics, disturbance effects on ecosystem structure and function, and silvicultural strategies for conferring adaptation potential within the context of global change, including introduced insects and diseases.

William Keeton, PhD: Professor of Forest Ecology and Forestry at the University of Vermont's (UVM) Rubenstein School of Environment and Natural Resources. At UVM he directs the Carbon Dynamics Laboratory and is a Fellow in the Gund Institute for Environment. He also serves as Chair of the IUFRO (International Union of Forest Research Organizations) Working Group on Old-growth Forests and Reserves. His research focuses on forest disturbance dynamics, riparian ecology, forest carbon, old-growth forests, ecological silviculture, and sustainable forest management in the U.S. Northeast and Pacific Northwest, but also takes him frequently to Central and Eastern Europe where he serves on the board for Science for the Carpathians and is currently a Fulbright Scholar. He has on-going research also in Chilean Patagonia and Bhutan related to wildfires and forest-stream interactions. In the U.S. he serves on the Board of Trustees for the Vermont Land Trust and on the science advisory committee for the Forest Ecosystem Monitoring Cooperative. His new co-edited book is entitled "Ecology and Recovery of Eastern Old-Growth Forests," published by Island Press. He holds a B.S. in Natural Resources from Cornell University ('90), a Masters in Conservation Biology and Policy from Yale University ('94), and a Ph.D. in Forest Ecology from the University of Washington (2000).

Appendix E
Proposals

Appendix E-1: Blank proposal form

Appendix E-2: Criteria for acceptance for discussion

Appendix E-3: Proposals that were accepted, discussed, and reached consensus. At least three of four co-chairs agree that proposal met criteria.

Appendix E-4: Proposals that were accepted and discussed during task force meetings but consensus not reached. At least three of four co-chairs agree that proposal met criteria.

Appendix E-5: Proposals that were accepted but not discussed. At least three of four co-chairs agree that proposal met criteria.

Appendix E-6: Proposals that needed revision or co-chairs were split on acceptance (fewer than three of four co-chairs accepted)

Appendix E-7: Proposals that were not accepted: At least three of four co-chairs agree that proposal did not meet criteria.

Appendix E-1: Blank proposal form

NJFTF Proposal Submission

Please use this form to submit your proposal for discussion and consideration by participants in your workgroup. Statements and data should be validated by cited literature - please provide documents or links of material that support your ideas. You can upload up to 10 documents here. Please include links in your narrative section. If you have trouble, please contact your workgroup co-chair.

Submit a proposal for one specific recommendation that could be included in state legislation related to protection or management of our public forestlands. If you have multiple recommendations, please submit separate proposals for each one.

DUE: JULY 5, 2022

If you are submitting a proposal on behalf of an organization, please ensure that your organization has reviewed and approved the submission.

Please indicate if more than one individual or more than one organization is submitting the proposal. Collaborative work is encouraged.

Please label your file uploads using this format:
Workgroup.YourLastName.Filename

For example:
EcolHlth.Smith.DeerManagement1
EcolHlth.Smith.DeerManagement2
Climate.Smith.DeerManagement1
Climate.Smith.Deer Management2

Be mindful of copyrighted material. There are search engines where you can find publicly available (open access) material such as:
PubMed.gov - https://pubmed.ncbi.nlm.nih.gov/
DOAJ - https://doaj.org/
Elsevier - https://www.elsevier.com/open-access/open-access-journals
CORE - https://core.ac.uk/

* Required

1. Name of Submitter (point of contact) *

2. Name(s) of additional submitters *

3. Organization (point of contact) *

4. Additional organizations *

5. Has your organization signed off on this submission? *

Mark only one oval.

- ◯ Yes
- ◯ No

6. Workgroup *

Check all that apply.

- ☐ Climate
- ☐ Ecological Health

7. General Topic Area *

Mark only one oval.

- ◯ Biodiversity
- ◯ Climate
- ◯ Deer
- ◯ Fire
- ◯ Funding/economics
- ◯ Habitat
- ◯ Invasives
- ◯ Passive management
- ◯ Recreation
- ◯ Stewardship/management
- ◯ Timber Harvest
- ◯ Water Quality
- ◯ Other: _____

8. Proposal Title *

9. Proposal Narrative (please cite your sources in the following section) - 2500 characters *

10. References, Peer-Reviewed (please upload materials cited here)

Files submitted:

11. Other References (please upload materials cited here)

Files submitted:

Appendix E-2: Criteria for acceptance for discussion

NJ Forest Task Force

Criteria s for accepting, rejecting, or revising a proposal.

Acceptance:

- Proposal addresses a NJ forest topic
- Addresses public lands in NJ
- Proposal presents a single, clear recommendation that can be addressed through legislative action
- Recommended action is within the purview of the task force charge
- Provides documentation for statistics, data, or literature cited

Revise:

- Multiple ideas in one proposal (revise to include one idea per proposal)
-

Reject:

- Not a proposal
- No clear idea presented
- No clear recommendation presented
- Does not address the topics

Possible questions to address in proposals that were sent to participants:
Some questions to be discussed include (but are not limited to):
What policy or management changes are needed on our public forests in response to climate change?

How should our public forests be cared for through management, restoration work, and protection in view of climate change?

What steps should be taken to increase the overall health and resiliency of our public forests in relation to climate change?

In view of climate change, should certain actions be taken to address carbon sequestration and carbon storage?

Are additional steps needed to protect against potential catastrophic wildfires, similar to those we see in other states?

How might these initiatives be funded?

What role should harvesting trees play to help achieve climate objectives on our public forests?

Appendix E-3
Proposals that were accepted, discussed, and reached consensus

Proposals that were submitted and accepted by the co-chairs as aligning with the criteria for acceptance. At least three of four co-chairs agree that proposal met criteria. These proposals were discussed by workgroup participants and consensus was reached to approve the ideas presented. There were 26 proposals in this category.

Narratives were limited to 2500 characters. Proposal sponsors were invited to also submit references, which are not included here due to space limitations but are available using the sponsor's citation(s) when provided. Footnotes in the proposals indicate a reference to an article, file, memo, or other document. Note that references submitted ranged from unpublished opinions, magazine and news articles, webinars, and journal articles (some peer-reviewed and some not peer reviewed).

Chris Hepburn, Ph.D.
Push Legislation (S-2186) that Limits Invasive Plants
"There is wide agreement that invasive plants are a problem for New Jersey forests. The New Jersey State Forest Action Plan lists Invasive plants as a DCA (Damage Causing Agent) and notes that invasive plants are becoming much more prevalent within our forest understories and are causing a variety of negative ecological effects.1 Invasive plants reduce wildlife habitat diversity and quality even at low densities and also reduce forest productivity.2

The New Jersey Invasive Species Strike Team has completed 4000 eradications of invasive plant populations, yet in 2021 listed 48 plant species as widespread and causing significant harm in natural areas.3 Their work has been supported by the NJDEP Division of Fish & Wildlife and many other nonprofit entities.4

And yet, at the same time that funds go toward eradicating invasive plants, many of the invasive plants that invade New Jersey forests are still for sale. The Strike Team's website contains a list of over 90 invasive or potentially invasive plant species that are commonly available for purchase.5 It is hard to believe, but while land stewards are spending time and money to control Barberry, for just one glaring example, stores are offering Barberry for sale!

This is despite it being known for decades that the ornamental plant trade is the primary means through which invasive plants enter the U.S. 6 And, while state regulations have been found to work to reduce sales of invasive plants, their effectiveness is decreased when neighboring states still sell the invasive plants. 6

New Jersey lags behind nearby states. As reported in 2016, New York, Connecticut, Massachusetts and New Hampshire have banned the cultivation, sale or use of [popular invasive species]".7 Not only do those four states limit the sale of select invasive plants8, but Maryland, Delaware, and Virginia all have recently voted to set similar limits (Virginia is in the study phase).9

In March, NJ Senators Bob Smith and Linda R. Greenstein introduced bill S-2186 that "Prohibits sale, distribution, or propagation of certain invasive plant species without permit from Department of

Agriculture." 10 It won't be easy for New Jersey's plant growers to adjust but it is necessary and this bill gives them two years to do so.

While passing this bill may not fall under 'management activities' for public forestlands, it is fundamental to protecting forest health. Invasive plants that are grown in the state or planted in private gardens are invading New Jersey forests, so the Forest Task Force should ensure that this bill is enacted as soon as possible.

Constance Katzenbach
Deer population management proposal
We ask that the NJ Forest Task Force consider a proposal to change the current NJDEP DFW regulations to create a pilot program with a new category of deer hunting license, a commercial deer harvest license (CDHL). Infrastructure for the regulated commercial harvest of wildlife (furbearers, fish) already exists. That the current level of deer population in NJ is deleterious to forest health is well documented. It is also evident that population control measures by NJ DEP DFW are inadequate in meeting this challenge in the face of declining hunter enrollment. A CDHL pilot program could be monitored closely, relying on research based data, to targeted areas. A CDHL program may provide a cost effective "green" tool in returning deer population to sustainable levels. The citations attached, by K.C Van Cauteren, et.al., (2011) outline the proposal most succinctly. Additional citations on recent (2019) deer population surveys by the NJ Farm Bureau and a comprehensive overview of the effect of increasing deer population on forest ecology from the 1970s to the present by J.Kelly (2019) are included.

Greg Gorman
Study the impacts of forest management techniques on New Jersey's aquifers and water supplies.
Considering the importance of New Jersey's aquifers to our drinking water supply and quality, any discussion of forest management should include an analysis of the impact of management techniques on New Jersey's aquifers. (See Climate.Gorman.WaterQuality1-Map of NJ Aquifers). Management techniques cover a wide range of methods, including tree thinning, prescribed burns, harvesting of mature tree stands and logging. Of most importance are the Kirkland-Cohancy Aquifer and the Highlands.
From the BC (British Columbia) Journal of Ecosystems and Management, there was acknowledgement that land degradation will have a major impact on carbon capture, recharge rates and forest vitality. But much is unknown. For example, there was also an admission in the study that effects of canopy openness are under-studied (Climate.Gorman.WaterQuality2-Bart Muys et. al. 2021). Forest management techniques may also have an impact on water table elevation, a vital consideration for New Jersey's management of its drinking water supplies (Climate.Gorman.WaterQuality3-Brian D. Smerdon et. al. 2009).
Different forest management techniques, such as thinning the forest or prescribed burns, will likely have differing impacts to our water ecosystems with significant and possibly adverse consequences for generations to come. Studies of the impact of forest management should highlight protection of vital watersheds where the state's major population centers, such as Newark and Camden, get their water from.
In summary, any discussion of how we keep New Jersey's forests resilient in the face of climate change should consider the implications to our aquifers and the availability of plentiful, clean water. It is recommended that any legislation allocate funds for the monitoring and analysis of forest management and its impacts on water supply and quality.

Jaclyn Rhoads
Ecological Community Conservation Plans
The Department should develop conservation plans designed to promote the recovery or maintenance of ecological communities based on the best scientific information available. This includes a multifaceted approach to evaluating the health of the system including all aspects of the ecosystem - water, plants, trees, and animals. Using this plan, land owners or organizations interested in helping to manage and/or steward the ecological community can propose management actions. These actions may include a specific forest stewardship plan or rare plant action plan, but a comprehensive evaluation must come first.

Additional details can be found in the other references section. I have also included three websites of examples and supporting research.

Joe Basralian
Forest to Faucet Block Rate Water Billing
It is widely accepted in peer-reviewed literature that healthy forests help purify water.

New Jersey can raise funds to pay for additional forest health initiatives by charging a small number of New Jersey's largest single-family home water users a little bit more per unit for water, after their usage has breached a threshold set far above the average resident's water usage. This is called increasing block rate pricing. New Jersey should move from its uniform rate structure to an increasing block rate structure. It is already very common in states, including Massachusetts, North Carolina, Georgia, Arizona and others. [Attachment 1]

Average NJ household water bill per month is approximately $60, inclusive of base rate service charges and per-unit charges. [2-2a]

The average American uses around 88 gallons per day per person. Average family of four would use around 10,500 gallons in a 30-day period, according to the U.S. EPA. An example of block rate pricing is shown mid-way down the attached page. A more detailed example is toward the bottom of the page. [3] Further discussion of block rate pricing is shown in [4].

Simplistic Example: If a single-family home pays $2.00 per thousand gallons of water, and uses 30,000 gallons of water in a month, it would pay $60 per month for water use (not including base rate service charges). That user has a large swimming pool and regularly uses its sprinkler system to water an expansive lawn, even when it rains. If the water rate after the first 20,000 gallons used rises to $2.50 per thousand gallons, the single-family home's total bill would rise by $5 per month to $65. This is a very small amount additional to pay for someone who has substantial means and has probably given little thought to water conservation.

Benefits of block rate pricing for water:
• Will raise funding for New Jersey's additional monitoring and managing of forests' ecological function.
• Only single-family households with the greatest means will pay a little more.
• Encourages conservation by the most inefficient users of water. Researchers saw 17% reduction in attached example. [5]
• Research shows that people are willing to pay for ecological functions. [6]
• Less water use reduces the utilities' costs of providing water and of treating wastewater.
• Less water use leaves more water upstream for use by the environment and in drought emergencies.

• Pertinency to forest conservation because healthy forests help purify water. All proceeds from the block rate pricing increment will be used for forest conservation, in service of clean water production.

Joe Basralian
Extend the Realty Transfer Fee progression to sales of homes $1.5 million and above
Stewarding New Jersey's forests to increase carbon sequestration may require raising more money for NJDEP.

To meet this need, it is logical to extend New Jersey's progressive Realty Transfer Fee rate to new breakpoints above $1 million.

BACKGROUND: New Jersey's Realty Transfer Fees (RTFs) are paid by nearly all sellers of real estate in New Jersey. The fees were instituted in 1968 to cover the cost of recording the transactions in deed books. By 2021, New Jersey's RTFs had become a major revenue source, raising $526 million [Attachment 1, p5 of PDF] out of total State revenue of $47 billion [Attachment 1, p10]. In 2022, RTFs are expected to raise $626 million [Attachment 1, p5].

PROGRESSIVE FEES: The fees are charged to sellers upon the sale of their home at a rate that starts at $2.90 (per $500 of home value) for homes sold for $150,000 and less, and rise to $6.05 (per $500 home value) on homes sold for $1,000,000 or more. [Attachment 2, Page 2] The break-points for the rising fee rates are at $150,000, $200,000, $550,000, $850,000 and $1,000,000. In addition, buyers of homes of $1,000,000+ pay a 1% RTF. [Attachment 3] At current rates, a seller of a $1 million home pays $9,575 in RTF. The fees are collected at closing, and remitted to the State of New Jersey.

RECOMMENDATION -- EXTEND THE PROGRESSIVE FEE STRUCTURE: The highest rate paid by sellers is $6.05 (on home sales of $1 million or more). This proposal suggests new break points be added at $1,500,000 and $2,000,000, at rates above $6.05. There were 60,000 NJ homes estimated to be worth more than $1 million in 2018. [4] There were 1,874 homes listed for sale at $1.5 million+, of which 1,106 were listed at $2 million+ on 6/22/22. [5] The wealthiest sellers would pay a little bit more.

CURRENT USES OF RTF FUNDS: RTF funds are used by the state for investments such as neighborhood revitalization, shore protection and the state's general fund. Counties also obtain a disbursement of these funds. [6]

DEDICATE FUNDING FROM THE RTF TO FOREST CARBON SEQUESTRATION STRATEGIES: NJDEP has over 70 programs that receive Dedicated Funds. [Attachment 1, p12-13] New DEP programs for Forest Carbon Sequestration should also receive dedicated funding.

RELEVANCE OF RTF TO FOREST CARBON SEQUESTRATION. It takes more than 100 full-grown Douglas Fir trees to build a 5,000 sq ft home. [7] Home size correlates with home price, so sellers of such homes – which are responsible for the removal of more trees from the landscape -- would logically contribute at a higher rate to forest carbon sequestration programs. The new RTF would apply to residential ("Class 2") homes only, not commercial properties.

John Landau
Invasive Species Management Regional Collaboration

NJDEP and/or a NJ Invasive Species Council shall establish formal and regular regional group and peer-state Invasive Species Management (ISM) relationships. Collaboration to build coordinated ISM strategies, shared knowledge bases, joint best management practices and reusable educational outreach materials will generate economies of scale that enable more efficient and effective invasives management to better protect our public forests.

Background:

1. NJ ISM challenges are not unique to NJ. Nearly all invasive diseases, flora, and fauna are detected first outside of NJ . NJ spotted lantern fly and emerald ash borer responses are examples of individual programs that gained considerable value from collaboration. But on a broader scale the data shows considerable disconnection and inconsistency between neighboring states.

(1) Bradley et al, "Breaking down barriers to consistent,
climate-smart risk assessments of invasive plants: a case study of US
Northeast states", 2022, Ecosphere, https://doi.org/10.1002/ecs2.4014
(2) Beaury et al (2021) "Invasive plant regulations in the United States are reactive and inconsistent",Journal of Applied Ecology

2. Invasive species succeed within an ecoregion, so peer state invasives species management coordination within an ecoregion that crosses the state border (eg Northern NJ and southern NY; Central NJ and SE PA) can be more important than coordination across ecoregions (eg The Pinelands and the Highlands).

3. Climate change facilitates both the migration of invasive species from warmer climes and the awakening of "sleeper" species that are already in NJ and are likely to become invasive as NJ conditions for propagation and growth become more favorable. This is a common threat to Mid-Atlantic and Northeast states.

(3) Prioritizing Range Shifting Invasives

(4) Are You Sleeping?

Methodology:

1. NJDEP and/or a NJ Invasives Species Council shall designate liaisons to participate in the Northeast Invasive Species Councils Work Group and symposia sponsored by the Northeast Regional Invasives Species and Climate Change Council (NE RISCC)

(5) Summary of 11-5 IPCs Working Group Meeting
(6) RISCC+Symposium+2022+Summary_Final.pdf

2. NJDEP and/or a NJ Invasives Species Council shall formally pursue peer-wise collaborations with neighboring states including PA, NY, DE and MD

3. NJDEP and/or a NJ Invasives Species Council shall annually summarize collaborative Invasives Species Management programs and propose continued improvements for further collaboration.

NJDEP and/or a NJ Invasive Species Council shall establish formal and regular regional group and peer-state Invasive Species Management (ISM) relationships. Collaboration to build coordinated ISM strategies, shared knowledge bases, joint best management practices and reusable educational outreach materials will generate economies of scale that enable more efficient and effective invasives management to better protect our public forests.
[(N)=EcolHlth.Landau.ISMcollab. N citations attached]

Background:

1. NJ ISM challenges are not unique to NJ. Nearly all invasive diseases, flora, and fauna are detected first outside of NJ . NJ spotted lantern fly and emerald ash borer responses are examples of individual programs that gained considerable value from collaboration. But on a broader scale the data shows considerable disconnection and inconsistency between neighboring states.

(1) Bradley et al, “Breaking down barriers to consistent,
climate-smart risk assessments of invasive plants: a case study of US
Northeast states”, 2022, Ecosphere, https://doi.org/10.1002/ecs2.4014
(2) Beaury et al (2021) “Invasive plant regulations in the United States are reactive and inconsistent”,Journal of Applied Ecology

2. Invasive species succeed within an ecoregion, so peer state invasives species management coordination within an ecoregion that crosses the state border (eg Northern NJ and southern NY; Central NJ and SE PA) can be more important than coordination across ecoregions (eg The Pinelands and the Highlands).

3. Climate change facilitates both the migration of invasive species from warmer climes and the awakening of “sleeper” species that are already in NJ and are likely to become invasive as NJ conditions for propagation and growth become more favorable. This is a common threat to Mid-Atlantic and Northeast states.

(3) Prioritizing Range Shifting Invasives

(4) Are You Sleeping?

Methodology:

1. NJDEP and/or a NJ Invasives Species Council shall designate liaisons to participate in the Northeast Invasive Species Councils Work Group and symposia sponsored by the Northeast Regional Invasives Species and Climate Change Council (NE RISCC)

(5) Summary of 11-5 IPCs Working Group Meeting
(6) RISCC+Symposium+2022+Summary_Final.pdf

2. NJDEP and/or a NJ Invasives Species Council shall formally pursue peer-wise collaborations with neighboring states including PA, NY, DE and MD

3. NJDEP and/or a NJ Invasives Species Council shall annually summarize collaborative Invasives Species Management programs and propose continued improvements for further collaboration.

John Landau
Public Forest Watershed Services Protection
Conservation of NJ Public Forests Infrastructure services for flood mitigation and drinking water shall be a major objective within NJ public forest management policy and individual public forest management plans.

Public Forest Watershed services analyses shall be created using green infrastructure water quantity and quality assessment best practices and NJDEP Extreme Precipitation Projections.

Background:

Flood control and drinking water for much of New Jersey require protection from the effects of climate change. Extreme precipitation events are getting worse. The watershed services provided by public forests are critical to mitigate increased risks and costs to the developed areas of NJ.

1. "...there is a high likelihood that precipitation intensity will increase into mid and late century in all parts of the state…
…projections suggest that the amount of precipitation associated with the 100-year, 24-hour storm will increase, on average, by 20% to 25% above published values in northern NJ counties. …a 17% chance that precipitations will increase by as much as 45% to 50% …in some counties."
https://njprojectedprecipitationchanges.com/ and (1)

a. NJDEP is updating stormwater management rules to require development projects to manage to these projected extreme rainfall projections.
b. A 100 year, 24 hour storm has a 1% probability to occur in any one year but a 39.5% probability of occurring at least once in any 50 year planning period. (2)

2. Public forests are the catchment area for 25% of rainfall (3) in densely populated NJ (4).Every county in NJ is classified by the US OMB as urban. (5)

a. Healthy NJ forests provide critical pluvial (surface water) and fluvial (riverine) flood risk mitigation and drinking water sourcing for most of NJ. (eg the NJ Highlands Water Protection and Planning Act)
b. Healthy forests provide very significant rainfall interception, infiltration and evapotranspiration services that impact their extended watershed (6)
c. eg Evapotranspiration services typically return about 50% of annual precipitation back into the atmosphere, water that does not add to downstream flow. (7)

Methodology:

1. An advisory council of NJDEP and private watershed experts shall be created to define practices to assess and manage the watershed services of NJ Public Forests. The assessment shall include an estimate of the economic value.(eg https://landscape.itreetools.org/maps/)

2. The defined practices shall be consistent wherever appropriate with the NJDEP practices for development. (8) (9)

Conservation of NJ Public Forests Infrastructure services for flood mitigation and drinking water shall be a major objective within NJ public forest management policy and individual public forest management plans.

Public Forest Watershed services analyses shall be created using green infrastructure water quantity and quality assessment best practices and NJDEP Extreme Precipitation Projections.

Kristi MacDonald

Establishing NJ Forest Ecoreserves to preserve and protect large forest tracts for their roles in supporting Biodiversity, Watersheds, Climate Resilience, Research and Passive Recreational uses. In the early 1700s, there were 4.7 million acres of forestland in NJ (NJDEP 2010); by 2015, about 1.5 million acres remained (Lathrop et al. 2020). Given this large-scale historic loss and the continuing threat of loss, fragmentation, and degradation, we propose that all large (> 500-1,000 acre) forests remaining in the state be permanently protected as ecological reserves. Large forest tracts serve critical ecosystem functions necessary for biodiversity conservation, sustainable water resources, carbon sequestration, and human health. Incompatible uses should be prohibited within ecological reserves including timber harvesting, removal of dead or damaged trees (salvage harvesting), commercial mining and excavation. While smaller forests have significant ecological value and should also be protected, large, intact forests are ecologically more effective than many smaller isolated forest patches at supporting critical ecosystem functions. There is a rich literature on forest fragmentation impacts on biodiversity (eg., Fahrig 2003). The forest-interior of large forests experience less impact from “edge effects” including human disturbance, invasive species, high sunlight, and wind-borne drift from herbicides and pesticides (see reviews in Murcia 1995). Larger forests support larger populations of species, which may be less at risk of extinction from “catastrophic” events; they support area-sensitive, forest-interior, wide ranging, edge-avoiding, and rare species (Wilson and MacArthur 1967); they support a greater genetic diversity within species (for eg. Bacles and Jump 2010); allow for movement, migration and range expansions of species due to climate change and support a greater variety of habitats (Hannah 2008; Thomas and Gillingham 2015). Increased shade, air and soil moisture, and healthy soils make larger forests more resilient to climate change impacts and major disturbances such as forest fires and drought; and allow for more carbon sequestration and water storage. Forested land at the watershed scale is associated with higher water quality in streams and aquifers and is the main source of clean drinking water for the majority of the U.S. population (Frimpong et al. 2005; Neary et al. 2009). Many remaining large forests may overlap with intact headwaters regions providing greater protection and buffering of critical water resources (see review in NRC 2002). Finally, it is likely that the larger forests are publicly owned making it easier to assert conservation and management strategies as opposed to privately-owned forests.

Kristi MacDonald

Watershed protections on public forestlands: Implement strong protections of streams, springs, wetlands, vernal pools and steep slopes

Forested land at the watershed scale is associated with higher water quality in streams and aquifers and is the main source of clean drinking water for the majority of the U.S. population (Frimpong et al. 2005; Neary et al. 2009). Forested riparian ecosystems and wetlands provide critical functions of maintaining water quality by filtering nutrients and other contaminants, shading and cooling water temperatures,

providing habitat for aquatic and terrestrial organisms, maintaining channel morphology by stabilizing banks, and slowing and storing floodwater (review in NRC 2002). It would cost billions of dollars a year in infrastructure to replace these ecosystem services.

Requirements must be put in place to protect critical watershed features such as streams, springs, wetlands, vernal pools, aquifers and steep slopes on public forestlands subject to logging, agriculture, and other human disturbances. These requirements include: 1. Mapping of all critical watershed features including permanent and ephemeral habitats such as small headwater streams and vernal pools; 2. Establishing science-based, meaningful minimum buffer sizes to protect watershed features within public forestlands. To provide maximum protection of all ecosystem services and functions we recommend a standard for all public forests of 300-foot buffers for streams and wetlands and a 1000-foot buffer for vernal pool habitat protection; 3. Protecting soils on steep slopes to prevent soil loss, degradation of water quality and silting of streams and wetland areas. There should be no alteration of slopes with a gradient of 10% or greater.

There are several reviews of the literature on the effective riparian buffer width necessary to protect stream health from land use impacts; climate change is necessitating a higher level of concerted planning to mitigate these impacts (Wenger 1999, Army Corps of Engineers 1991, Fischer and Fischenich 2000, Broadmeadow and Nisbet 2004, Sweeney and Newbold 2014). Stream and wetland buffer recommendations depend on targeted parameter, but in general they range from 50ft to 300ft (15-91m); in some cases buffering beyond the entire floodplain is recommended (Wenger 1999), which for the 500-year storm could range up to 250 ft. (76 m) or more. Narrower forest strips act as de facto small forest patches and experience edge effects from adjacent land use (review in Murcia 1995) and for instance, do not reach 100% of natural shade until approximately 250 feet (76 m) from the edge of clearcuts (Brosofske et al. 1997). Vernal pool buffers of 1,000 feet protect and promote biodiversity and address the habitat requirements of vernal pool-breeding wildlife.

Patricia Shanley, PhD

Training New Jersey's Youth to Steward Public Forests

Public forests in New Jersey are key to the health of its people and ecosystems. Yet their ecological integrity is in decline (1). The wellbeing of NJ youth is also in jeopardy. In one decade, suicide rates rose 39% among NJ children (2). Research shows that time in nature, and meaningful activity, boost mental health (3).

Research also shows that forests are our best defense against the twin crises facing our planet - climate change and species extinction (4). Education, however, has become globalized and screen-based, reducing direct exposure to local ecosystems and leading to an “extinction of experience” (5). Youth graduate without the ability to identify common trees. Although NJ is distinguished as the first state to mandate a climate curriculum, true understanding of climate change, biodiversity loss, and invasive species require direct experience in forests (6).

Globally, invasive species are a major cause of species extinction and forest degradation (7). In NJ, at a landscape scale, forests require sustained effort to reduce invasives. At a societal scale, youth urgently require meaningful activity. Although seemingly insurmountable, cost-effective solutions to these two problems are intertwined. Youth can learn both the ecological and public health risks of invasive species (8) and become empowered to eradicate them with their own hands, thereby transforming forests into

habitats of native species, while also transforming themselves. Physical work in schoolyards, parks, and forests bestow a sense of accomplishment, instilling forest knowledge and community spirit.

This proposal aims to improve the health of NJ's forests and to promote resilience among NJ youth. Planned activities include:

- Collaborating Partners (NGOs, Land Trusts, Schools, and State Agencies) will jointly design and implement a state-wide, forest and park youth stewardship service.

- Invasive Species Strike Forces will be strengthened and expanded to create a youth training network, increasing volunteer ecosystem restoration in public parks and forests.

- Educators and science standards experts will complement the state CC curriculum with experiential, outdoor/forest-based K-12 learning. Youth will learn compelling natural history and cultural uses of invasives and natives.

- A pilot program in public schools will train 40 HS students to visit 200 K-12 classrooms reaching 5,000 students to improve ecosystem health and reduce invasives in schoolyards, public parks, and forests.

- Collaborating partners will study the feasibility of reviving the Youth Conservation Corps (YCC) on a statewide level.

Richard Isaac
Deer in Deep Forest
Proposal: Do a study of deer in deep forests and the causes of their deaths within them to determine if deep forest ecological health can be significantly increased by augmenting culling of fawns by increasing the number of natural predators (bears, eastern coyotes, and/or bobcats), increasing hunting limits on adult deer, and/or other techniques.

According to the Rutgers HMF Deer Density Final Report (attached), high deer densities can lead to intolerable levels of damage to native ecosystems. "Forest ecosystems suffer tremendously from deer over-browsing. Impacts to the forest understory start becoming harmful when population densities surpass twenty deer per square mile, impeding forest regeneration (Drake et al. 2002). Many of New Jersey's forests are likely over-browsed and, in many areas, it is severe (Baiser et al 2008). Kelly (2019), noted impacts from increased densities of white-tailed deer of concern to forest managers in northern New Jersey that included declines in seedlings, saplings, trees, herbs and shrubs and a shift from mostly native to exotic species." (p. 10).

Insight into the effects of deer browsing can be gained by examining long-term changes in diversity and the pattern of species abundance. (Direct and Indirect Effects of White-tailed Deer in Forest Ecosystems, p. 169, attached.)

A study by the U.S. Forest Service concluded that coyotes help manage deer population in the Southeast U.S. (Study is attached.) The increased killing of fawns by bear, eastern coyote, and/or bobcats may be able to complement hunters focusing more on full grown deer.

As increasing the number of bears, eastern coyotes, and/or bobcats may be able to increase deep forest ecological health where there are very high deer densities, it is proposed that a study be conducted in

deep forest to see if restricting the hunting of any of those predators, increasing hunting limits on adult deer, and/or other techniques will increase deep forest ecological health by limiting the deer population.

Sandra Chen
Train Municipal Fire Personnel as Prescribed Burn Professionals
Prescribed burns can be used both a wildfire prevention technique and an ecological method of invasive species control (https://www.nj.gov/dep/parksandforests/fire/program/aboutrxb.html). In New Jersey, it seems that the capacity to carry out such burns each year is not sufficient to meet the need.

A typical goal of New Jersey State Forest Fire Service typically is to conduct prescribed burns on 25,000 acres per year (https://www.nj.gov/dep/newsrel/2022/22_0004.htm). But in 2021, for example, the Forest Fire Service completed prescribed burns on 11,796 acres of state-owned lands, 4,915 acres of other government-owned land and 1,225 acres of privately owned property, for a total of 17,936 acres—a total short of the goal.

One constraint on prescribed burns are the mandated weather and the other pre-conditions that must be met for prescribed burns to be authorized to occur on a given day. Only about days per year satisfy the pre-conditions. A further limit on how many prescribed burns can be conducted is the fact that there are only so many trained burn professionals with the skills necessary to carry out and complete a burn safely.

In 2018 New Jersey enacted the "Prescribed Burn Act" (https://www.state.nj.us/dep/parksandforests/fire/docs/107_Prescribed-Burn-Act.pdf). This Act calls for the State Forest Fire Service to "develop and administer a program for prescribed burning on public and private lands under which the department may authorize a person to conduct a prescribed burn pursuant to a prescribed burn plan approved by the department." While authorized in law, such training has yet to be offered. The resources necessary to implement this prescribed burn training program should be allocated to the State Forest Fire Service so that the cadre of trained and qualified burn professionals can be expanded.

Any municipality, particularly those with forested parklands, should be able to ensure that members of its local fire service can qualify as prescribed burn professionals. Qualified burn professionals are a key resource for ecological management of forest lands. If members of local fire departments are given the opportunity to qualify, they will be able to offer support to their local government and the ecological management of their forest lands.

Sandra Chen
Ban the Sale of Invasive Species
To protect woodlands throughout the state, New Jersey should enact a ban on the sale or import of exotic species that are known to be detrimental to woodland ecosystems.

Invasive species are a daunting problem for New Jersey forest managers. The threat posed by invasive species has been studied (1). Control is difficult and expensive. Prevention of their introduction and spread has been found to be a more cost-effective approach. but to date no law has been passed.

However, in March, 2020, a bill governing sale of invasive species was introduced into the Senate and House: S2186/A3677 (2). This is good, and it is to be hoped that the bill, or some version of it, continues on forward toward enactment. The bill is to be commended for requiring the development and dissemination of education materials to help the public understand and appreciate the reasons why controlling these species is important.

Recently Delaware passed an invasive species law, which went into effect on July 1 (3). Delaware's initiative offers a model worthy of consideration. The New Jersey bill and the Delaware law are similar, but not the same. The New Jersey bill proposes control of 28 species, while Delaware's initial list addresses 37 species or sub-species. Twenty-three of the species listed in Delaware's law are not included in the New Jersey bill. Fourteen of the species listed in the New Jersey bill are not included in the Delaware law. Only 14 of the two states' listed species are the same.

Research has shown that control of invasive plants is most effective when conducted consistently across jurisdictional boundaries (4), (5). Coordination with Delaware could be a first step in building a regionally consistent approach. Other states in the region may be interested in developing a regional approach as well. Already Pennsylvania and Vermont have "noxious weeds" laws for the protection of their agriculture and local ecosystems (6). And New York regulates certain species it has determined to be invasive (7).

In any case, continuing to allow the sale or import of plants which are well-documented to be invasive in New Jersey and which woodland managers must expend scarce resources, year-after-year, to attempt to control is simply ecologically counterproductive.

Emile DeVito

Protection of critical natural resource areas via establishment of a new reserve system.

Outside of the NJ Pine Barrens ecosystem, there are unique forested habitats that should be designated with a new type of natural reserve status, one that prohibits road creation and timber harvests unless authorized by the New Jersey Natural Areas Council to address an extreme ecological threat or disaster. State Natural Areas are the only public lands now protected from logging or any form of recreational development. Far more areas need similar elevated protection.

Currently most NJ forests lack sufficient "advanced regeneration" of a diverse set of seedlings and saplings due to overabundant deer. Disturbances of any type (natural and man-made) result in colonization by ruderal native or invasive alien species and eventually a severe loss of species diversity of plants (Kelly ref). Even well-intended forestry operations are disturbances that often set off a chain of events that eventually result in degradation of biodiversity due to deer and alien species impacts. These risks are unacceptable in NJs highest quality forests.

What follows is a proposed list of public forest areas (outside of the Pine Barrens ecosystem), either already mapped, or to be mapped based on new biological surveys which must be conducted, to be designated for elevated protection to properly protect critical natural resources and ecological processes from being degraded:

- All future designated forested State Natural Areas and additional Natural Heritage Priority Sites as biological surveys warrant,
- Natural Heritage Priority (NHP) sites already acquired as public land (mapped on Conservation Blueprint https://www.njmap2.com/)

- Forested lands where the soil horizons have never been disrupted by past agriculture. These lands can be identified by the CC Vermuele forest maps from the late 1800s, 1930 aerial photos, and ground-truthing. They have been shown (DeVito and VanClef ref) to contain significantly greater Floristic Quality Index values than immediately adjacent late successional forests on post-agricultural soils.
- Upland forests whose canopies are dominated by maturing trees over 100 years old, as current research shows that the best way to sequester carbon on these sites is to allow them mature. (Moomaw ref).

Note there is overlap between these 4 categories; forested lands never used for past agriculture that disrupted soil during the 17th to 19th centuries still contain the most unique and vulnerable natural resources. This proposal does not include the Pine Barrens ecosystem nor the plentiful tracts of post-agricultural forest on public land.

Jean Montgomerie
Address Climate Change AND Endangered Species Protection by Reviving and Empowering the New Jersey Natural Lands System and Natural Lands Council

Whereas:

The State Natural Areas System was created to protect natural and ecological resources while still allowing public use. There are 41,000 existing acres of State owned, Designated Natural Areas; of which 40,000 acres are forested.

Tree Harvesting from Natural Areas SOLELY FOR THE PURPOSE OF COMPLETING A FOREST MANAGEMENT OBJECTIVE, is permitted in Natural Areas. However, Ecological Reserves are generally NOT subject to habitat management cutting, while Conservation Preserves allow habitat management to preserve rare plant and animal species.

The State Natural Areas Council and the DEP Office of Natural Lands Management governs the Natural Areas. Natural Areas are administered and Enforced by Parks and Forestry and the State Park Police if on State Forest and State Park lands OR by Fish Game and Wildlife and Conservation Officers if on State Wildlife Management Areas.

New State lands have not been Designated or added to the State Natural Areas for over 20 years (2022).

The seven member Natural Areas Council is appointed by the Governor and two seats have been vacant for many years. Reappointments to the Council have lagged past expiration for years.

It is proposed that :

The Governor appoint and fill all vacant seats on the Natural Areas Council immediately.

Reappointments shall be completed in the year following Expiration.

The Government Shall expedite and adopt at least 1,000 acres ANNUALLY to the Natural Areas System AS ECOLOGICAL RESERVES to fight climate change, support Carbon Sequestration, and provide Endangered Species Habitat, by these bioreserves. Priority shall be given to old-growth forests.

Doug Vornlocker
Wildfire Support

The New Jersey Recreation and Parks Association (NJRPA) would like to propose a project to support and enhance the great work currently being conducted by the New Jersey Forest Fire Service. As both science and the public become more supportive of the use of fire in, and around, our forests, there will be a greater demand for the wildland fire resources of New Jersey. The NJRPA is requesting that a dedicated source of funding be identified to support the development of local wildfire planners and technicians to work under the oversight of the State authority. Having local understanding and proficiency will allow for a larger number of, and possibly smaller – more frequent, burns on public lands. Many variables, including a lack of understanding the benefits of fire, State-level staffing

deficiencies, frequency of suitable weather conditions, and limited seasonal availability of certain properties are challenges that could be addressed if this project was approved. This funding would be used to support those local governments interested in items such as:

- the development of prescribed burn applications, burn plans, and prescribed burn related incident action plans (IAPs)
- education to local communities including the public, local fire agencies and fire officials
- training local emergency response agencies and county and municipal employees (for example, park maintenance and park ranger departments) in wildland firefighting
- the purchase of necessary personal protective equipment and other related items to provide to those executing burn plans
- using fire to reduce the amount of fuel and chemical, and number of person-hours, currently being used to manage local forested landscapes
- planning for and monitoring the ecological effects of prescribed burns
- research that assists in identifying the usefulness of fire on both native and invasive species (including the effectiveness of fire on different life-stages) on related (local) spatial scales
- guiding managers towards a set of local best practices related to use of fire as a tool in our communities - to protect and restore our environment and increase public safety
- strengthening public sector relationships and assisting reforestation efforts with the many nonprofit conservation and stewardship organizations throughout NJ
- Assist communities in creation and implementation of Community Wildfire Protection Plans (CWPP) to increase public awareness of potential fire threat

Kristen Meistrell

Potential mechanisms to increase prescribed burning (Rxb) within the NJFFS to increase capacity for carbon defense and ecosystem resiliency in disturbance dependent forests

Among the barriers for using Rxb more widely are weather and seasonality constraints, and the limited number of people employed by the NJFFS who are qualified through experience and proper credentialing to conduct burns within the narrow timeframe each year when conditions are conducive to safely employ Rxb. Potential opportunities to increase capacity at the DEP could include:

1. Restructuring section-specific warden assignments in favor of having staff work more fluidly throughout the state to take advantage of seasonal Rxb opportunities from north to south. This would allow for a greater exchange of expertise and experience among personnel.

2. Create one or more mobile sections or “modules” to support Rxb operations in sections where assigned wardens are out on leave during the burn season, or wherever assistance is needed.

3. Cross-train staff from the Forest Service to support Forest Fire Service and vice-versa. This would allow more qualified people to be available during the relatively short Rxb burn season, and section wardens could support the Forest Service functions (including state lands planning) throughout the remainder of the year. Other states like Missouri seem to use this model effectively.

4. Increase training opportunities within the DEP for personnel who might be exceptionally well trained at fire suppression but possibly less experienced using Rxb as a silvicultural tool, which appears to be an issue in Division A. This could be accomplished by establishing an Rxb co-operative among other state fire agencies, which would not only provide interagency training, but could add capacity for all involved states as combined crews fluctuate along the eastern seaboard to operate within seasonal burn

windows. Interagency training would also incentivize more NWCG credentialling among DEP staff working out of state. In turn, that would enable more NWCG training opportunities for non-professionals in NJ who are interested in becoming certified under the guidance of a NWCG certified DEP staff person (NWCG training opportunities in NJ currently seem to be lacking).

Kristen Meistrell

The need to increase the use of prescribed fire (Rxb) for ecosystem resilience and carbon defense in the face of climate change

Including public and private lands, Rxb is currently employed on roughly 20,000 of the 2 million acres of forest in NJ annually (McLaughlin 2022), which is equal to approximately 1% of the total forest cover. However, within this figure there are certain areas of the Pinelands that are burned repeatedly every few years for public safety purposes, making the percentage of new forestland being affected by Rxb each year significantly less than 1%.

As pine and oak stand densities continue to increase in the absence of fire from processes such as mesophication (Nowacki 2008), the structural changes will make them increasingly vulnerable to competition stress and other climate related stress from warmer temperatures and erratic precipitation patterns, including periods of drought (USDA Tree Atlas). This will be exacerbated by the strong reduction in water availability due to increased evapotranspiration as tree density increases (Hoek van Dijke 2022, Isaacson 2022), which will make forests even more susceptible to large-scale losses of stored carbon as widespread mortality occurs, like in the 2022 Wharton fire or when 431,000 acres of oaks were defoliated in 1990 (NJ Dept. of Agriculture, retrieved 2022).

Treating less than 1% of the state's forests annually with Rxb is insufficient to sustain the roughly 1.5 million acres that are dependent on disturbances like fire for system stability or regeneration. The NJDEP needs to explore mechanisms to increase the number of acres burned each year using Rxb as a carbon defense strategy.

Peer reviewed references:

Nowacki, Gregory J.; Abrams, Marc D. 2008. The demise of fire and ""mesophication"" of forests in the eastern United States. BioScience. 58(2): 123-138.

Other references:

USDA Climate Change Tree Atlas - https://www.fs.usda.gov/ccrc/tool/climate-change-tree-atlas

USDA Forest Inventory and Analysis (FIA) National Program - https://www.fia.fs.fed.us/tools-data/

NJ Dept Ag --
https://www.nj.gov/agriculture/divisions/pi/prog/gmquestions.html#:~:text=A%3A%20The%20gypsy%20moth%2C%20in,800%2C000%20acres%20of%20forest%20land.

McLaughlin, Gregory; Chief, NJFFS. 2022. Personal Communication

Isaacson, B. 2022. Redefining Forest Stocking in The New Jersey Pinelands (Unpublished doctoral dissertation). Rutgers, The State University of New Jersey

Kristen Meistrell

Potential mechanisms to increase the training of non-DEP staff in prescribed burning (Rxb) to increase capacity for carbon defense and ecosystem resiliency in disturbance dependent forests

NJ has 29 designated fire sections, each having a full-time employee who is charged with overseeing prescribed burning in that section (i.e., a Section Warden). Other than Section Wardens, there are few qualified private individuals in the state who are appropriately qualified and have been permitted to conduct Rxb without NJDEP oversight. Having more qualified people (e.g., NWCG certified) to oversee Rxb operations should help to improve capacity, which is essential for defending existing carbon stocks and sustaining disturbance dependent ecosystems for a carbon benefit in NJ. Some potential options include:

1. Establish a NJ Rxb Training Center to make planned experiential learning more accessible within the state. This could be done in cooperation with the federal govt., other states, county govt., ENGOs, volunteer firefighting departments, and other partners like the North Atlantic Fire Science Exchange. The training center could coordinate a mobile Rxb team/module comprised of staff from partner organizations to support burning throughout the state.

2. Increase opportunities for partners and other volunteers to gain Rxb experience by making it easier to participate in DEP organized Rxb activities happening throughout the state. This could be done by establishing an online Rxb calendar on the DEP website where individuals who have basic wildland firefighter training (credentials provided to the NJFFS) can review locations where Rxb is planned each day and enroll to voluntarily participate on that project instead of waiting to be called for assistance within their designated section. In theory, the calendar could be updated daily so that participation could also be done on relatively short notice based on a person's availability.

Daniel J. Bernier

Facilitating Venison Donation through Funding and Recruitment of Butchers

Forest health is greatly impaired by a proliferation of white-tailed deer. Culling by licensed sportsmen has not been able to keep pace with deer numbers, especially as the number of licensed hunters has been on the decline. Since 1994, land managers in New Jersey have had the ability to utilize alternative deer control measures through the Community Based Deer Management Program (CBDMP)(1).

As a condition of the CBDMP, the permittee is required to provide for the donation of venison to a community food bank (1). Generally, the permittee pays to a butcher the customary cost (currently $90/deer) of processing the deer harvested by that program (2).

That cost can be a considerable piece of the budget of an agency's deer management program. In 2019, the Essex County Deer Management Program harvested 200 deer. The total cost of butchering ($75 per deer at that time) amounted to $15,000 (3).

Individual hunters can participate in the Hunters Helping the Hungry Program by taking a harvested deer to a participating butcher. The venison is given to a food bank, and the butcher is reimbursed by the Hunters Helping the Hungry Program. However, the funding source for the HHH Program is unstable, and mostly reliant on donations (4).

After the funding is depleted, a hunter must pay the cost of butchering themself, even though they are donating the venison (4). After having filled his or her freezer with venison from deer harvested early in

the season, an avid hunter might continue to hunt the rest of the season if they knew they had an outlet for the carcass - but not if they have to pay $90 for each surplus deer. This results in less deer being culled statewide than might otherwise be.

A stable source of funding for the Hunters Helping the Hungry Program needs to be established to encourage greater hunter participation throughout the hunting seasons. Funding assistance to eligible CBDMP applicants might encourage more public agencies to start or maintain a hunting program

All processing of venison for charitable purposes must be conducted by butchers that are certified by the New Jersey Department of Health (5). Currently only 8 butchers are certified, and 4 are clustered in Hunterdon County. The NJ Dept. of Health and/or the NJ Division of Fish and Wildlife need to encourage other New Jersey butchers who process deer to seek certification and participate in the HHH Program. A stable source of funding might provide a means for incentivizing those butchers.

Emile DeVito
Funding for NJ Dep of Ag Allampi Lab for Biological Control
Legislation should increase funding for the NJ Dep of Ag Phillip Allampi Beneficial Insect Rearing Laboratory, to increase collaboration w/ nearby states and institutions to hasten development of biological control agents for alien invasive species that threaten New Jersey forests.

A flood of invasive species threaten virtually every forest ecosystem in New Jersey. Only core areas of the New Jersey Pine Barrens are somewhat free of aggressive alien species due to high soil acidity. (NJ Strategic Mgmt Plan for Invasive Species) Elsewhere, floodplain forests are overrun with Bohemian knotweed and Lesser Celandine, Emerald ash borer is wiping out ash trees, native plants cannot establish beneath blankets of Japanese stiltgrass in many forest types, and alien vines and shrubs young forests. The list seems endless; our natural heritage is being converted to alien weeds. More than 1/3 of NJ's 2500 native plant species are at risk. Few native insects and pollinators feed on alien weeds; a broken food web cascades upward to cause declines in forest amphibians and birds. For most alien species there is no hope of manual control, chemical control is expensive and dangerous. To restore a food web rich in native plants and insects we need biological control agents that attack only the alien species. This work requires surveying alien species in their countries of origin, and years of testing to determine if insects or pathogens that control the alien species can be released safely. Federal agencies and academic institutions do much research, but NJ's excellent Allampi Lab must become a larger cog in this battle on issues most prominent in NJ and the mid-Atlantic.
https://www.nj.gov/agriculture/divisions/pi/prog/buglab/what-is-biological-control/ Biological control will yield incalculable benefits restoring functionality to critical ecosystems (e.g. restoration of floodplain forests via control of Bohemian (Japanese) knotweed by the tiny, sap-sucking psyllid insect Aphalara itadori. The Allampi lab is rearing colonies for release into test sites; with sufficient funding, floodplains of especially urban rivers throughout New Jersey could be restored. Knotweed stems rot and clog river channels, collect sediment and exacerbate urban flooding. Trees cannot colonize infested habitats, Knotweed makes shorelines inaccessible for recreation, degrading urban parklands. Significant increased investment in the Philip Allampi Laboratory is essential for our public lands.

Emile DeVito
Legislation to Re-establish and Fund the NJ Invasive Species Council

Legislation should re-establish the New Jersey Invasive Species Council on a permanent basis, and to provide it with stable source funding, so that it may revise and carry out the objectives of the New Jersey Strategic Management Plan for Invasive Species, commensurate with efforts by nearby northeastern states to combat the immense costs incurred as a result of infestations of alien, invasive species of plants, animals, and pathogens.

During the first decade of this century, under Governor's Executive Order #97, the New Jersey Department of Environmental Protection assembled a diverse group of stakeholders (the Invasive Species Council) to develop a Strategic Management Plan for Invasive Species. The plan was finalized in 2009, but the Invasive Species Council was almost immediately dissolved and no funding was ever assembled. Since then (other than efforts by the NJ Dept. of Agriculture Phillip Allampi Beneficial Insect Lab and the non-profit NJ Invasive Species Strike Team), the State of New Jersey has essentially ignored the Strategic Management Plan. 15 years ago, damage to NJ agriculture alone was estimated at $290 million! The emergence of Emerald Ash Borer, Spotted Lantern Fly, Snakehead Fish, and many other species of plants, animals, and pathogens since that time have no doubt compounded the yearly costs to New Jerseyans while wreaking additional havoc on our farms, forests, wetlands, and waterways. The climate crisis is creating unstable conditions in our ecosystems, especially our forests, which will allow for newly emerging invasive species to take hold.
Many surrounding northeastern states have active invasive species management programs that go far beyond solving existing agricultural problems. They seek out newly emerging invasive species before they spread and gain a permanent foothold, they spend considerable effort monitoring sites where unwanted species introductions are likely, and they collaborate with non-profits and neighboring states to try to stop damaging invasive species from gaining a foothold. New Jersey needs a permanent Invasive Species Council and sufficient staff at both the Departments of Agriculture and Environmental Protection to confront the highest priority issues as determined by the Council.

Emile DeVito
Legislation to instruct the NJ Div of F&W to work w/ partners to aggressively pursue reduction of deer density on public forest tracts greater than 200 acres.
Legislation to instruct the NJ Div of F&W to work w/ with state agencies, local govts, tax-exempt landowners, and woodland-assessed landowners to aggressively pursue reduction of the deer density on publicly-accessible contiguous open space forest tracts greater than 200 acres to a January density of 7 deer per square mile (one deer per 90 acres).

The deer population explosion during the late 20th century has been New Jersey's most significant cause of forest degradation. Deer have virtually eliminated successful reproduction and re-establishment of most species of native forest trees, shrubs, and herbaceous plants in the vast majority of New Jersey's forests (Kelly, 2019), except certain pine and maple swamps in the Pine Barrens and a few remote mountainous tracts. By removing natives, deer have assisted invasion of aggressive alien plants into natural forest gaps in otherwise healthy forests, onto almost all post-agricultural soils, and forest stands disturbed by insect outbreaks, fires, and many forestry projects.
In nearly all of New Jersey, deer are at least 10x more abundant than forests can tolerate. A healthy forest containing a diverse complement of native herbaceous plants, shrubs, tree seedlings and saplings, understory tree species, and a largely intact canopy can withstand 15 to twenty deer per square mile (Horsely et al. 2003; Russell et al. 2019), but a forest degraded by deer herbivory (the vast majority of deciduous forests in NJ) cannot recover unless deer density is dropped and held well below 10 deer per square mile for many years (Almendinger et al. 2020).

Heavily deer-damaged forests have been proven to recover when deer are significantly reduced, but continuing to manage deer at high densities will significantly undermine all attempts to manage forests for biodiversity conservation or carbon sequestration. If deer are not reduced well below 10 deer per square mile for at least 20 years, as canopies open from disturbances, our public forests will continue degrading, becoming overwhelmed by alien weeds. Not only will food webs, biodiversity, natural resource, and open space values continue to decline, but public ecosystem functions – societal benefits such as carbon storage, water and air purification, aquifer recharge, and flood control will all decline precipitously.

On open space forest tracts of 200 acres or more, access to deer and tract size are sufficient to develop deer reduction strategies that will restore the future forest.

Steven Mitchell

Proposal To Reduce The White-Tailed Deer To Manageable Habitat Levels

The most imminent environmental problem facing NJ is the overabundance of the white-tailed deer (Odocoileus virginianus) pop., and as the dominant ecological animal in NJ, its trophic effects on the forested and edge ecosystems of NJ. The deer pop. of the US and NJ was driven to near extinction through overhunting, animal predation, habitat loss and encroachment by an expanding human pop. in the 1800s. Efforts began in the late 1800s to recover the deer pop., when the US Biological Survey of 1890, est. only 300,000 deer remained in the US. This culminated in passage by Congress of the Lacey Act in 1900 forbidding interstate shipments of illegally killed game.(Kenyon 2020, p.2) Since then deer recovery efforts have led to resurgence of the deer pop. in every state. By allowing deer to increase in NJ with no predators to contain their growth, we've engendered their reproduction and created a trophic cascade of animal and plant community changes, as the result of deer browse, that have ensconced deer as the top-down control species of the forest. In 1998, NJ's deer pop. was est. at an average density of 38 deer/mi2, numbering 175,00-200,000.(Van Clef 2004, p. 5-6). These est. are nearly 25 years old. In 1972, it's est. NJ had a deer pop. of approx. 10 deer/mi sq2, about the same number as historical pop.. 10 deer/mi2 is required for deer-preferred browse vegetation and tree regeneration to occur. (Kelly 2017). Recent est. show a substantial increase in deer pop. since. The 2019 NJ Farm Survey, a sampling of deer in 7 study areas located in portions of 10 counties, showed a range of 103 deer/mi2 and 111 deer/mi2 in this survey of agriculturally-impacted habitats.(5-6) NJ needs to reclaim the design and biodiversity of its forest lands from the deer.

This proposal authorizes the NJ legislature to identify deer overpop. as the primary threat to ecol. health of NJ's public forests and create a state task force to address the resultant problems, in conjunction with NJ DEP. The task force would develop a strategy for the 11 ecologically-unique state forests, incorporating substantial deer reduction targets aimed at an average of 10 deer/mi2, with an emphasis on preferred edge habitat regeneration favored by white-tailed deer, and biodiversity reclamation. A 4-prong strategy to reduce the deer pop. would be utilized.

1) Develop a commercial venison industry for state of NJ
   a. Federal/state approval/regulation
   b. Create commercial retail market
2) Culling
   a. Use of professional sharpshooters
   b. Ecological deer management
   c. Recreational hunting (incentives)

3) Use of immunocontraceptive vaccines
   a. Requires state/federal approval
4) Deer fencing

Steven Mitchell
Proposal to Support the Creation of an Invasive Species Task Force for the State of NJ by the NJ Legislature (Current Bill A2629)
This proposal would support legislation currently submitted in the NJ Assembly (Bill A2629), sponsored by Ronald Dancer of the NJ Assembly that creates an "Invasive Species Task Force" for the state of New Jersey, consisting of 5 members, led by 2 co-chairs, the Commission of Environmental Protection and the Secretary of Agriculture.

The legislation is summarized below:

Part I – the composition of the 5-member task force

Part 2 – The Invasive Species Task Force shall do the following:

1. Study most efficient means of controlling invasive species.

2. Develop uniform policies and a coordinated response to the threat of invasive species to agriculture and NJ ecological, historical, cultural and infrastructure resources.

3. Develop plan to prevent new invasive species from entering NJ and limit the spread of invasive species already present in NJ

4. Develop plan to control current infestations.

5. Develop plan to restore ecosystems to their natural condition and repair the damage caused by invasives.

6. Identify regulatory and statutory obstacles at federal, state and local levels impeding development or implementation of prevention, control and restoration efforts.

7. Evaluate 2009 NJ Strategic Management Plan for Invasive Species prepared by NJ Invasive Species Council, pursuant to 2004 Executive Order No. 97.

8. Develop alternatives, in addition to 2009 Strategic Management Plan for Invasive Species plan recommendation to control entry and spread of current and new invasive species

9. Prepare comprehensive invasive species management plan for the state of NJ including estimate of necessary resources for implementation.

10. Prepare recommendations for legislative action necessary to implement the report.

11. Submit report of findings, plans and recommendations to Governor within one year after task force is organized, and to the state legislature.

This proposal also recommends amending the Bill A2629 to include appropriate public and community input to the formation of this statewide plan through public hearings and correspondence, and to adjust deadlines accordingly.

Appendix E-4
Proposals that were accepted and discussed

Proposals that were submitted and accepted by the co-chairs as aligning with the criteria for acceptance. At least three of four co-chairs agree that proposal met criteria. These proposals were discussed by workgroup participants, but consensus could not be reached due to discussions veering toward the topic of tree cutting and wood removal. There were 15 proposals in this category (one was submitted and revised).

Narratives were limited to 2500 characters. Proposal sponsors were invited to also submit references, which are not included here due to space limitations but are available using the sponsor's citation(s) when provided. Footnotes in the proposals indicate a reference to an article, file, memo, or other document. Note that references submitted ranged from unpublished opinions, magazine and news articles, webinars, and journal articles (some peer-reviewed and some not peer reviewed).
.

Douglas A Meckel
New Jersey Wildlands and Old Forest Protection act
Set aside most ,if not all, of the remaining old and older growth forests as ecological reserves to allow them to reach their potential. Modify existing plans on public lands to prevent Highgrading.

Note as everyone is aware New Jersey is the most densely populated state in the US. Expecting New Jersey to be a self-sufficient wood producer (as some have suggested) would be as reasonable as asking North Dakota to make their own pharmaceuticals. The best use for our forests is as forests for the use of our citizens for recreation, carbon sinks, and an ark for various species to preserve biodiversity, not as a wood lot or clear cutting to create edge habitat to improve deer or warbler habitat. We have plenty of edge habitat.

"Today, <20% of the world's forests remain intact (i.e., largely free from logging and other forms of extraction and development). Intact forests are largely tropical forests or boreal forests in Canada and Russia (Watson et al., 2018). In the U.S.—a global pioneer in national parks and wildlife preserves—the percentage of intact forest in the contiguous 48 states is only an estimated 6–7% of total forest area (Oswalt et al., 2014), with a higher proportion in the West and a lower proportion in the East. "
Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good WR Moomaw, SA Masino, EK Faison - Frontiers in Forests and Global …, 2019 - frontiersin.org (see IntactForestPDF)

As you can see from the above, we have precious little land that has not been highly modified. So as a wise man once said "when in a hole stop digging."

"Proforestation serves the greatest public good by maximizing co-benefits such as nature-based biological carbon sequestration and unparalleled ecosystem services such as biodiversity enhancement,

water and air quality, flood and erosion control, public health benefits, low impact recreation, and scenic beauty." (ibid) (see IntactForest PDF)

Additionally please see PDF's forest & forest1 for more information on the need to keep forests intact if we are to meet our climate goal.

The advantage of the above approach is it requires little in the way of new funds and may in fact generate income if the state decides to use some of the carbon that will be captured for sale on the emerging carbon markets which currently lack verifiable projects that can be trusted. Additionally if the State decides to measure the carbon captured, it will provide some employment for the Foresters who would have a new mission.

Douglas Meckel
New Jersey Wildlands & Older Forrest Protection Act (updated)
Set aside most, if not all, of the remaining older growth forests (on public lands) as ecological reserves to allow them to reach their potential (see Older Forest PDF for definition). Allow only non-motorized recreation in the most sensitive areas. If trees need to be cut for public safety issues (example ash borer damage) wood to be left in area to provide habit.

New Jersey is the most densely populated state in the US. Expecting New Jersey to be a self-sufficient wood producer (as some have suggested) would be as reasonable as asking North Dakota to make its own pharmaceuticals. The best use for our public forests is as forests for the use of our citizens for recreation, carbon sinks, and an ark for various species to preserve biodiversity, not as a wood lot or for clear cutting to create edge habitat to improve deer or warbler habitat. We have plenty of edge habitat.

"Today, <20% of the world's forests remain intact (i.e., largely free from logging and other forms of extraction and development). Intact forests are largely tropical forests or boreal forests in Canada and Russia (Watson et al., 2018). In the U.S.—a global pioneer in national parks and wildlife preserves—the percentage of intact forest in the contiguous 48 states is only an estimated 6–7% of total forest area (Oswalt et al., 2014), with a higher proportion in the West and a lower proportion in the East."
Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good WR Moomaw, SA Masino, EK Faison - (see IntactForestPDF)

As you can see from the above, we have precious little land that has not been highly modified. So as a wise man once said "when in a hole stop digging."

"Proforestation serves the greatest public good by maximizing co-benefits such as nature-based biological carbon sequestration and unparalleled ecosystem services such as biodiversity enhancement, water and air quality, flood and erosion control, public health benefits, low impact recreation, and scenic beauty." (ibid) (see IntactForest PDF)

Additionally, please see PDF's forest & forest1 for more information on the need to keep forests intact if we are to meet our climate goal.

The advantage of the above approach is it requires little in the way of new funds and may in fact generate income if the state decides to use some of the carbon that will be captured for sale on the emerging carbon markets which currently lack verifiable projects that can be trusted. Additionally if the

State decides to measure the carbon captured, it may provide a new source of employment for Foresters.

Greg Gorman
Support Preservation of Mature Tree Stands
NJ policy and legislation should support the preservation of stands of mature trees. Mature trees should be those above say 15"" in circumference. It is NOT in the public interest to create incentives for harvesting mature trees and releasing the sequestered CO2 they contain. Logging without restraint will make Climate Change worse. Some people think that thinning is a good idea because they assume that thinning leaves some habitat in place.

Some people also think that thinning prevents forest fires because it widens the space between trees and involves cleaning up the forest floor. To the contrary, the mature forest canopy prevents fires by keeping the forest floor cool and damp. Once the mature canopy is gone through thinning, the forest is much more prone to fire. Many claim also that forest fires release more sequestered CO2 than does thinning. However, the reality is quite different according to the work of the John Muir Project, because thinning is much more comprehensive than people realize.

Thinning unlocks carbon sequestered in our forests. Logging also destroys habitat that is badly needed for the survival of many species. Habitat recovery is very difficult with thinning since thinning leaves very little original habitat. While thinning, a large amount of the wood removed is burned elsewhere as waste, which releases greenhouse gases. At the same time, study shows that the typical forest fire, leaves a great deal of the tree material behind – as burned trunks, etc. According to the John Muir project, CO2 emissions from thinning are about three times higher than wildfire alone because thinning removes more of a mature tree than does fire. (See The John Muir Project Reports Climate.Gorman.Stewardship7 Rim Fire JMP fact sheet and Climate.Gorman.Stewardship8 Forest & Fire Science Synthesis).

Also, the John Muir Project points out that emissions are just part of the story when it comes to logging and climate change. A consistent conclusion from many scientific studies approaching the issue from many directions is that heavily logged landscapes are far less resilient to the effects of climate change. They are more susceptible to wildfires, flooding, insects, disease, wind damage, heat waves, landslides, and harmful algae blooms. These stressors are already on the rise due to climate change – logging makes the effects so much worse. The work of the John Muir Project provides resources to support this line of research (https://johnmuirproject.org/forest-watch/),"

Jim Lyons
Create a public process to develop a Forest Conservation Plan for each of the State Forests
New Jersey's state forests are owned by all New Jerseyans and should be managed to achieve conditions that reflect the views, values, and desired outcomes of the public. Each state forest should be managed in accordance with a Forest Conservation Plan.

To determine what residents desire of their forests, a process should be established that ensures public input, oversight, and participation in the management of the public's forests consistent with existing

law, agreed upon management objectives, and based on sound science. To achieve this, a forest planning process should be initiated to develop plans for the conservation and stewardship of each of the 11 state forests covering one-quarter of a million acres of New Jersey.

[Please, see the attached document for remaining proposal]"

Ken Dolsky

Maximize Carbon (C) Storage and Sequestration (S&S) by Banning Harvesting Trees on Public Lands

NJ climate policy requires maximization of C S&S on public forestland to support the GWRA (increase sequestration 33% by 2050). GWRA 80x50 Report: "This optimistic projection, however, would require the use of all currently available open space for sequestration, requiring a major transition in New Jersey's current land use laws and practices." (p. xix). Maximizing S&S is needed to achieve EO 274 (50% reduction in GHG emissions by 2030 (reduction of 60MMT).

Because older forests store and sequester more C than young forests, this requires a policy of allowing forests to mature and a ban on harvesting or commercial logging.

Peer-reviewed studies support this proposal by demonstrating:

• Older temperate deciduous forests store and sequester more C per unit area than younger forests.
• Young temperate forests are net emitters of C for many years.
• Older forests' rates of growth and C gain increase continuously with tree mass for hundreds of years.
• Aboveground biomass of most US forests will not decline with age. A substantial amount of additional C could be stored in US forests if large second growth tracts were preserved.
• Even considering sequestration of C in wooden buildings, timber harvest results in a net flux of CO2 into the atmosphere.
• Confusion over the age at which forests sequester the most C is because young trees grow in height faster than old trees and the rate of sequestration in a young forest can be high. However, volume is more important than rate. It is not how fast C deposits are made but how large those deposits are. Young forests are limited in the size of their deposits by their leaf area.
• Conversion of old-growth forests to young invariably reduces C storage, even when structural components in buildings are considered…forests continue to lose mass for three decades after disturbance. Although reintroducing forests to deforested regions will increase C storage, conversion of old-growth forests to younger forests has added and will continue to add C to the atmosphere.
• We find no scientific evidence to support increased logging to store more C in wood products, as a natural climate solution.
• Overall, logging in U.S. forests emits 10 times more C than fire and native insects combined.
• Afforestation and reforestation, while helpful on open land, cannot store or sequester more C than existing forests on a per acre basis and cannot be used to justify harvesting of mature forests.

See source #1 - Carbon sequestration and storage data – young vs old document for expanded narrative and other sources.

Ken Dolsky

Proposal to base forestry GHG decisions only on NJ GHG policies and objective research

NJDEP/F&W forest management carbon storage and sequestration policies and practices shall only be based on minimizing GHG emissions and maximizing carbon storage and sequestration in NJ public forests' total carbon lifecycle, in support of both the NJGWRA objective (80% GHG reduction by 2050) and the EO 274 objective (50% GHG reduction by 2030). Policies shall be based on a combination of peer-reviewed studies and credible non-forestry industry analyses. They shall not be based on "leakage"

from any other states or total US or worldwide carbon emissions. There are no State policies or regulations requiring NJDEP to make decisions on forest carbon based on emissions outside NJ or the effects of NJ actions on emissions outside NJ.

To enforce these decision factors, forestry management must become a regulated activity.

DEP has great latitude on forestry actions because forests are not ""regulated features"" or ""regulated sources"" and sequestration is not a ""regulated activity." Regulating forestry would require DEP to be more rigorous in their definitions and asserted authority.

Current DEP policies support local logging to avoid importation of wood from sources outside NJ based on the premise that the energy required for transportation generates more GHG emissions than from local wood harvesting. Evidence to date shows that wood logged in NJ is being transported for sale out of state. This policy violates state law. Given the need to meet NJ GHG reduction targets and the high level of GHG emissions from harvesting, these policies must be rescinded.

Current DEP polices support logging in NJ based on the resulting storage of carbon in wood products. Studies have consistently shown that logging results in net increases in emissions even when long term storage in wood products is considered. More carbon is lost to the atmosphere than is stored in wood products in the short term. In the long term all products eventually release their carbon. Moreover, wood products have no further sequestration capability.

Policies attempting to justify a reduced lifecycle carbon footprint by comparing NJ hardwoods used as construction timber as being less carbon intensive than cement or steel construction materials produced in NJ, need to be evaluated using peer reviewed science and include harms to the environment from tree cutting. Estimates comparing the carbon benefits of wood products to alternative materials have been found to overestimate the benefit by factors of between 2- and 100-fold by not counting the full life cycle carbon and the shorter durability of wood relative to alternative materials (Harmon, ME, 2019). NJDEP/F&W forest management carbon storage and sequestration policies and practices shall only be based on minimizing GHG emissions and maximizing carbon storage and sequestration in NJ public forests' total carbon lifecycle, in support of both the NJGWRA objective (80% GHG reduction by 2050) and the EO 274 objective (50% GHG reduction by 2030). Policies shall be based on a combination of peer-reviewed studies and credible non-forestry industry analyses. They shall not be based on "leakage" from any other states or total US or worldwide carbon emissions. There are no State policies or regulations requiring NJDEP to make decisions on forest carbon based on emissions outside NJ or the effects of NJ actions on emissions outside NJ.
To enforce these decision factors, forestry management must become a regulated activity.

Ken Dolsky
Ban Thinning of Public Forests (especially forest canopies) as a Purported Tool to Prevent and Lessen the Intensity of Wildfires (with various accommodations in the NJ Pinelands where needed).
NJ climate policy requires maximization of carbon storage and sequestration on public forestland to reduce the harmful effects of climate change and support the GWRA (increase sequestration 33% by 2050) and EO 274 (50% reduction in GHG emissions by 2030). This requires allowing forests to mature and a ban on harvesting or commercial logging.

Studies have shown that logging on a commercial scale (aka commercial thinning) does not reduce the risk of wildfire or the intensity of wildfire and must be banned as a practice to purportedly reduce the probability of catastrophic wildfires in NJ.

Peer-reviewed studies and other reports such as wildfire risk analyses support this proposal by these findings:

- The main driver of catastrophic wildfires in the West is climate change induced severe, 1,000-year drought, a condition not found in NJ
- New Jersey forests, especially in the Northern part of the state have not had a long history of natural wildfires followed by recent years of suppression
- The risk of wildfire, let alone catastrophic wildfire, is very low in Northern NJ and only modest in Southern NJ outside of the Pinelands
- A 2016 review of 1500 fires found that fire severity was higher in areas treated by fuel reductions compared to wilderness and parks where no logging is allowed
- Intensive forest management characterized by young trees and homogenized fuels burn at higher severity
- Thinning reduces the cooling shade of the forest canopy, creating a hotter, drier, and windier microclimate, and leaves "slash debris" made up of the easily combustible tops, branches and needles of previously standing trees. This makes wildfires burn more intensely. Thinning dries out the land and increases fire risk.
- Thinning, including overstory trees, can increase the rate of fire spread by opening up the forest to increased wind velocity and introduce invasive species that increase flammable understory vegetation
- Logging conducted under the guise of "thinning" and "fuel reduction" typically removes mature, fire-resistant trees that are needed for forest resilience and emits about three times more CO2 than wildfire alone
- Prescribed burning in fire dependent landscapes does not require removing larger canopy trees
- Conclusion: Commercial thinning (especially large trees) does not reduce the risk of fire occurrence or fire intensity.

See Research on the Use of Thinning to Protect Against Forest Fires document for expanded narrative and sources.

Ken Dolsky

Proposal to formulate a joint legislative/regulatory/NGO group to investigate sources of funding for ecological restoration including those described below:

Reallocate Green Acres tax money

Increase the portion of GA money used for maintenance. Mercer County did this when they decided there was not much more forest to acquire and they needed more money for maintenance. They passed an ordinance to place an Open Space Tax Referendum on the 2021 ballot. Lisa K. Fritzinger, AICP PP, Assistant Planning Director, Mercer County said this referendum passed with 76% of the vote.

Utilize money from RGGI

NJ has allocated $15 million, available from New Jersey's participation in the Regional Greenhouse Gas Initiative (RGGI), in new grants for projects that create, restore and enhance natural "carbon sinks," or places sequestering carbon that would otherwise go into the atmosphere. (See Source #1 for more background on RGGI funding).

Natural carbon sinks include forests, agricultural soils, salt marshes, seagrass beds, and urban parks, woodlands and street trees. The RGGI program provides carbon auction proceeds to invest in programs and projects designed to help New Jersey meet its climate, clean energy, and equity goals.

Once we have clearly demonstrated that the best way to enhance natural carbon sinks on forest land is by letting forests mature, then any functions that support this should be candidates for RGGI funding.

USDA money to write FSPs for public lands.
We should redefine these functionally to be ecological restoration plans and only allow accredited ecological managers to write them but try to keep the USDA funding.

Auto Insurance Surcharge for Deer Control
According to State Farm Insurance, there were 30,866 accidents in New Jersey involving deer in 2010. It is proposed that the State mandate an additional annual auto insurance fee of $1 (or other amount based on annual cost analysis of deer control measures) for every automobile / vehicular insurance policy for every driver on the policy. With over 6.2 million insured drivers in the state, this would provide a substantial resource for the multiple courses of action that may be needed for deer control. This surcharge should be carried for a minimum of 7 years (or until such time as deemed unnecessary). This will benefit drivers by reducing deer related accidents and reduce other costs such as emergency health care.

Leslie Sauer
CLIMATE CHANGE PROPOSAL- Recognizing the urgency of climate change, the State declares proforestation to be the management policy for public forests in order to maximize sequestration and ecological values.
Proforestation is growing forests to reach their full ecological potential for carbon storage in wood and soils in the absence of human interference 1,2,3,4,5. Like reforestation (replacing forests on deforested land) and afforestation (planting new forests) proforestation is one of the methods for removing carbon dioxide from the atmosphere and storing it long term 6,7.

At this point the evidence is incontrovertible that older, more intact forests, sequester and store more carbon than younger forests 8, 9. Carbon sinks are not only the trees themselves but also, and perhaps even more significantly, in mature forest soils and peat. Forests on public lands, that have been protected from harvesting by Green Acres and other entities for 60 years, are just reaching their prime as the most significant contributors to sequestration 10. While newly planted trees take decades or more to contribute to carbon removal, our existing forests are becoming better at sequestration as they age 11. The effects of proforestation are instantaneous.

Proforestation as a policy is allowing natural self pruning to be the primary regulator of forests' growth and maximizes the storage of carbon. When trees fall or are self-pruned that material becomes carbon sequestered in the soil and taken up by vegetation and is sequestered at a far higher rate than a wood product 12. The value of the potentially harvested wood is greater for its sequestration activity than for its value as harvested timber. Wood, whether fallen, wind-blown, jettisoned by negative branching, or charred is vital to the rebuilding forest soils and should be retained on site 13,14.
Proforestation is not about no management at all as it is often characterized by opponents. Claims that without management/harvesting forests will become uniform and decrepit over time are not supported by any data. The 'carbon offense' strategy of cutting forest now to avoid future carbon losses loses

stored carbon and reduces sequestration immediately. It is not a justifiable strategy 15,16. With a policy of proforestation many of our forests need restoration, not harvesting, in order achieve to their full ecological potential. NJ's public forests are more crucial than ever and must be fully protected instead of harvested and monetized 17,18,19. This is the most critical decade to minimize the effects of climate change 20. No other policy would increase sequestration more while fostering r complexity and biodiversity than proforestation.

Leslie Sauer

ECOLOGICAL HEALTH PROPOSAL- Protect and manage forests on public lands to attain their highest ecological potential to foster their conservation and recreation values while maximizing their sequestration capability and stored carbon pools.

The model for stewarding our public forests should be as natural as possible with little interference. Forests given the opportunity to self-prune attain the highest levels of sequestration. As a management approach it is called proforestaton and is defined as protecting forests to reach their full ecological potential 1. Proforestation however does not equate to no management at all. In many cases some active restoration is needed to ensure ecological values are attained 2. NJ's forests are subject to many stressors such as ash borer that is taking at least 13% of the State's trees, storms such as IDA that cost another 5% of our trees as well as the impacts of climate change. Overbrowse by deer and the spread of invasive, non-native species of both plants and animals must be addressed to ensure regeneration and survival of ground layer and understory plants, including the next generation of forest trees 3. Better ATV management is also necessary. Tree harvesting exacerbates all these problems. 4, 5 Creating young forest by cutting old forest is simply unnecessary and harmful 6, 7.

Proforestation fosters natural resilience to increases in pests and pathogens with genetic adaptations that are occurring already 8, 9, 10. Many of the climate impacts we are seeing such as increased wildfire also are part of the forests restoration and adaptation to new conditions 11, 12. In the Wharton Forest, where fire is vital to maintaining ecosystem health, a recent fire was allowed to burn safely to established breaks, creating increased structural diversity and more varied microhabitats. Prescribed burning, instead of logging, can be consistent with proforestation 13, 14, 15, 16.

Before any management is considered an ecological inventory must be completed for baseline purposes as well as a compilation of existing data for that site. Plant lists should be recorded on the national Floristic Quality Assessment (universalfqa.org) database. Priority for monitoring should be given to the intact forests on native soil that have never been plowed as well as areas of higher diversity. All of these values would be monitored in a proforestation approach 17.

" Over time unmanipulated forests develop the greatest complexity and accumulated carbon storage and therefore serve as models for ecological forestry" 18,19 . At this point in time logging in public forests is only 13% of the industry in NJ. This is not the time to expand harvesting for any purpose, especially for wood products extraction 20. Climate change and the loss of biodiversity are the most severe threats to our planet. The management of our public lands should prioritize these concerns.

Matthew Olson

Need for an actionable and comprehensive forest management plan for NJ public lands

There is a growing consensus in forest science that narrowly focused management frameworks (e.g., production forestry) are not up to the challenge of sustaining healthy forests under changing climate and disturbance regimes (Park et al. 2014, D'Amato and Palik 2021). Successful management systems will need to remain flexible to adapt to future uncertainties in real-time.

On-size-fits-all strategies can have negative ecological consequences. In the Lake States, decades of uneven-aged silviculture have homogenized forests, raising concerns about increased vulnerability to climate change and forest health threats (Knapp et al. 2019). In central Europe, forests under uneven-aged management were found to support fewer taxa at multiple scales compared to forests under even-aged management approaches, which was tied to greater habitat diversity in the latter (Schall et al. 2018).

Ecological forestry is a naturalistic approach to forest management that integrates our understanding of natural forest dynamics at multiple spatial and temporal scales in the design and implementation of silvicultural systems. Although conservation of biodiversity and ecosystem function are primary goals, ecological forestry has the flexibility to address a much wider range of goals, including ecological restoration, climate change adaptation, and forest health threat mitigation (D'Amato and Palik 2021).

Active and passive approaches to forest management are only mutually exclusive at the stand scale. However, these strategies can coexist at the larger landscape scale to enhance both adaptation and mitigation potential for addressing climate change. This is not new idea. Foresters have established "set-asides" and "ecological reserves" within their management units for some time and, in some states, it is standard practice on public lands (e.g., Missouri).

I propose that the New Jersey DEP develops a comprehensive forest management strategy for state lands that integrates both ecological forestry and proforestation at the state and forest levels. The recently published state forest action plan is fine as a guiding document, but it is not an actionable plan per se. Our state needs a comprehensive yet actionable plan for managing public forests in an uncertain future.

Michael Van Clef
Assigning State Land Forest Management Goals
Recommendation (to be performed by NJ Forest Service with other state and private stakeholder input): Request legislative mandate, with appropriate resources, to develop a comprehensive overarching plan that identifies broad habitat stewardship goals across all state lands. The proposed level of specificity would clarify the states' goals for stakeholders and the general public. This would reduce concerns that have arisen from planning and implementation at selected individual state lands outside of the context of a specific overarching plan.

Broad Explanation:
An overarching stewardship goal would be assigned to each state land (i.e., delineated forest stands within them). Individual site goals would be set within the context of an overarching statewide goal (i.e., percentage of land assigned to each goal type).

Goal Types:
1) Old Growth / Proforestation - Harvesting and removal of trees is prohibited. Minor girdling or felling of smaller trees allowable to hasten old growth characteristics and create light mosaics suitable to encourage a broad range of forest species. Prescribed burning and invasive species control are allowable.
2) Active Forest Canopy Management - This includes sale of timber to fund costs of initial operations and additional stewardship tasks to maintain treated areas. This would include creation of

'young forests' at a level that captures ecological 'economies of scale' (i.e., quantity and distribution match needs for a suite of early to mid-successional species). Maximum canopy reduction levels and harvesting methods must be defined for each stand (e.g., 10-100%) and statewide goals must adhere to pre-determined levels of proposed levels of canopy reduction.

3) Open Habitats - Upland meadow and open marsh habitats
4) Built Areas - Areas utilized for park offices and amenities

In setting goal types:

1) Consider historic forest age distributions and tree species composition that existed for over 10,000 years prior to European settlement
2) Consider all elements of biodiversity. For plants, includes forest canopy and subcanopy trees, shrubs, and wildflowers. For animals, includes species requiring each stage of succession.
3) Consider effects of overabundant deer and invasive species
4) Consider prescribed burning as a key stewardship tool
5) Consider broad landscape context of surrounding public and private lands
6) Consider physiographic province (e.g., open woodlands may be favored in Pinelands region)

Sandra Chen
Establish Ecological Forestry Institute at Rutgers

Sara Webb
For forests of New Jersey's public conservation lands, do not permit logging management
For New Jersey's public conservation lands, do not permit logging management nor stewardship that involves canopy clearing, cutting, or thinning of native trees from large or small acreages. This Forest Task Force was established in response to a groundswell of concern about widespread logging of our oldest and best remaining public forests. Such management steeply depletes climate resilience (refs 1 2 3 4 5) and sacrifices forest-interior species and ecosystems 6 12 13, which cannot return because of deer 6 and invasive vegetation 14.

Thus, NJ must establish new policies to keep our mature canopy trees and biodiverse natural forests intact: not to replace with young forest, not for early-successional wildlife far less imperiled than forest interior species, not for commercial logging. Exceptions should be strictly limited to invasive plants, specific pathogens and insects requiring quarantine to prevent spread, and ecological restoration projects for highly-degraded forests.

The science is clear: for climate resilience, our large trees and mature forests absorb AND store the most planet-warming carbon, per tree 7 11 15 and per acre 1 3 7 9 2 , far more than young or managed forests 1 2. Our forest ecosystems store carbon for centuries 3 9, and sequestration increases with age for 87% of tree species, to store ever- increasing volumes of carbon 7. Removing large trees also sacrifices future capacity for carbon sequestration 4. Forest disturbance accelerates these losses and global warming 3 .

Carbon storage in wood products is no substitute for living trees because carbon absorption has stopped, and because wood products are surprisingly short-lived 10. Only 1% of wood products are still in use and 13% of harvested biomass is in landfills 100 years after harvest 8.

Today's logging approach is also wrong for biodiversity. Contiguous forest is essential to provide migration pathways for species to shift northward as the climate warms. US Forest Service and Nature Conservancy models indicate New Jersey will be a critical corridor for plants and animals to avoid extinction 18; 19= https://maps.tnc.org/resilientland. In the present day, remarkably extensive "stewardship" clearings have no natural analog in our forests 16, and logged clearings do not recover their natural forests because of deer and invasive species, whose control is difficult and costly. Canopy logging as well as the mechanized transport and harvest of timber also have impacts on soil, hydrology, vernal pools, other microhabitats with specialized wildlife, and understory vegetation including the future forest of young trees.

Sara Webb
Reduce Conversion of Old Forest to Young Forest
New Jersey must protect our uncommon mature forests to age naturally, keeping forest canopies intact. The state must end the WIDESPREAD policy and practice of clearing natural forests within public conservation lands to create young forest. This facilitates problematic deer and invasive species while impairing forest-interior ecosystems and climate defense.

Public conservation lands are New Jersey's last, best refuge for natural forests and forest-interior wildlife. Unbroken mature forest covered most of New Jersey prior to Euro-American colonization; young forest and open fields were uncommon. Paleoecology research finds that the amount of young forest today is not natural but several times higher than in pre-European settlement times 1,2.

Much recent logging of public forests is justified as habitat improvement for early-successional birds and deer, which are not the species in trouble. Wildlife of intact forests and undisturbed wetlands are far more threatened than species of openings and edges. Early successional habitat is abundant in New Jersey. Deer are the major obstacle for young trees today and clearing old forest does not fix but exacerbates the deer problem problem.

Most of today's Stewardship Plans for NJ public forests both harvest and fragment older forests, creating early successional habitat by rotating clear-cuts through throughout natural public wildlife management areas and other lands. Removed biodiverse mature forests do not return because of deer 3 and invasive species 4 This practice continues today in century-old forests at Sparta WMA and elsewhere, despite vigorous objections from scientists and land conservation experts.

Replacing old forest with young greatly weakens climate defense. Larger trees take up (sequester) far more carbon because of their greater leaf area, and they store far more carbon, particularly below ground in roots and soil 5 6 7. On a per-acre basis, older forests both sequester and store more carbon than younger forests. Established natural forests are the most carbon-dense, and will contribute orders of magnitude more removal and storage of greenhouse gases over time than either young forests or working, managed forests. 5 9 8 10.

The State must prioritize preservation of forest interior habitat over early successional species. Current landscape-level deforestation should be replaced by focused projects growing young forest on open land and invaded woodlands not in patches cleared from existing healthy intact forests. New Jersey's forest interior habitat is limited, fragmented, and must be protected, for its high ecological and carbon sequestration values and for its scarcity today.

Vinh Lang

Forest Conservation Zoning: Allocation of Proposed Management Areas on publicly owned lands for change resiliency

To adopt coordinated management direction for lands administered by the NJDEP. Socio-ecological goals can be met by considering trade-offs and tailoring land management to variations in ecosystems, climate, and social values across state owned lands (Spies, et al., 2019). An array of forest zones modeled after the Northwest Forest Plan and Great Barrier Reef Marine Park Zoning Plan would help allocate forest resources management to meet social-ecological values, improve forest and biodiversity resiliency, and mitigate climate change in New Jersey.

Forest management zones are areas where various forest management activities and conservation objectives can occur through complementary approaches. Landscape level maps are used to designate zones for public information. The areas are clearly delineated by natural features and existing infrastructure. The zones may be tiered; a protected Conservation Zone may be surrounded by Management Zones where active management and restoration may occur. Lastly, Habitat Zones allocate areas on State Lands where the objectives of active management are primarily to enhance/maintain flora and fauna habitat which has been degraded. “Habitat loss is the greatest threat to New Jersey’s wildlife,” (NJ Wildlife Action Plan, 2018).

Having a diversity of structural and functional forest zones provides a greater assortment of options in the face of climate change, (Pace et al., 2015). The public can clearly know that both protection and management of the forest is occurring. Zones assign a locale to often differing and sometimes conflicting management goals.

The costs to the State are minimal for this proposal.

As an Example:

Conservation Zones: Depending on the size, configuration and locale of the State-owned land, mature forest or special forest types (riparian forests, pygmy pine plains, etc.) may be marked as a “Restricted Activities” zone; providing special habitat protection for T&E species, high carbon reserves, special scenic value, etc.

Management Zones: Ecological forest management and adaptive planning/monitoring to address socio-ecological values under changing climate: forest management to re-introduce healthy fire, storm salvage, Invasive species removal, and other values (Franklin et al., 2018).

Habitat Zones: Designated via approved Forest Stewardship Plans for project areas to enhance or create T&E habitat which has been lost due to development, fire suppression, or natural succession. This may include re-introduction of natural disturbance regimes, succession management, corridors, and connectivity of habitat."

Appendix E-5
Proposals that were accepted but not discussed

Proposals that were submitted and accepted by the co-chairs as aligning with the criteria for acceptance. At least three of four co-chairs agree that proposal met criteria. These proposals were not discussed by workgroup participants due to time constraints. Because discussions on proposals continually veered toward the topic of tree cutting and wood removal, co-chairs moved to a different approach for workgroup meetings. While there were ideas and proposals that deserved discussion and consideration, they were not covered due to these factors. There were 29 proposals in this category.

Narratives were limited to 2500 characters. Proposal sponsors were invited to also submit references, which are not included here due to space limitations but are available using the sponsor's citation(s) when provided. Footnotes in the proposals indicate a reference to an article, file, memo, or other document. Note that references submitted ranged from unpublished opinions, magazine and news articles, webinars, and journal articles (some peer-reviewed and some not peer reviewed).

Branwen Ellis
Forestry Policies for State Owned Lands in the Pinelands Area
This memorandum identifies the specific forestry policies that the Commission may wish to consider recommending to the New Jersey Forest Task Force for State owned lands in the Pinelands Area. The Forest Task Force was formed by New Jersey State Senator Bob Smith to study and identify ways in which the State can best manage its forests.
If the Commission decides to support some or all of the identified forestry policies, the Commission may wish to recommend the policies to the Forest Task Force for only State owned lands in the Pinelands Area. To the extent that the Forest Task Force determines that some or all of the Commission recommended polices for the Pinelands Area are applicable to the balance of State owned land in New Jersey, that would be a determination of the Forest Task Force.
For background information, page three of this memorandum provides the Pinelands Comprehensive Management Plan (CMP) definition of "forestry."
For further background information, page four of this memorandum provides important language from the Pinelands Protection Act. Providing an overview of the goals of the Pinelands Protection Act, particularly the different goals of the Act with respect to the Pinelands Protection Area and the Pinelands
Preservation Area, will hopefully facilitate the discussion of forestry polices for State owned lands in the Pinelands Area. For reference, the State owns nearly 365,000 acres of land in the Pinelands Area, including State Forests, Wildlife Management Areas and other open space lands. Approximately two-thirds of this acreage is located in the Pinelands Preservation Area. The remaining third is located primarily in the Pinelands Forest Area, which is within the Pinelands Protection Area.

The fifth page of this memorandum identifies the specific forestry policies that the Commission may wish to consider recommending to the Forest Task Force.
Please note that the identified forestry policies are limited to the matters that the Commission regulates.
For example, the Commission does not regulate hunting or fishing or directly regulate offroad vehicle

usage in the Pinelands Area. Accordingly, the staff has not recommended forestry policies relative to deer management or offroad vehicle usage.

Geoffrey Lohmeyer
Controlling the illegal off-road vehicles plaguing NJ forests
NJ Forest land specifically in southern Pine Barrens of NJ and in the forests of the northern tier counties of the state have seen a huge increase in the volume and intensity of off-road vehicles. State parks as well as county open space has been decimated by the illegal use of dirt bikes, and ATV's. Loss of habitat and pure destruction to the natural environment by this use is something that needs to be stopped.

Every weekend large groups of people, increasingly from outside the state, are using our natural forested land as a haven for their illegal "fun". With the numerous access points to many of these properties it makes it very difficult to police. The cost to set up patrols with local police forces or New Jersey Park Police and New Jersey State Police resources doesn't exist at the scale needed.

The New Jersey Recreation and Park Association would like to propose a project that would identify means to strengthen our rules/laws to combat the issues of illegal off-roading. These rules would be such that all law enforcement agencies state wide would be able to write tickets of enforcement. We recommend identify funding sources to protect our valuable resources and enable state wide patrols to take place. We must be proactive to protect these natural areas before the reason for which they were preserved is no longer present.

Greg Gorman
Categorize Carbon Management Strategy
The USDA designed "Adaptation Strategies and Approaches" specifically for forest carbon management and draws direct connections between climate adaptation and mitigation (Ortl, Todd A. et. al, January 2020). (Stewardship2) In developing the Forest Stewardship Plan, the State approved consulting forester (Stewardship4) shall perform a climate vulnerability assessment of each forest stand using USDA's "Adoption Workbook" and select an appropriate carbon management strategy/approach from Table 1. "Menu of adaptation strategies and approaches for forest carbon management" on p. 89 of Ortl et. al, January 2020. (Stewardship1 & 3) A forest stand is a contiguous community of trees sufficiently uniform in composition, structure, age, size, class, distribution, spatial arrangement, site quality, condition, or location to distinguish it from adjacent communities. The Adaptation Workbook can be found in the US Forest Service report: Forest Adaptation Resources: Climate Change Tools and Approaches for Land Managers (Swanson, Christopher W. et.al. September 2016). (Stewardship5)
It is recommended that legislation include the requirement for Forest Stewardship Plans to identify the selected climate adaptation/mitigation strategy for each forest stand and describe the appropriate management prescriptions to achieve the desired carbon management objectives. NJ DEP State Forester shall develop a means of oversight and monitoring execution of the plan.

Greg Gorman
Categorize Climate Adaptation Strategy
In developing the Forest Stewardship Plan, the State approved consulting forester (Stewardship4) shall perform an ecological vulnerability assessment of each forest stand using USDA's "Adoption Workbook" and select an appropriate climate adaptation management strategy/approach from Box 18 "Menu of

Adaptation Strategies and Approaches" on p. 139 of Swanston et. al, September 2016. (Stewardship 6) A forest stand is a contiguous community of trees sufficiently uniform in composition, structure, age, size, class, distribution, spatial arrangement, site quality, condition, or location to distinguish it from adjacent communities. The Adaptation Workbook can be found in the US Forest Service report: Forest Adaptation Resources: Climate Change Tools and Approaches for Land Managers (Swanson, Christopher W. et.al. September 2016) (Stewardship5).
It is recommended that legislation include the requirement for Forest Stewardship Plan to identify the selected adaptation strategy for each forest stand and describe the appropriate management prescriptions to achieve the desired climate adaptation objectives. NJ DEP State Forester shall develop a means of oversight and monitoring execution of the plan.

Greg Gorman
Study the impacts of forest management techniques on New Jersey's aquifers and water
supplies.Considering the importance of New Jersey's aquifers to our drinking water supply and quality, any discussion of forest management should include an analysis of the impact of management techniques on New Jersey's aquifers. (See Climate.Gorman.WaterQuality1-Map of NJ Aquifers). Management techniques including both passive and active approaches cover a wide range of methods, each of which should be considered in terms of their potential harms and benefits to water quantity and quality.. Of most importance are the Kirkland-Cohancy Aquifer and the Highlands.
From the BC (British Columbia) Journal of Ecosystems and Management, there was acknowledgement that land degradation will have a major impact on carbon capture, recharge rates and forest vitality. But much is unknown. For example, there was also an admission in the study that effects of canopy openness are under-studied (Climate.Gorman.WaterQuality2-Bart Muys et. al. 2021). Forest management techniques may also have an impact on water table elevation, a vital consideration for New Jersey's management of its drinking water supplies (Climate.Gorman.WaterQuality3-Brian D. Smerdon et. al. 2009).
Different forest management techniques will likely have differing impacts to our water ecosystems with significant and possibly adverse consequences for generations to come. Studies of the impact of forest management should highlight protection of vital watersheds where the state's major population centers, such as Newark and Camden, get their water from.
In summary, any discussion of how we keep New Jersey's forests resilient in the face of climate change should consider the implications to our aquifers and the availability of plentiful, clean water. It is recommended that the legislature designate a portion of the state's RGGI funds or other funding to authorize Rutgers, the State University of NJ, in conjunction with the NJDEP and other relevant state agencies, to conduct a scientific review and synthesis of existing studies and literature pertaining to the effects of forest management, or the lack thereof, on water quality and quantity. The amount appropriated for this review should be $300,000 or another amount that is consistent the normal scope of completing such a review.. The report shall include a description of recommended program for monitoring and analysis of forest management and its impacts on water supply and quality as well as cost estimates for implementation. .

Joe Basralian
Require DEP to site-visit before FSP approval amd shortly after FSP implementation
Title 13, the legislation governing the DEP's Forest Stewardship Plans (FSP), is lax on inspection and enforcement of FSP implementation.

Title 13 makes it OPTIONAL for DEP to inspect forest land prior to approving an FSP, and allows DEP to wait THREE YEARS before visiting the forest after FSP implementation. This laxity makes DEP enforcement untrustworthy, and opens the FSP process to public doubt.

13:1L-31b states, "The department may elect to inspect the forest land, prior to determining whether to approve a forest stewardship plan." "May elect" means it's optional. Budget constraints at DEP make it plausible that DEP won't inspect. This permissible laxity is hard to fathom in a state like NJ, and with something as dear as our public forests.

13:1L-31b continues, "After the department approves a forest stewardship plan, the forest land shall be subjected to inspection by the department during one of the first three years following approval and at least once every three years following the first inspection." Can you imagine that the DEP can wait three years? That makes it impossible to hold the stewardship plan implementors accountable for any problems or abuses that could occur. Perhaps the most lax protections in New Jersey? If I make even a minor change to my home it's subject to nearly immediate inspection afterwards. Our precious public forests deserve better than "take a look three years later."

Proposed:

1) Require DEP to physically inspect the area of the forest being proposed for a FSP before approving an FSP. File report on public website.
2) Require DEP to physically inspect the area where an FSP was implemented within three months after FSP is completed. File report on public website listing the ways in which implementation was compliant and not compliant with the approved FSP.
3) In #1, require reporting of the number, diameter and species of trees over 6" caliper at 5' height that are targeted for removal. In #2 include a final accounting of these and a comparison to the expected number.

Countless papers attest that timely inspections and data improve compliance. This concept is the backbone of organized society and government. For example:

Journal of Environmental Law: https://academic.oup.com/jel/article/23/2/169/426247?login=false

EPA: https://19january2021snapshot.epa.gov/ust/do-more-frequent-inspections-improve-compliance-evidence-underground-storage-tank-facilities_.html

Journal of Public Policy: https://journals.sagepub.com/doi/10.1509/jppm.21.2.319.17578

John Saponara
Expand threatened bird species along utility rights of way, not by cutting blocks of forest
NJ's position on the flyway for many migrant birds presents a great opportunity to steward these species, especially the most threatened.
But biodiversity must be promoted within a framework of minimizing the carbon cost of conservation, not only for humans but also for the many wildlife species impacted by climate change.
We should map forest edge and ROWs (utility rights-of-way, namely transmission line corridors, highways, and railroad beds) for their potential to expand existing populations of threatened species.
Advantages of ROWs for promoting shrubland birds:

- Many thicket birds are already present along ROWs at high densities, even without management to favor those species [eg Table 2 in 1].
- Studies demonstrate that these species can benefit from targeted management along ROWs [2, 3].
- Findings of relatively low nest success in some situations can be due to short study duration, mistaking low return rates for low survival [4], or the fact that the birds colonizing small patches are the losers in the competition for big patches.

Drawbacks of cutting blocks of forest to promote shrubland birds:
- Patch cuts are short-term fixes that require further logging elsewhere to maintain a population [5], whereas power utilities have pioneered the use of selective clearing and herbicide application to maintain stable shrub communities [6].
- Creating a patch is no guarantee that it will be colonized by the target species, and patch cuts are not generally evaluated against their goals. NJFW's goal for the Sparta Mountain WMA was to create habitat for imperiled species yet groups all species together in graphs of ""Number of bird species"" before and after treatment, with no error bars that might help suggest whether differences are significant [11]. Admittedly I have yet to request more detailed data.
- ""Minimum patch size"" requirements are much smaller than many patch cuts, up to just 1.1ha (2.7ac) in [6]. At Sparta Mountain WMA we cut 10acres per year for 10 years.
- ""Minimum patch size"" requirements are based on observations, not manipulations, and thus demonstrate species preferences, not requirements. Some studies acknowledge some of these methodological inadequacies [6].
- Thus many ""minimum patch size"" requirements may be overestimated [7].
- Danger of climate change to wildlife

Although today climate change is just #6 of the 10 greatest threats to wildlife generally [8], among the most sensitive to climate is the famed Golden-winged warbler [9]. Its range, which includes just the northwest corner of NJ [Figure 1-3 in 10], is shifting northward, and already NJ hosts just 0.02% of its breeding population [Table 1–7 in 10].

Katherine Evans
Reinstate Citizen Scientist Program for Critical Habitat Species

Amphibians are major contributors to overall forest health. In order to protect their aquatic and terrestrial habitat and the critical services they provide, accurate mapping is necessary.

In the past, the citizen scientist program contributed greatly to the Natural Heritage database and it needs to be reinstated. In the case of vernal pool critical habitat, it is invaluable. All requisite fieldwork data (geolocation, species, etc.) is verifiable with today's cellphones.

On the ground certification has been replaced with remote sensing/digital orthography which cannot verify vernal pools. (You can't ID amphibian egg masses, for example, with remote sensing analysis.) The F&W description states this system detects depressions that are likely vernal pools, but that they need to be verified on the ground.(1) This incomplete "potential vernal depressions" data should not be used to replace verified data and cause decertification of already certified pools! Most of the state's vernal pools that were officially certified and recognized for years are now being considered "potential." This is extremely problematic because they no longer show up on important maps used for forestry plans, or by the state (ie Highlands Council) and municipalities to make regulatory determinations.(2 & maps)

On the ground citizen surveys with verifying data show that pools demoted to "potential" on the new maps are indeed still there. Vernal pools, mostly geologically formed, do not simply disappear. Many amphibians return only to their natal pools to lay eggs, using them generation after generation. On

Sparta Mtn WMA, for example, where there are over 30 certified vernal pools, the new mapping depicts only about 4. Logging equipment has damaged vernal pools and egg masses and caused severe rutting.

The vernal pool citizen scientist website has been offline for years now. For years, the DEP has been claiming to be too "understaffed" to do field verifications or input data that citizens have been providing. If the Div of Fish and Wildlife is too "understaffed" to carry out fieldwork, input data or do other baseline ecological studies, they should not be altering existing data or writing forestry plans that degrade our public forests/critical habitat.

Why eliminate one of the most helpful sources of field data-the citizen scientists program?` Reinstating the program with acknowledgment of sighting receipt and data input scheduled 2x yearly is a logical solution.

Ken Dolsky

Maximize Carbon (C) Storage and Sequestration (S&S) by Banning Harvesting Trees on Public Lands

NJ climate policy requires maximization of C S&S on public forestland to support the GWRA (increase sequestration 33% by 2050). GWRA 80x50 Report: "This optimistic projection, however, would require the use of all currently available open space for sequestration, requiring a major transition in New Jersey's current land use laws and practices." (p. xix). Maximizing S&S is needed to achieve EO 274 (50% reduction in GHG emissions by 2030 (reduction of 60MMT).

Because older forests store and sequester more C than young forests, this requires a policy of allowing forests to mature and a ban on harvesting or commercial logging.

Peer-reviewed studies support this proposal by demonstrating:

- Older temperate deciduous forests store and sequester more C per unit area than younger forests.
- Young temperate forests are net emitters of C for many years.
- Older forests' rates of growth and C gain increase continuously with tree mass for hundreds of years.
- Aboveground biomass of most US forests will not decline with age. A substantial amount of additional C could be stored in US forests if large second growth tracts were preserved.
- Even considering sequestration of C in wooden buildings, timber harvest results in a net flux of CO2 into the atmosphere.
- Confusion over the age at which forests sequester the most C is because young trees grow in height faster than old trees and the rate of sequestration in a young forest can be high. However, volume is more important than rate. It is not how fast C deposits are made but how large those deposits are. Young forests are limited in the size of their deposits by their leaf area.
- Conversion of old-growth forests to young invariably reduces C storage, even when structural components in buildings are considered…forests continue to lose mass for three decades after disturbance. Although reintroducing forests to deforested regions will increase C storage, conversion of old-growth forests to younger forests has added and will continue to add C to the atmosphere.
- We find no scientific evidence to support increased logging to store more C in wood products, as a natural climate solution.
- Overall, logging in U.S. forests emits 10 times more C than fire and native insects combined.
- Afforestation and reforestation, while helpful on open land, cannot store or sequester more C than existing forests on a per acre basis and cannot be used to justify harvesting of mature forests.

See source #1 - Carbon sequestration and storage data – young vs old document for expanded narrative and other sources.

Ken Dolsky
Public Forest Management regulations shall be promulgated by a transparent science-based development process that includes public notice and comment.
Proposal - Climate and Ecological Health Workgroups: Public Forest Management regulations shall be promulgated by a transparent science-based development process that includes public notice and comment

The current process for developing public forest policy is by internal directives, not based on legislative mandates or statutory authority and whose validity are questionable. DEP has not provided peer-based science studies as evidence that its policies and practices are appropriate solutions responsive to climate change and the ecological health issues of NJ public forests. Nor has DEP demonstrated by any science-based metrics that its management practices have achieved the desired objectives.

The process for developing public forest policies and regulations:
- Require all public forest climate and ecological policies to be based on peer-reviewed science studies and documented results from similar policies and practices. Policies must include written commitment by the State to fund, manage, enforce and maintain oversight of the resulting activities to avoid actions in violation of contracts or cause long term or irreversible harm to the natural resource and climate mitigation values of public forests;
- Require a well-defined process including detailed inventories and analyses of the existing ecological populations and the anticipated impacts of climate change to the populations;
- All proposed policies and practices shall be developed under the direction of an oversight board. The board shall include representation by NJ DEP/F&W, forestry industry, NJ Highlands Council, NJ Pinelands Commission and an equal number of members of conservation and forest advocacy non-profits, including NJ Forest Watch, NJ Highlands Coalition, NJ Conservation Foundation, Pinelands Preservation Alliance. All policies and proposed actions must be approved by two thirds of the voting members;
- Require any group to resolve objections to its policies/actions in writing, based on proven science or objective evidence. If such a process does not resolve an issue, the services of a provably objective arbitrator will be used to make the final decision on the validity of the proposed policies/actions;
- The development of policies and regulations and supporting arguments and evidence as stipulated above shall be publicly accessible and subject to public comment.

This would allow the public to be informed and engage in policy development and implementation. The public may challenge policies and actions where there is evidence they are ineffective or harmful. Regulations could also be challenged if the agency lacks adequate resources for oversight and enforcement.

Ken Dolsky
Proposal to Require Addressing Climate Change to be the Default Priority for all Public Forest Management Decisions
Definition: Carbon sequestration is the amount of carbon accumulation per unit of land area per year, net of respiration. Increasing sequestration is equivalent to decreasing GHG emissions.

Climate change is the most important ecological threat to NJ and, therefore, it must be considered in all projects. Those that will reduce its impact should have the highest priority. Projects that increase its impact should have very low priority.

Addressing climate change includes mitigation (increasing carbon storage and sequestration) and adaption (protecting clean water, managing stormwater runoff, etc.).

GWRA 80x50 Report: NJ climate policy requires maximization of sequestration in NJ's natural carbon sinks to support the GWRA objective (increase sequestration 33% by 2050 from 8.1MMT to 10.8MMT per year). "This optimistic projection, however, would require the use of all currently available open space for sequestration, requiring a major transition in New Jersey's current land use laws and practices." (p. xix). Maximizing sequestration is also needed to achieve EO 274's 50% reduction in GHG emissions by 2030 (reduction of 40MMT).

Total annual sequestration of all NJ forests in 2018 is estimated to be 4MMT (NJ State FAP 2020, p. 82). A 33% increase would be 1.3MMT. DEP has not published information on the potential increase in sequestration by types of sinks, nor a plan to achieve this. Given the caveat in the GWRA Report, recent research demonstrating that older forests store and sequester more carbon than young forests (proposal #31), and the lack of information on sequestration sinks, it must be NJ policy to include an analysis of the sequestration capability of affected sinks and prioritize sequestration as part of all public forest management decisions.

Decisions on all proposed NJ public forest projects must specifically (and quantitatively) be based on peer-reviewed science and include:

- Multi-year analyses of the benefits/harms of these actions on GHG targets specified in NJ climate change policy (for 2030 and 2050), as well as a long term projection (e.g., 100 years)
- Benefits/harms to climate adaption
- Measures of other anticipated benefits and associated harms (e.g., destroying some species' habitat to improve it for others)

Projects that will increase GHGs and/or harm climate adaption should only be allowed to proceed if an independent third party (see Oversight Board in proposal #68) finds that the net other benefits outweigh the climate change benefits.

Kristen Meistrell
Mesophication must be controlled in northern NJ Public Forests for Climate Change Resiliency and Adaptation
Northern NJ has been dominated by oaks for thousands of years (1) but these oak forests are being lost through the conversion of shade-tolerant northern hardwood trees through a process called mesophication(2). Mesophication is caused by the absence of fire and other forest disturbances and results in a feedback loop that promotes moist, cool microclimates that encourage shade-tolerant northern hardwood tree species & prevents the regeneration of oaks, hickories, & cherries(3). The presence of the mesophytic northern hardwoods also alters the ecosystem function of oak forests by changing the hydrology and reducing the availability of water, sunlight, & nitrogen in the forest(4,5,14).

Mesophication will result in lower live tree carbon storage & carbon sequestration rates(6) in addition to an increased risk of forests in northern NJ becoming net carbon emitters. Warmer temperatures & the potential for more frequent droughts in the summer are projected in this area(7, 8) which will increase water stress in plants(9,10) & lead to increased mortality of tree from other factors(7). Mesophytic trees tend to not be drought tolerant (8,9) & are projected to decline in future climate conditions, particularly in a high emissions scenario(11 www.nrs.fs.fed.us/atlas). Mesophytic forests will reduce the range of available wildlife habitats.

Potential actions to reduce impacts of mesophication & risk of mortality from drought, as well as enhance the resilience of forests, include prescribed fire, thinning forests & facilitating regeneration to promote tree species better adapted to future climate & drought conditions, such as oak (8). Promoting diverse age classes through a variety of techniques & reducing competition for moisture, nutrients & light can increase water availability(14) & biodiversity(15,16). These actions can maintain a mixed-oak ecosystem & control invasive exotic plants, maples, & other trees less adapted to future climate conditions(8,17,18).

All of these options, & others we may not have thought of yet, need to be available to have a flexible approach to accommodate diverse geographic settings, local site conditions, & other considerations when helping the forests in northern NJ be better adapted to future climate conditions(12). A one-size-fits-all approach to forest stewardship is insufficient for climate adaptation, and any restrictions that limit the focus of forest mgmt. to a single action would be detrimental to forests in northern NJ. Instead, a diversity of adaptation options based on climate impacts as well as landscape & ownership context must be allowed in any proposed forest stewardship legislation(13).

Kristen Meistrell

New Jersey's Forests and Wildlife Depend on Disturbance

Many believe all virgin forests consisted of closed-canopy old-growth forests and that forests in NJ prior to European settlement (EuS) were similar to the dense forests of today but with larger trees. The majority of NJ was forested prior to EuS but not like those many have imagined. Early settlers reported open woodlands with 10-30 trees per acre in NJ (1), and heath hens, a grassland-shrub-dependent bird that is now extinct, were abundant in NJ (2).

Open-canopy forests & shrublands were much more prevalent in NJ's landscape pre EuS than today, ranging from a maximum 50% in northern NJ to 80% in southern NJ from various disturbance events (excl. beavers), and old growth forests consisted of <7% of the landscape (1, 3, 4). Today <8% of forests are open-canopy forests & shrublands, >80% are closed-canopy mature forests (2019 FIA, 2015 LULC), and 15% of all NJ public forests have a reserve status (FIA 2019).

Changes in forest composition and structure pre EuS to today have impacted wildlife because many declining wildlife in NJ, including >30% of SGCN, need open-canopy forests, grasslands, and shrublands (2, 6, 7). About 2.9 B birds have been lost in North America since 1970 & the cause of decline is habitat loss (5, 7). When looking at 59 forest bird species that breed in NJ, 30/31 birds that suffered declines either breed in shubby/open-canopy forests or bring their chicks to shrubby/open-canopy forests after leaving the nest (5, Birds of North America).

Forest stewardship is needed to increase biodiversity & create a complex of wildlife habitats on public lands necessary to ensure the persistence of NJ's biological diversity (2, 6, 7). Forests on public lands in NJ managed for shrubby/open-canopy forests resulted in the number of bird species more than doubling, and SGCN tripling, compared to bird observed in closed-canopy mature forests prior to

treatment (8). Even so, NJ has an implementation gap when it comes to forest stewardship on public lands; only <0.5% of the <0.1% of forests in NJ managed annually are public lands (9, FIA 2019).

Legislation needs to facilitate active stewardship in NJ's public forests to remove the implementation gap and restore the structure & composition of forests similar to the historical disturbance regimes of fire & hurricanes prior to EuS. The 15% of public forests with reserve status (FIA 2019) exceeds the amount of old growth forests in NJ pre EuS (1, 3, 4). Creating more reserves for a single ecosystem service or creating more old-growth forests would counteract the needs of wildlife & disturbance-dependent forests in NJ and should not be mandated.

Kristen Meistrell

Mesophication must be controlled in northern NJ public forests for wildlife/ecological health

Few keystone plant genera support more than 90% of Lepidoptera species in the US, with oaks being the most important, followed by willow, cherry, pine, and aspen(1). Trees that support the most spp. of caterpillars are preferred foraging trees for insectivorous birds, especially during the breeding season(2). The most important tree spp. for Lepidoptera are either shade intolerant or intermediate shade intolerant, meaning seedlings need sunlight to germinate and grow tall and fast enough to be competitive (Wikipedia). Oak are intermediate shade-intolerant & have dominated northern NJ forests for thousands of years(3,4); however, oak forests are now being lost through a process called, mesophication, or the conversion to more shade-tolerant northern hardwood trees, such as maples(5). Mesophication is caused by the absence of fire & other forest disturbances and results in a feedback loop that promotes moist, cool microclimates & encourage the proliferation of shade-tolerant northern hardwoods(6). Although the microclimate remains moist, there is a decline in the overall water supply due to increased water use by the mesophytic trees(7). Closed-canopy forests that also result from mesophication promote soil pathogens that maples are resistant to but cause diseases in species like cherry(8). The conversion of oaks to maples may also be enhanced by the mortality of ash trees from the emerald ash borer(9). While maples & birches also support Lepidoptera species, their combined importance score is less than oaks(1). Birds, bats, and other wildlife depend on oak forests for forage. Oaks are host plants for hundreds of species of lepidoptera caterpillars, which then provide forage for many other species of wildlife. Additionally, many species rely heavily on acorns that are produced by oak forests, so it is critical that oak forests of northern NJ are able to regenerate & stay as oak forests. The methods needed to address mesophication & regenerate oaks & other important shade-intolerant host plants needs to be determined on a site-by-site basis, but depends on several factors, such as location, soil moisture, & current spp. composition(10). Typically, the methods needed to address this require thinning the canopy and prescribed burns to allow enough sunlight for regeneration(4,10), and using other techniques such as herbicide applications and continued maintenance for decades to successfully control mesophication & establish a functional oak forests(4,10). Legislation is needed to require the development of Forest Stewardship Plans for public land in NJ that address mesophication and evaluates and utilizes all the tools available, including those above.

Kristen Meistrell

Maximizing Ecosystem Services provided by New Jersey's Public Forests

Forests provide a variety of ecosystem services (EcoS), such as carbon storage & sequestration, biodiversity, water quality and quantity, & wood production. The extent & types of EcoS forests provide depend on the surrounding landscape & forest composition, structure, age, & growth/regeneration

rates (1,2). The public also uses forests for a variety of recreational activities (hunting, camping, hiking, wildlife viewing, etc.; 3,8).

Not all EcoS can be maximized in the same place & time, and trade-offs occur when maximizing only one or two EcoS. Some forest EcoS don't require active forest mgmt. but many others do (2,4). Maximizing canopy cover (no mgmt.) will increase local temperature regulation & carbon storage, but at the expense of other services such as wildlife diversity, pest control, bird watching, wild edible plants, & resiliency (active mgmt.; 2,4). Providing multiple EcoS can be accomplished by managing for a diversity of forest attributes across larger forested landscapes, particularly vertical heterogeneity & shrub richness (2,4).
EcoS priorities on public lands depend on the purpose of the owner. In NJ the purpose of state parks is to provide visitors with a variety of recreational opportunities (hiking, biking, camping, swimming, etc.), the purpose of natural lands is to preserve land in its natural state, and the purpose of wildlife mgmt. areas is to manage for a diversity of wildlife species & public access. County & municipal entities may have other goals for forests they own depending on their priorities & that of residents. In NJ, <0.1% of all forests in NJ are being managed annually (10), and <0.5% of those forests are on public lands (FIA 2019), indicating NJ's public forests aren't being managed for all priority EcoS.

Maximizing one EcoS, such as carbon storage, in the majority of public lands will not meet the needs & values of the majority of New Jerseyans - the public holds many different opinions on how forests and wildlife should be managed based on what they value most (3,5,6,7,9). Which EcoS for which parcel of land is unique to that parcel. The general public shares an opinion that our public lands should be managed (3,7). In fact, most wildlife mgmt. area users in NJ, in addition to most of the 20 organizations in a NJ focus group, were in favor of active mgmt. on wildlife mgmt. areas, including wildlife habitat mgmt., Rx burning & timber harvests (9). Legislation should therefore facilitate & promote ecological-based mgmt. of public forests for multiple EcoS, along with the purposes of the owners.

Leslie Sauer
New Jersey Public Forests Climate Emergency Response Management. Prioritize carbon uptake and storage as well as ecological restoration in the management of public forests by prohibiting the removal of wood and forest products.
At this time of an existential climate crisis and threats to biodiversity, the State declares that the management of all public forests shall be documented and monitored to prioritize optimization of carbon storage and ecological restoration. Ecological restoration seeks to initiate or accelerate ecosystem recovery following degradation, damage or destruction. The goal is to return the ecosystem to its historic trajectory (not its historic condition). When forests are allowed to grow without harvesting and wood removal they can achieve their full ecological potential for carbon sequestration (uptake and storage) in wood and soils.

How:

No wood or forest products shall be removed
All woody material shall be left as habitat and carbon sequestered in soil.
Legislation needed to prohibit growing, selling, planting etc. of invasive spp.
Invasive/infected plants/that pose a hazard must be managed on site
Effective deer control is the most needed management
Monitoring all spp., not just forestry info, for baseline and ongoing management

Expand prescribed burning and more natural burn regimen where safe
Manage natural gaps vs cutting mature forest to create them

Benefits:

End unregulated clearing of mature forests/large trees
More climate impact re: carbon than any other action
Avoids major loss of carbon from public lands
Helps to reach the State's goals for carbon reduction
Little economic impact to niche industry; No logging income to DEP
Higher level of fire protection and more pyro-diversity
Sequesters three times the carbon of thinned forest
Increased resistance and adaptation re: pests.
Maintenance of interior forest, the most endangered habitat
Better regeneration with deer control than canopy opening
Greater protection for Special Concern, Threatened and Endangered species
Does not inhibit any needed ecological restoration

The need to act now is overwhelming. We have no time to plan varied treatments for each public forest. No task force member claimed that logging public forests will improve carbon uptake or storage and logging is not needed for ecological restoration. Task Force participants could achieve consensus behind this proposal. Halting all harvesting and removal from all of our public forests can be implemented immediately with no planning time and with instantaneous beneficial impacts. This is doable now!

See attached document concerning ecological management without wood removal.

This proposal is not intended to be retroactive to the Atlantic White Cedar Restoration.

See proposals 27, 28, 29, 35, 36, 37, 52, 65, 66, & 68 for references.

Margaret Wood
Deer Public Forest Management
Deer density has been too high in forests for decades (Ref 1). Over-grazing has decreased forest diversity, causing extinctions.

On Public land, deer resources belong to the public. People want deer to be culled by individual hunters, not businesses or private clubs (Ref 2).

10 deer per square-mile allows for sustainable habitat (Ref 1).

The deer density map shows most of the Highlands, has 15-30 deer/sq-mi (Ref 3), leading to forest degradation. The south-western Highlands is in Hunterdon and Warren with very heavy deer populations.

The eastern Pinelands has 0-15 deer/sq-mi, which is good. The western edge of the Pinelands has 15-30 deer/sq-mi, degrading the forest.

This map is based on “information from state wildlife agencies that generally is estimated from harvest data and deer surveys” (Webb, 2014), reflecting hunt-able land, such as state forests.

Current bag rates reduce the deer population 34%, maintaining current populations. Does breed 2 fawn per year in the forest (Ref 4). Approx. 60% culling, is needed. Hunting is the most economic way to reduce the herds. More people need to be encouraged to hunt. Hunters need incentives to cull more deer, especially Does. Hunters prefer antlered stags, but reducing stags does not slow the birth rate.

Proposals:
1. Increase the season length.
2. Issue permits for multiple zones under one fee.

Hunters sometimes donate deer to charity (Ref 5).
A fixed butcher fee was paid by the State and the meat would go to charity to feed the hungry. Funding was cut. One year, hunters were asked to donate $25 to the butcher fee, in addition to their labor. Hunters stopped donating and the program died. The charities should be self-funding and worthwhile to the hunter as well as the butcher:

3. Allow a NJ resident with a deer hunting license, to SELL one dressed doe to a charity, at a fixed fee determined by the state. Hunters should be compensated for their expense and labor dressing the deer. Hunters should still be freed of liability when selling to the charity, like they were before. The charity should be allowed to serve the venison at fund-raising dinners. The venue charges a large entrance fee and a portion of that goes to the charity. The charity uses the money for expenses and to buy food for the hungry.

Media:
Hunters have been stigmatized by anti-gun and PETA rhetoric in the media. NJS must reverse that.

4. Run ad campaigns encouraging people to hunt deer for food.
- The book ""An Omnivore's Dilemma” shows that hunting is the most humane way of obtaining meat, (Ref 6) The public should be made aware.
- Deer overpopulation is destroying the natural ecosystem. Hunters re-balance nature.

Margaret Wood
Farmland deer management in peri-urban zones
Deer populations in human occupied zones are increasing (Ref 1). The densest areas are in NNJ along the Delaware River and Hunterdon, where agricultural areas meet suburbs (Ref 2). Deer hide in no-hunt zones during the day, then eat crops at night.

Deer are synanthropes who thrive in peri-urban farmland (Ref 3). A doe births 3 fawns in suburbs compared to 2 in the forest. Populations can double in 3 years. Culling in the forest won't affect farmland deer. “Extreme” deer management plans are needed in these zones (Ref 5).

Animal rights groups request non-lethal control. Neighbors harass those who cull deer. Deterrents don't work long enough to allow crops to grow. Taxpayers won't fund sterilization costing $1200/doe.

Increased hunting and 7 foot tensile wire fencing are the best methods of reducing farm losses (Ref 1).

Some farms are on leased land where the landowner forbids hunting.

Deer donations to ""Hunters Helping the Hungry"" (HHH) (Ref 4) incentivized hunters to cull these deer. Taxpayers subsidized butcher fees. When money ran out, hunters were asked to pay butcher fees, so they stopped participating.

Don't expect taxpayers or hunters to pay to eliminate losses to farmers. It's the farmers' ""cost of doing business.""

Conclusions:
- Deer hunting regulations need to be different in peri-urban zones.
- Deer culling, for the private gain of farmers, should be self-funded; no tax money.
- To be sustainable, charities like HHH need to generate their own funding to expand the program.
- Don't assume hunters are rich. Make deer culling more affordable.
- Harassment of those who cull deer must stop.

Proposals for dense deer populations in peri-urban zones:
- Issue permits for multiple hunting zones with one fee. Simplify permit process.
- Allow bow hunting from stands, with reduced offsets. Reduce excessive firearm offsets.
- Encourage towns to allow hunting on their vacant and green-space land.
- Require landowners who rent to farmers and receive Farmland Assessment, to allow deer hunting. Landlords may require lead-free ammunition to protect the soil, or demand bow hunting.
- Prioritize farmers with depredation permits, for small business loans, to buy 7 foot tall, high-tensile fencing.
- Charities similar to HHH could host venison fund-raising dinners. Ex: tourist venues near Mountain Creek, Six-Flags.
- Deer eat crops at night. Charities need 24/7 refrigerated vans to pick up freshly dressed deer at all hours.
- Allow hunters on farmland to SELL a large bag-limit of does to charity (free of liability) for a fee, fixed by the state, as is done for butchers in the HHH program.
- The state needs to run ads encouraging people to hunt deer for food.

Michaeline Picaro
Preserve Ramapough Lenape culture
These lands are living creations and places of spiritual ceremony, which our ancestors have created thousands of years ago. Each generation adding prayers (stones) and holding ceremony on each of these sacred sites, teaching our future generations of their homelands and spiritual complexes that exist on these lands today. Asunals (stones) are treated with respect as any elder should be. They are here to assist and provide teachings to us, to ensure spiritual growth, much like Grandparents provide. Our stone creations were/are used for prayers, healing, ceremony and trail markers. Placing a stone (prayer stone) in a specific area, spiritually guided, is an ongoing practice today. Streams above, below ground, are considered spiritual beings and have life. All land is connected, one cannot live without another. Prayers and intention set years ago will be broken, if even one stone is moved. Destroying our ancestors' prayers or ceremonial complexes, will erase our ancestors living culture passed down for generations before, your ancestors stepped foot on our lands. Ceremonial Stone Landscapes were and are another

extended form of our language. Today when we enter the woods, the land speaks to us, allowing the traveler to see the language that was left here by our ancestors. The many different arrangements of these stones indicate direction, with meaning provoking the traveler to follow the code/language of stones, to this day. Language indicating shelter, water bodies, ceremonial complexes, and portals of spiritual worlds of entry. Our living history of Stone Language codes ensured the very survival of our people, providing direction to shelter, water and spiritual access areas for body and spirit. We are the protectors of our living history and culture. We need assistance with preserving this crucial component of our history, language, and culture. Many of these living artifacts remain in place, as they have for over 10,000 years. Our living culture deserves updated policies that state agencies will respectfully adhere to. Provided below is an abridged version taken from Governor Jon Corzine's Executive order #122 "To protect Native American open air worship sites and tribal burial grounds" "and broaden inter-State, State, county, and municipal relations with Native American communities This administration affirms, endorses, and supports the New Jersey Legislature's acknowledgement in 1995 of the major role of the Nanticoke Lenni Lenape Indians, the Ramapough Mountain Indians, and the Powhatan Renape Nation in the history of the State and those tribes' unique and continuing importance in New Jersey's political, social, and cultural life.

Nancy Roberts-Lawler

Fund the Creation & Implementation of Forest Stewardship Plans (FSPs) on Public Lands

Many local governments have taken the opportunity of funding provided by the Garden State Preservation Trust Act (NJSA 13:8C-1 et seq.) and other open space taxes for the acquisition and preservation of properties, mainly for the protection of the natural resources and ecosystem services those forests provide. However, the presence of invasive plants, emerald ash borer, and other threats are prevalent in many areas. Without stewardship activities like the removal of invasive plants, those natural resources and ecosystem services the land preservation was intended to protect will be threatened (1).

Other than raising taxes, many local governments do not have the means to steward their properties despite the need to do so. Governing bodies will likely not volunteer to bear the added cost of having to either create a plan or obtain multiple permits just to control invasive plants in a flood hazard or wetlands transition zone in the Highlands without any compensation or assistance.

An incentive is needed to help public landowners create and implement plans so they can steward their forests for the benefit of the natural resources and ecosystem services provided to the public. There are currently some incentives for having a plan, such as exemptions from needed many of the permits, but it's not enough to offset the cost of creating the plan and then implementing it. If possible, public outreach and education should be included as part of the planning and implementation of forest stewardship.

Available monies to incentivize the creation and implementation of FSPs should be advertised often to local governments. Funding sources could come from Regional Greenhouse Gas Initiative or Green Acres. Compared to the millions of dollars required to purchase land, it would only cost thousands of dollars to plan and conduct stewardship on Green Acres lands. Because land in the Highlands (https://www.nj.gov/njhighlands/master/rmp/final/highlands_rmp_112008.pdf) and Pinelands regions (2) are incredibly important, perhaps public landowners within those boundaries can be eligible for added funding from the Highlands Council and Pinelands Commission for implementation as well as planning.

Nancy Roberts-Lawler

Clarify Forest Stewardship Plan (FSP) regulations and include non-contiguous parcels owned by the same public landowner under one FSP

Public landowners currently follow forest stewardship regulations outlined in NJAC_7:3-5.1-5.14 (1) when developing forest stewardship plans (FSPs) on public lands. Many public entities preserved open space to protect natural resources & ecosystem services such as water quality, recreation, & wildlife diversity. However, the presence of invasive plants, emerald ash borer, & other threats are prevalent in many areas. Without stewardship activities like the removal of invasive plants, those natural resources & ecosystem services the land preservation was intended to protect will be threatened (3). Many public entities prefer the more comprehensive and protective FSP when creating plans to control invasive plants. The criteria for FSPs mandates thorough consideration of multiple resources through the inclusion of soil, topography, hydrology/wetlands, ecology, biodiversity, endangered/threatened species, threats to the forest, carbon sequestration, cultural resources, recreation, fish & wildlife habitat, timber, forest products, and aesthetics in the FSPs (1,2). NJAC_7:3-5.2 also mandates that mgmt. of forests & natural resources under a FSP be based on the principle of conservation, sustains/enhances forest productivity & ecosystem services, & helps keep forests as forests by not allowing clear-cuts leaving <10% canopy except to regenerate a forest (1). We appreciate that these criteria mandate thorough consideration of natural & cultural resources & desire those criteria remain unaltered. Creating a more thorough plan can increase costs but FSPs can save costs from certain regulation exemptions. With FSPs come the cost savings of needing wetland delineations and permits just to remove invasive plants in, for example, a flood hazard area or wetlands transition zone in the Highlands. Allowing non-contiguous parcels to be included under a single FSP would also reduce costs. While FSP regulations do not preclude public lands from the forest stewardship program, they also don't define a publicly held qualifying property. As such, the definition of a single qualifying property that is privately held is being used for qualifying properties that are publicly held. We recommend that a clarifying statement be added to NJAC_7:3-5.1b so single FSPs can apply to non-contiguous parcels owned by the same public entity. This clarification would greatly benefit municipalities who may own a total few hundred acres of forest land but in multiple non-contiguous parcels. The creation of one FSP for multiple parcels, instead of creating multiple FSPs, would reduce planning costs & time investment which will help facilitate the approval for the plans to be developed.

Patricia Shanley, Ph.D.

Public Forests for Public Health

Recent scientific findings confirm that forests are crucial to human health. To realize the health benefits of forests, management plans need to encompass the urgent priorities of planetary and human health. This requires forestry programs to include the nutritional, cultural, ecosystem service values, and human health benefits which forests offer (1). To broaden the lens on forest use and value, this proposal recommends formation of a Forest and Human Health Advisory Committee, including experts from interdisciplinary fields such as: social, urban, and community forestry; infectious and non-communicable diseases; environmental and mental health; climate change; biodiversity; and recreation.

Cross-sectoral collaboration on forests & health is needed because forests:

Enhance immune function: Contact with diverse natural environments enriches the human biome, optimizes the immune system, and protects from allergy and inflammatory disease (2).

Reduce non-communicable disease: & risk factors linked with higher rates of cardiovascular & respiratory diseases, cancers, diabetes & mental health issues, the fastest growing and largest health burdens globally.

Reduce risk of infectious disease: Fragmentation and habitat loss cause increased interactions between pathogens, parasites, bacteria, wildlife and humans, and a rising incidence of infectious diseases, including tick-borne.

Filter & cool air & protect drinking water: Forests reduce pollution-related diseases, including cancers and respiratory illness which annually account for over 100,000 US deaths (3).

Regulate temperature: Heat stress and stroke is rising, but lessened by the cooling effect of trees, which is proportional to the size of the forest patch.

Promote mental health: decrease anxiety, depression, ADHD, and enhance community (4).

The focus of the Committee is to assess the state-of-the-art findings on forests and health relevant to NJ, and to issue a report to the Governor and State Legislature with recommendations incorporating human health into the management of public forests. The committee would include indigenous representation and liaise with the Depts. of Health, Education, Children and Families, Human Services, Mental Health, and Env. Protection. The mandate would be for an initial period of 2 years, renewable as needed. Opportunities to mainstream forests into public health care can occur only through full recognition of the vast public health benefits forests offer.

Sandra Chen
Qualify public forest flora for RAWA funding

Congress is expected soon to enact, with bipartisan support, a law to combat biodiversity loss (1). The Recovering America's Wildlife Act (RAWA) (2) aims to avoid the need to list any additional species as threatened or endangered (T&E), primarily by extending financial and technical assistance to States. Funding levels would increase over time, and ultimately up to $1.3 billion could be disbursed annually (3,4).

New Jersey (NJ) could receive millions of dollars each year for conservation and restoration of species classified as either i) T&E species or ii) at-risk species, not yet classified as T&E but recognized by the State as a species of greatest conservation need (SGCN). RAWA specifies that SGCNs may be fauna or flora. Anticipating this forthcoming influx of resources, the Task Force should recommend several steps be taken to ensure and enhance RAWA's potential benefit for public forest lands:

1. Revise the State's Wildlife Action Plan (WAP) (5) to include plants. RAWA requires that its monies be used to implement the State's wildlife conservation strategy. NJ's strategy is set forth in its WAP. Trees, shrubs, and understory species (i.e., plants) are essential components of forests. At-risk woodland species merit protection. Currently NJ's WAP currently considers only species of birds, mammal, reptile, amphibian, fish, and invertebrate species as SGCNs—not plants.

2. In the WAP, recognize as T&E species the 356 plants listed as endangered in the Endangered Plant Species Program Rules (6), promulgated pursuant to State law (7). RAWA requires that a State utilize not less than 15 percent of the RAWA money it receives to assist in the recovery of T&E species (8).

3. Consider amending State law to authorize Department of Environmental Protection (NJDEP) to promulgate a list of threatened plant species. Current law (7) only provides for a listing endangered species. But if additional at-risk species (9) could be listed, pursuant to State law, as "threatened," these species too could qualify for the funding RAWA directs to T&E species recovery.

4. Provide safeguards to protect the habitats in which RAWA-funded conservation measures are carried out. RAWA specifies that conservation programs for SGCNs will also entail recovery and management of the "key habitats" and the "plant community types" essential to the SGCN's conservation. The welfare of the habitat and the plant community needs to be attended to, as well as that of the target SGCN(s).

Sandra Chen
PROHIBIT CLEARING OF FORESTS FOR INSTALLATION OF SOLAR PROJECTS
Preventing forest lands from being converted to other uses is fundamental to their conservation. Allowing forestland to be cleared for the installation of solar fields is contrary to this aim.

NJ's Board of Public Utilities (NJBPU) offers a range of incentives for the installation of solar facilities (1). Agreed, promoting the expansion of solar energy capacity is important for addressing climate change, but it should not be done at the expense of forests.

For larger solar installations (i.e., a grid supply solar facility or a > 5 MW net metered solar facility), Section 6 of N.J.S.A. 48:3-119 establishes siting criteria that NJBPU must see are met for it to authorize the installation (2). Section 6 contains some acknowledgement of environmental concerns. It states that the siting criteria shall "minimize, as much as is practicable, potential adverse environmental impacts." But its specifics provide no guarantee of protection of forestlands. There are ambiguities. For example, it states that, in selecting installation a site, consideration is to be given to conservation designations associated with the property and to the amount of its tree cover; but requiring consideration does not establish any ultimate obligation. And such consideration is to be given only "where appropriate," with no clarity as to what that means. In like vein, Section 6 also prohibits siting large installations on land preserved under the Green Acres Program, on land in the Pinelands and Highlands preservation areas, and in freshwater wetlands and lands defined as "forested lands." Then, a subsequent provision establishes that a "developer may petition the board for a waiver" to these prohibitions.
For smaller solar installations (<5 MW) (3), State law does not provide any siting criteria. In a draft of proposed amendments to its existing solar energy rules for these smaller installations, NJBPU states: "Although the proposed rulemaking does not establish specific siting standards, existing statutes and regulations implemented by other New Jersey state agencies will continue to apply to siting on…sensitive natural environments." (4) But there are no other-agency regulations protecting forests from being cleared for a solar project.
New State law is needed which prohibits the clearing of public forestlands to make way for solar power installations.

Sara Webb
Retain Wood for Climate and Biodiversity
To maintain and increase climate resilience and safeguard biodiversity, there shall be no sale or removal of wood or timber products from New Jersey's public forested lands. With this major policy change, all

woody material will be left in the forest for habitat and as carbon sequestered in soil. Standing dead trees, dead wood and logs shall be retained on site: for their critical habitat value, for organic matter to create and replenish topsoil, for climate defense through carbon storage, and to prevent ecological damage from logging machinery to soil, vernal pools and other habitats. Invasive non-native woody plants and those that pose a genuine hazard must be managed on site rather than moved and disposed of elsewhere. Logs, snags, and stumps are mostly carbon, and as they decompose most carbon moves into soil, beneficial fungi, and the entire food web. Retaining wood and living trees is essential to meeting the NJ State Forest Action Plan goals (Plan, p.145) "to enhance carbon sequestration, and prevent our forest resources from becoming a net carbon emitter." With these goals in mind, wood must remain in the forest and living trees also retained for continued carbon sequestration services.

Despite claims that logging does not sacrifice carbon defense because wood products also store carbon, wood products actually have a surprisingly short life span (Ref 1), and a very high percentage of trees' carbon storage is released through processing, milling, transportation, and production (Ref 2). When used as or converted to fuel products, logged timber biomass rapidly converts to CO2 in the atmosphere. But left unlogged, native forest species of our state will live for centuries of accelerating carbon sequestration and storage as they grow (Refs 3& 4)

Many species rely on dead wood or related complexity of forest floor habitat: dead tree and cavities for bird habitat, nurse logs for tree seedlings, wood for high diversity of fungi which are globally threatened by tidy habits. In addition to loss of carbon and habitat, we have seen that today's mechanized timber management and transport on New Jersey conservation lands erodes and compacts soil, spreads invasive species; and harms public water supplies, vernal pools and other wetlands, amphibians, understory plant communities, and the future forest of young trees.

This proposed policy of wood retention for climate defense and wildlife also would reduce financial incentives for cutting trees and clearing the forest canopy. Other sources of funding not tied to wood harvest must be developed to support the NJ DEP's important conservation work to enhance climate resilience and forest integrity.

Sharon Wander

Protect Nesting Habitat for Forest-Interior Breeding Bird Species on Public Land in New Jersey

Much of the justification offered for logging of NJ public forests has been to create early successional/young forest habitat (ESH) for birds, attributing population declines of ESH-breeding birds to lack of this habitat type1,2. However, clearing mature forests does much more harm than good to birds of NJ. Since 1970, Eastern Forest bird populations have declined by 166 million, with 63.5% of species exhibiting losses3, including 31 of New Jersey's 59 forest bird species4. Of NJ forest birds, 2 are State Endangered (E), 2 are Threatened (T), and an alarming 21 are Special Concern (SC)5. ESH bird species include 3 E, 1 T, and only 4 SC5. Obviously, forest-breeding birds need at least as much habitat protection as ESH species. It makes no sense to log the decades-old habitat needed by one group of declining species to create, for another group, habitat of short-lived effectiveness (the number of species using ESH created by logging at Sparta Mtn. WMA starts to decline after only 3-4 years6). Further, many NJ forests are so severely degraded they cannot support the normal complement of breeding birds. Overabundant deer have greatly impacted the species composition and abundance of forest understory vegetation in central NJ7 and "pose a significant threat to forest health and plant regeneration throughout [NJ]"8. The resultant loss of cover, nesting sites, and food sources, combined with effects of invasive plant species on vegetation structure, has reduced abundance of ground- and

midcanopy-nesting forest birds in NJ9. So, with forest-breeding birds facing habitat losses at least as serious as those of ESH-breeding species—and with many more Species of Concern involved—further conversion to ESH of forest nesting habitat must be restricted—particularly when NJ owns thousands of acres of open fields (notably on WMAs) where ESH could be created relatively quickly. Also, some 950,000 acres of forest in NJ is privately owned8 and ESH is likely being created on much of this acreage through Forest Stewardship Plans.

Therefore, management activities on publicly owned forests in NJ that would temporarily or permanently reduce the area of nesting habitat for forest-interior breeding birds should be restricted. Any management to create ESH by mimicking natural disturbance within maturing forests (both for ESH-breeders and to provide habitat heterogeneity for forest breeders) must be small-scale (suggested ≤3 acres), implemented without the use of heavy machinery, and not involve killing of large trees or removal of wood (unless to another part of the forest). Details of such restrictions to be determined by a scientific advisory board (See proposal #68).

Silvia Solaun
Mgmnt of Public Lands Must Be Held To Highest Standards
Management of our public forested lands must be held to the highest standards known for Ecological Health.
The majority of our public forested lands have been acquired through public funding including Garden State Preservation Trust Funds and the Green Acres Program. These lands are now held in the Public Trust.
In order for our public forests to fulfill their Public Trust obligation and serve the public by protecting ecological diversity, no heavy logging equipment, such as feller bunchers, skidders, harvesters, logging trucks or other heavy machinery should ever be used on public forest lands. “Habitat disturbance and land use intensification are the principle drivers of global biodiversity loss in terrestrial ecosystems.”1
The use of heavy machinery on NJ’s public forested lands has caused severe soil compaction, soil degradation and extreme rutting in all of the previously logged areas, e.g., Sparta Mtn. (SMWMA) is an example of what NOT to do. (See photos) Soil impacts damage adjacent trees, native vegetation, mycorrhizal systems, and lead to erosion and impair surface water quality.
Use of heavy equipment causes severe negative impacts to sensitive and Rare, Threatened & Endangered vernal pool species (amphibians: salamanders, frogs, toads). Huge heavy equipment permanently widens historic dirt forest roads and encourages ATV/ORV use, which severely degrades our public forest lands’ ecological resources.
Finally, heavy equipment brings with it the likelihood/certainty of infection of invasive species not previously infected with them. In addition to bringing invasive seeds in on the vehicles, the massive soil upheaval inflicted by the heavy equipment alters the pH of the soil to a level preferred by non-native species, eg. Japanese stilt grasses, knotweed, barberry & mugwort.
New Jersey’s existing Best Management Practices (BMPs) are outdated, grossly inadequate and should not apply to our public forests. Our public forests deserve better! No heavy logging equipment belongs on NJ’s public forests.
Below are images from Sparta Mtn. that serve as visual testimony to “What should not occur on NJ public forested lands.

Sparta Mtn. WMA Forest Mismanagement and Why Our Public Forested Lands Deserve Better!

Silvia Solaun

Highest Standards should be employed on our forested public lands

Management of our public forested lands must be held to the highest standards known for Ecological Health.

The majority of our public forested lands have been acquired through public funding including Garden State Preservation Trust Funds and the Green Acres Program. These lands are now held in the Public Trust.

In order for our public forests to fulfill their Public Trust obligation and serve the public by protecting ecological diversity, no heavy logging equipment, such as feller bunchers, skidders, harvesters, logging trucks or other heavy machinery should ever be used on public forest lands. "Habitat disturbance and land use intensification are the principle drivers of global biodiversity loss in terrestrial ecosystems."1

The use of heavy machinery on NJ's public forested lands has caused severe soil compaction, soil degradation and extreme rutting in all of the previously logged areas, e.g., Sparta Mtn. (SMWMA) is an example of what NOT to do. (See photos) Soil impacts damage adjacent trees, native vegetation, mycorrhizal systems, and lead to erosion and impair surface water quality.

Use of heavy equipment causes severe negative impacts to sensitive and Rare, Threatened & Endangered vernal pool species (amphibians: salamanders, frogs, toads). Huge heavy equipment permanently widens historic dirt forest roads and encourages ATV/ORV use, which severely degrades our public forest lands' ecological resources.

Finally, heavy equipment brings with it the likelihood/certainty of infection of invasive species not previously infected with them. In addition to bringing invasive seeds in on the vehicles, the massive soil upheaval inflicted by the heavy equipment alters the pH of the soil to a level preferred by non-native species, eg. Japanese stilt grasses, knotweed, barberry & mugwort.

New Jersey's existing Best Management Practices (BMPs) are outdated, grossly inadequate and should not apply to our public forests. Our public forests deserve better! No heavy logging equipment belongs on NJ's public forests.

Below are images from Sparta Mtn. that serve as visual testimony to "What should not occur on NJ public forested lands."

Sparta Mtn. WMA Forest Mismanagement and Why Our Public Forested Lands Deserve Better!

Timothy McKenna

NJ Public Forests, Undisturbed by Tree Removal or Logging, Best Serve the Public

The New York-New Jersey Trail Conference proposes that there be no sale or removal of wood or timber from New Jersey's public forested lands. As other well-researched and data-supported proposals to the Task Force will state, prohibiting the sale or removal of wood or timber will preserve the forests in the optimum state of health and maintain and increase their resilience and biodiversity. In addition,

prohibiting the sale or removal of wood is crucial to preserve the beauty of the forests and, as our Trail Conference mission defines, “ensure that the trails and natural areas we share are sustainable and accessible for all to enjoy for generations to come.”

Mature forests are the healthiest forests. As other proposals to the Task Force will attest, mature forests have a remarkable natural ability to care for themselves while fostering flora and fauna diversity and clean air and water. The value of mature trees as among the world’s best carbon sinks is well-established in scientific literature.

The work of the Trail Conference’s Ecological Stewardship team further informs our opposition to any clear-cutting or wood removal. As part of the invasive species monitoring, removal, and treatment work we undertake, we are well-acquainted with the invasive species and uncontrolled deer populations doing unprecedented damage to native flora and fauna. Commercial forestry practices and the disturbance they entail can accelerate this damage.

In addition to ecological health, the value of public access and enjoyment cannot be overlooked in stewardship discussions. The state is small and the most densely populated in the nation, and the benefits of having the natural beauty of public lands open to New Jersey residents should not be minimized. These forests, and the hiking trails the Trail Conference maintains, offer the joy and restorative power of nature to everyone regardless of age, ability or location. Visit any of our trails on a weekend and you will see people of all backgrounds and experience levels making the best use of nature and representing the diversity that thrives in New Jersey. The clear-cuts and road-building that come alongside commercial timbering do irreparable damage to these important recreational amenities and areas of natural beauty.

We are in a region with huge concentrations of housing, business and infrastructure. In this region to set aside our public forests for the good of the public is a necessary step to benefit generations to come. Our public, which includes all of the state’s residents, would be appalled by any actions that would mar the extraordinary vistas of our state’s Highlands that these forests provide."

Appendix E-6
Other Proposals

Proposals that were submitted and reviewed by the co-chairs but where revisions were needed or there was not at least three of four cochairs accepting or rejecting them These proposals were not discussed by workgroup participants. There were 40 proposals in this category (one was submitted and revised).

Narratives were limited to 2500 characters. Proposal sponsors were invited to also submit references, which are not included here due to space limitations but are available using the sponsor's citation(s) when provided. Footnotes in the proposals indicate a reference to an article, file, memo, or other document. Note that references submitted ranged from unpublished opinions, magazine and news articles, webinars, and journal articles (some peer-reviewed and some not peer reviewed).

Angi Metler (Susan Russel)
First, stop the harm.
Reverse systemic game management ("young forests") for wild turkey, non-native and captive-raised ring-necked pheasant, partridge, bobwhite quail and cottontails. These landscapes yield more deer.

Angi Metler (Susan Russel)
Process, conflicts, pre-determined, weighted votes
Several participants have raised concerns about conflicts of interest. We've been meaning to go on record regarding same. The forestry task force will lead to a pre-determined outcome and recommendations to the Legislature. Three of the four co-chair groups – New Jersey Audubon, New Jersey Forestry Association, and New Jersey Conservation Foundation—pursue, engage in and/or financially benefit from logging or tree killing (girdling), burning, and forest management services and regimes. All three subscribe to theories predicated on perpetual baiting and killing of deer. Task force leadership (unelected) is remarkable given the demonstrated unpopularity of logging briefs within the state's environmental and grassroots community. For ten years, New Jersey Audubon and the New Jersey Forestry Association have lobbied for legislation to advance logging and destroy more deer. The New Jersey Conservation Foundation argues for a return of market hunting and the destruction of "80 to 90 percent" of the state's deer herd. New Jersey Audubon's lobbyist is a co-chair of the task force. Among the rules laid down for participants: a gag order; no blogging, no speaking with the press. Votes will be "weighted based on conservation knowledge" – as determined by the co-chairs. For ten years, at co-chairs' behest, task force creator Senator Bob Smith has introduced legislation to promote logging and expand deer killing methods used by poachers – jacklighting, shooting from vehicles – to forested lands. In each session, the legislation failed. In his former position as New Jersey Audubon's vice-president for stewardship, John Cecil was the state's chief proselytizer for timber operations and Audubon's related "active" management business. In fact, Mr. Cecil dismissed proforestration as "a political movement.

Angi Metler (Susan Russel)
Stop food plots, crops, and cuts that breed deer
Cease managing leased or owned stewardship land expressly for white-tailed deer via food plots, crops, and cuts. https://deerassociation.com/manage/food-plots/

Angi Metler (Susan Russel)
Ban baiting
Of major import is a statewide ban on bait for deer and black bear. Bait increases density, reproduction, conflict, and predation of ground-nesting birds. It drives transmission of disease. New York and Pennsylvania don't allow it.

Angi Metler (Susan Russel)
Fertility Control
Surgical sterilization has significantly reduced local deer populations in Virginia, California, Michigan, New York, Ohio, and Maryland. While fertility control may not be suitable for every site, it is demonstrably viable and safe in appropriate settings which can include open populations. Fertility control needs to be made available in New Jersey. The key to fewer deer is lower fertility. Hunting does not reduce fertility in individuals; it either stabilizes higher breeding rates, or as recorded in New Jersey, increases fertility by improving habitat. Lethal removal will always require more killing. Controlled hunts spanning decades in New Jersey, with little or no change in forest regeneration or collisions, self-evidently sustain annual hunting.

Angi Metler (Susan Russel)
Reforestation
Intact, mature forests mean fewer deer and are home to many other species of no less value than warblers. Others will address the host of ecological and climate benefits conferred by intact forests. Where practicable, allow and develop policy to encourage and protect regrowth.

Anne Soos
Proposal: Planning, Planting, and Maintaining Urban Forests "Proposal: Planning, Planting, and Maintaining Urban Forests

Many recent studies have shown that urban areas with lower-income residents, are especially prone to severe heat island effects. This is when, due to the large amount of dark, impervious surfaces, ambient temperatures are significantly higher than in other areas of a city. Due to re-radiation after sunset, these areas also remain excessively hot during the nighttime hours as well. Increased temperatures have been linked to higher mortality rates, as deaths rise significantly during heat waves, especially in these areas.
Green spaces, or urban forests have been shown to significantly reduce the heat island effect. Trees can also act as wind breaks and make cityscapes less cold during winter months. An urban forest can be as simple as tree canopies planted and maintained along streets, or larger areas such as parks or building lots where structures have been abandoned and demolished. Areas along rivers and streams are especially suitable for trees, for then channelized rivers can be converted to a more natural landscape A park planted with flood-tolerant trees and shrubs can provide cooling as well as flood control and ground water recharge.
Reducing ambient temperature has several obvious advantages: it decreases energy use and therefore carbon dioxide emissions as less AC is needed in summer, and heat in winter. With lower summer temperatures, death rates decline. Studies have also shown that areas with trees have positive

psychological effects for residents. The reason that urban forests are so good at temperature control in the summer is evapotranspiration. Soil can evaporate water back into the atmosphere, lowering the temperature. In addition, the leaves on plants release water in a process called transpiration.
Trees planted and maintained in urban areas can sequester carbon dioxide as they photosynthesize. Plant roots can also absorb water, decreasing the amount of runoff and flooding associated with the large amount of impervious surfaces associated with urban areas.
This proposal directs the State of NJ to devote funding to developing, planting, and maintaining urban forests, through the following five steps.
1)Using temperature data widely available to locate urban areas within the state which have especially pronounced heat island effects
2)Developing specific plans for each of these areas on how to best implement an urban forest.
3) Providing funds to municipalities to purchase land deemed appropriate for an urban forest.
4)Initiating a tree planting program
5)Initiating a maintenance program.

It is crucial to involve community residents in this process.

Cameron McKenzie
Urban Forest Stewardship in Underserved and Overburdened NJ Communities
Forest stewardship is a critical infrastructure1 for natural resource management, especially within the most densely populated state (NJ) in the nation's most densely populated metropolis. At a national and state level, existing forest stewardship programs and policies are ineffective at meeting the growing needs of forest landowners, especially those with smaller land holdings in urban areas. This is evidenced by nominal participation of eligible forest landowners in the U.S. Forest Stewardship Program (i.e., less than 2% of all eligible forest landowners in the state of Minnesota) and the existence of socioeconomically exclusionary minimum land holding requirements for participation in this program across many U.S. states2,3. This also suggests that most stewardship on private forest lands is occurring outside governmental supervision2. This is no surprise, considering environmental governance has shifted over the last century from state-dominated management to an expanding role of civic society in the management of natural resources4. Now more than ever, stewardship is the responsibility of many (individuals, NGOs, environmental commissions, non-profits etc.)5. However, the forest stewardship needs of many communities, including the Environmental Justice Communities identified by the NJDEP6, are often overlooked by existing urban stewardship networks. Recent studies on urban stewardship networks have shown that resources are disproportionately allocated near existing environmentally-focused institutions and therefore often outside of the "stewardship deserts" that need these services the most.7 Expanding urban forest stewardship networks across NJ's underserved communities is therefore a priority for the management of urban forests, particularly in a time of climactic change, epidemiological disruption, and rampant environmental injustices. Urban stewardship can be a powerful tool for (1) education of the future generation of environmental leaders from underserved NJ communities (2) a means of nurturing climate resilient, disease-mediating, equitable urban forests (3) citizen science for the long-term monitoring of the ecological health of urban forests and (4) an outlet for biocultural stewardship within communities that form personal connections between their culture and the environment.8

Chief Vincent Mann
Preserve Ramapough Lenape culture - Respect our Relations

All lands in New Jersey are originally the lands of our ancestors. However, taken from us, the land deeds that our grandparent Sachems signed, whether coerced, or cheated, they had the wisdom to reserve for us the rights "to hunt, to gather, to strip bark from trees". We call upon the stewards of New Jersey's public lands—which have a special significance because they embody the public trust that we, the indigenous peoples have valued all lands, whether public, or private—to respect our reverence for the earth, the trees, the plants, the waters, as living creatures and that the forests of New Jersey are our open-air worship sites. We, the Turtle Clan of the Ramapough Nation, the descendants of the Munsee speaking people from the north of the Raritan River, call on you to recognize the rights reserved for us by our ancestors when our lands were taken. By that recognition, we ask that the trees in public forests are accorded the respect of a living person, as our cousins, or grandparents. They may willingly give of themselves, as we would give of ourselves, as our Mothers would give to sustain her children. The oak in the forest, she gives freely of her acorns, to sustain many of her different children that gather her nuts, including we who make flour. But she gives her acorns only after she has lived in the forest for 50 years, reaching her peak at 120 years. All trees of the forest are thus providers and when you cut them you destroy our living relations. We ask that you grant this provision per Nature's Bill of Rights and Governor Jon Corzine's Executive order #122, which remains in effect, "To protect Native American open air worship sites and tribal burial grounds" "and broaden inter-State, State, county, and municipal relations with Native American communities This administration affirms, endorses, and supports the New Jersey Legislature's acknowledgement in 1995 of the major role of the Nanticoke Lenni Lenape Indians, the Ramapough Mountain Indians… in the history of the State and those tribes' unique and continuing importance in New Jersey's political, social, and cultural life.

Dawn Riley

Actionable Data and Tools to Improve Forest Management

Forests play a critical role in mitigating climate change through biologic carbon sequestration. While trees can reduce the negative impacts of climate change, forests are susceptible to climate stressors and require forestry management to grow and thrive. Decisive forest management actions are necessary to maintain and enhance the forest carbon sink.

According to the NJDEP's 2018 Greenhouse Gas Inventory, the NJ state land sector sequesters nearly 8% of the state's overall greenhouse gas emissions. Enhanced forest management practices on public lands with a focus on atmospheric carbon storage could significantly increase the ability of NJ forests to offset greenhouse gas emissions in the state. Consideration, however, must be given to the balance of forest values and the detrimental impact to biodiversity with a long-term focus on maximizing carbon sequestration. Species diversity is a critical component in decreasing the negative impacts of climate change.

Most practices are already part of existing proper forest management activities, it is a matter of ensuring the most purposeful and beneficial practices are being operationalized based on the landscape. Forest managers need access to data and the understanding of greenhouse gas emission evaluations and carbon accountings to improve carbon sequestration. To achieve this, the NJDEP would require resources to acquire and process real-time data through periodic and continuous measurements and a structured program to provide this information to trained natural resource managers, planners and forest managers to inform their actions. Data should also be publicly available in both raw and summarized formats. In addition, tools are needed to assist in the identification of the type of forest being managed based on tree species and geographic conditions, as well as the most ecologically appropriate species for reforestation and afforestation.

Forest management planning should be transparent, based on data and with ample public input opportunities. The planning should have long-term goals and perspective, with milestones and follow

an iterative process. Data and forest management activities should be coordinated with land managers in adjacent states and within the state with federal land managers, county, municipal and public entities. Healthy forests store and sequester significantly more carbon than degraded forests. Through focused forest management practices based on actionable data and the tools and knowledge to best manage our forests and public lands, NJ can improve the ability to offset greenhouse gas emissions and prepare our state to be more resilient to the impacts of climate change.
Forests play a critical role in mitigating climate change through biologic carbon sequestration. While trees can reduce the negative impacts of climate change, forests are susceptible to climate stressors and require forestry management to grow and thrive. Decisive forest management actions are necessary to maintain and enhance the forest carbon sink.
According to the NJDEP's 2018 Greenhouse Gas Inventory, the NJ state land sector sequesters nearly 8% of the state's overall greenhouse gas emissions. Enhanced forest management practices on public lands with a focus on atmospheric carbon storage could significantly increase the ability of NJ forests to offset greenhouse gas emissions in the state. Consideration, however, must be given to the balance of forest values and the detrimental impact to biodiversity with a long-term focus on maximizing carbon sequestration. Species diversity is a critical component in decreasing the negative impacts of climate change.

Dawn Riley
Operationalizing Carbon Offense Strategies
NJDEP must be tasked to operationalize their carbon offense strategies through existing natural resource managers, planners and forest managers. NJDEP needs to create a forest management framework including all NJ public lands and the tools to assist forest managers in the implementation of these strategies. The tools need to provide guidance on the most ecologically appropriate species for reforestation, afforestation and restoration with a focus on carbon sequestration and climate resiliency.

With the decrease in the number of NJDEP staff and the state's appropriations for direct state services remaining flat (when adjusted for inflation amounting to about 60% of funding in 2005) this means an operating model change. Continuing to allocate resources to generate reports on what needs to be done and managing support through previous outdated processes will not create the change needed.

The proposed deliverables can be leveraged from existing work by the Natural Areas Conservancy (NAC) in partnership with the New York City Department of Parks and Recreation (NYC Parks). NAC has created a Forest Management Framework for the restoration and maintenance of NYC Parks and produced data on the health and condition of NYC natural areas.
https://naturalareasnyc.org/content/forests/fmf-2019-update-singles.pdf

NAC has also released FIRST: Forest Identification and Restoration Selection Tool using data from the Ecological Assessment of New York City's natural areas, and tree species climate adaptation data from the USDA Forest Service Climate Change Tree Atlas to assist users in identifying the type of forest they are managing and providing guidance on appropriate tree species. https://naturalareasnyc.org/climate

Doris Lin
Game management
Prohibit systemic game management ("young forests") for wild turkey, non- native and captive-raised ring- necked pheasant, partridge, bobwhite quail and cottontails. These landscapes yield more deer.

White-tailed deer have not exceeded biological carrying capacity in almost all of NJ, but may have exceeded cultural carrying capacity, which leads residents to call for deer hunting. Because of cultural carrying capacity, LOHVNJ objects to management practices that increase the deer population.

Doris Lin
Stop management of state lands for increase in deer population
Prohibit managing leased or owned state lands expressly for white-tailed deer via food plots, crops, prescribed burns, and cuts. White-tailed deer have not exceeded biological carrying capacity in almost all of NJ, but may have exceeded cultural carrying capacity, which leads residents to call for deer hunting. Because of cultural carrying capacity, LOHVNJ objects to management practices that increase the deer population.

Diets, Movements, and Consequences of Providing Wildlife Food Plots for White-Tailed Deer in Central North Dakota

https://www.jstor.org/stable/4496393

https://www.southernnewjerseyqdma.com/adopt-a-food-plot/

Doris Lin
Ban baiting and feeding of deer and bears
Ban baiting for deer and black bear. Bait increases density, reproduction, conflict, and predation of ground- nesting birds. It drives transmission of disease. New York and Pennsylvania don't allow it.
White-tailed deer have not exceeded biological carrying capacity in almost all of NJ, but may have exceeded cultural carrying capacity, which leads residents to call for deer hunting. Because of cultural carrying capacity, LOHVNJ objects to management practices that increase the deer population.

Doris Lin
Prohibit logging on state lands
Reforestation. Prohibit logging on state-owned lands. Intact, mature forests mean fewer deer. Others will address the host of ecological and climate benefits conferred by intact forests. Where practicable, allow and develop policy to encourage and protect regrowth.
Logging creates the edge habitat preferred by deer and will increase the deer population. White-tailed deer have not exceeded biological carrying capacity in almost all of NJ, but may have exceeded cultural carrying capacity, which leads residents to call for deer hunting. Because of cultural carrying capacity, LOHVNJ objects to management practices that increase the deer population.
https://extension.missouri.edu/media/wysiwyg/Extensiondata/Pub/pdf/agguides/wildlife/g09494.pdf

Elaine Mann
Handbook Tiny Forests Planting method.
I have been reading material on two remarkable men.Mr. Miyawaki and Mr. Sharma. While reading throught the material it dawned on me that perhaps we should adopt their methods. Their methods have been a proven succesendusharma/ interview by s around the world.

The Miyawaki Method: A better way to build forests. His very particular approach to afforestation a soil, air, water and climate remediation process.
Mr. Sharma applied the above method to a tract of land around a Toyota factory where he worked.
He quit his job at Toyota and opened a forest production company named Afforestt.
Handbook Tiny Forests Planting method, it provides a step by step instructions.
I think we can model the Miyawaki-Sharma methods to our project recomendations and prove successful.
Toyota provided some of the capital to create the forest around the plant.
With the help of land developers and major corporate and government investment we can achieve our goal.
World EconomicForm, July 3, 2020, Alex Thornton Senior Writer
Leda Nargi (https://daily.jstor.org/dily-author/leda-nargi/)
https://blog.ted.com/shubhendusharma/ interview by Ted Fellow.
The best source;
IVN Natuureducatie

Elliott Ruga

Forest management activities on public- and non-profit-owned lands are not exempt from the Highlands Act, Freshwater Wetlands regulations and Flood Hazard Area Control Act regulations

New Jersey lacks regulations specifically designed for managing public forests. Instead, rules developed for privately owned forests are being applied to public forests where they are inadequate in protecting the public's interests and in addressing the threats to these forests. The Woodland Management Plan program under Treasury at NJAC 18:15-2.10 and the NJ Forest Stewardship Plan program under DEP at NJAC 7:3-5 were promulgated to discourage the conversion of private lands to development by setting forth criteria to qualify for a tax break. The objectives of both these programs are limited to what standards could be adopted by a property owner in exchange for a tax incentive. On the other hand, the procedures and standards for forest stewardship for public lands need not be limited by a quid pro quo, they should be solely based on protecting the highest values that represent the public's investment in the forest's resources.

Similarly, exemptions to Wetlands Rules, the Highlands Act and Flood Hazard Area rules facilitate participation by the private forest owner. Exemptions also insulate New Jersey's land use regulations from claims of regulatory takings of property. But on publicly owned lands property rights concerns are inapplicable and incentives are unnecessary.

The argument that forest management is not permanent development thus should not be subject strict application of land use rules does not account for the impacts from mechanized logging, which are devastating to sensitive ecologies, they provide footholds for non-native species invasions, they destroy occupied habitats, and they disrupt hydrologic flows.

In the New Jersey's Flood Hazard Area rules, which implement a riparian zone, forestry activities are exempt if the New Jersey Forestry and Wetlands Best Management Practices Manual is followed. That manual hasn't been updated since 1995, pre-dating current Wetlands and Flood Hazard Area rules, pre-dating contemporary science and understanding of the functional values of wetlands and riparian zones and the entire context of a climate change.

(Documentation cited below clarifies that mechanized tree harvesting on public lands is inconsistent with NJ's wetlands and flood hazard rules and thus not entitled to exemptions).

Greg Gorman

Categorize Carbon Management Strategy
The USDA designed "Adaptation Strategies and Approaches" specifically for forest carbon management and draws direct connections between climate adaptation and mitigation (Ortl, Todd A. et. al, January 2020). (Stewardship2) In developing the Forest Stewardship Plan, the State approved consulting forester (Stewardship4) shall perform a climate vulnerability assessment of each forest stand using USDA's "Adoption Workbook" and select an appropriate carbon management strategy/approach from Table 1. "Menu of adaptation strategies and approaches for forest carbon management" on p. 89 of Ortl et. al, January 2020. (Stewardship1 & 3) A forest stand is a contiguous community of trees sufficiently uniform in composition, structure, age, size, class, distribution, spatial arrangement, site quality, condition, or location to distinguish it from adjacent communities. The Adaptation Workbook can be found in the US Forest Service report: Forest Adaptation Resources: Climate Change Tools and Approaches for Land Managers (Swanson, Christopher W. et.al. September 2016). (Stewardship5) The Forest Stewardship Plan shall identify the selected climate adaptation/mitigation strategy for each forest stand and describe the appropriate management prescriptions to achieve the desired carbon management objectives. NJ DEP State Forester shall develop a means of oversight and monitoring execution of the plan.

Greg Gorman
Categorize Climate Adaptation Strategy
In developing the Forest Stewardship Plan, the State approved consulting forester (Stewardship4) shall perform an ecological vulnerability assessment of each forest stand using USDA's "Adoption Workbook" and select an appropriate climate adaptation management strategy/approach from Box 18 "Menu of Adaptation Strategies and Approaches" on p. 139 of Swanston et. al, September 2016. (Stewardship 6) A forest stand is a contiguous community of trees sufficiently uniform in composition, structure, age, size, class, distribution, spatial arrangement, site quality, condition, or location to distinguish it from adjacent communities. The Adaptation Workbook can be found in the US Forest Service report: Forest Adaptation Resources: Climate Change Tools and Approaches for Land Managers (Swanson, Christopher W. et.al. September 2016) (Stewardship5). The Forest Stewardship Plan shall identify the selected adaptation strategy for each forest stand and describe the appropriate management prescriptions to achieve the desired carbon management objectives. NJ DEP State Forester shall develop a means of oversight and monitoring execution of the plan.

Gwen Macchione
Cap and Trade Carbon Market
Proposal is too long for the character limit. I will upload the file with the complete proposal below.

Jim Lyons
Guiding Principles for Managing NJ Forests for Ecological Integrity and Climate Resiliencer
Key Concepts for Managing NJ Forests for Climate and Biodiversity

John A. Thonet
The New Jersey Forest Task Force should make certain factual acknowledgements and findings to the New Jersey State Legislature prior to even beginning its efforts to propose appropriate forest stewardship / management regulations and policies for publicly-owned forest lands.

The NJ Forest Task Force should commit to making the following basic acknowledgements to the NJ State Legislature prior to even beginning its important work involving proposing appropriate forest stewardship / management regulations and policies for publicly-owned forest lands:

(i) Acknowledge and inform the NJ State Legislature, that New Jersey's existing Forestry rules at NJAC 7:3, address only forestry activities proposed on privately-owned forest lands. Simply put, no Forestry rules currently exist for publicly-owned forest lands.

(ii) Acknowledge, and inform the NJ State Legislature, that the New Jersey Forestry and Wetlands Best Management Practices Manual is over 26 years old and provides recommendations that are today, inconsistent with other current NJDEP regulations. Accordingly, this existing BMP Manual would need to be updated and revised in order to be utilized as a BMP manual for forestry-related activities on either privately-owned or publicly owned forest lands;

(iii) Acknowledge, and inform the NJ State legislature, that the New Jersey Green Acres Program Rules at NJAC 7:38 provide forestry-related regulations concerning certain publicly-owned forest lands, which at the present time are not being enforced by the NJDEP.

(iv) Acknowledge and inform the NJ State Legislature, that any forest stewardship / management regulations and policies for publicly-owned forest lands should be different from regulations for privately-owned forest lands, since specific goals and objectives for managing forests on public and private forest lands are different.

(v) Acknowledge and inform the NJ State Legislature that qualified professionals such as, but not limited to ecological restoration consultants, civil engineers, land surveyors and environmental consultants, should be authorized and required, as necessary, to participate in the preparation of all forest stewardship plans, woodland management plans, or forest management plans, in addition to "foresters."

[Supporting documents include: (i) Preliminary Report and Appendices A and B, regarding New Jersey Regulations and Policies Governing Forest Management Activities, and (ii) Preliminary Analysis and Report on New Jersey's Green Acres Program, with regard to Forestry-Related Activities, both prepared by Thonet Associates, Inc., on behalf of the New Jersey Highlands Coalition, dated December 28, 2021 and March 4, 2022, respectively.

Katherine Evans
Enhance protections for critical habitat/amphibians for ecosystem services
Amphibians are likely the most overlooked contributors to overall forest health. Their vernal breeding pools and their associated upland forest habitat are interdependent. They maintain soil structure and pH, control algal biomass and play critical roles in food supply and nutrient cycling. Salamanders sequester vast amounts of carbon in the soil. The strength of amphibians is in their numbers, and this density must be maintained in order for these services to be effective. (1,2,3,4)

Though the focus is usually on the breeding pools, it is in the surrounding upland forest where they spend most of their lives performing the majority of these services. This is why, as already established based on decades of science, amphibians require a vernal pool buffer of 1000 ft (N.J.A.C. 7:7A-1.4), with

some species requiring a greater distance. (The wood frog migrates well over that distance and spends 11 months in upland forest habitat.)

Forest management should not be exempt from 1000 ft vernal pool buffers as is the case in the in the Highlands Act, for example, in which these buffers apply only to development. In the case of critical habitat in our public forests, the need for 1000' buffers should be obvious if this "stewardship" is truly for "ecological health" as is claimed. The soil compaction, rutting, temperature increase and alteration to water flow caused by canopy removal and heavy logging equipment is extremely damaging to vernal pools and upland habitat. While it is argued that the ground is frozen when logging occurs, this is not always the case and heavy equipment collapses overwintering burrows regardless. Amphibians are affected in body composition and size, egg nutrition, mating ability, migration ability and overall survival.(5)

As it stands, with insufficient buffers, we protect only the breeding pools to which amphibians return to breed for about a month or so, while degrading the upland habitat in which they spend the other 11 months and make vast contributions to forest health and carbon sequestration. No use of heavy equipment/extraction of timber should occur. Only girdling and removal of invasives (cutting in the case of ailanthus, etc.) should be considered within 1000 feet. Vernal pools AND their 1,000 ft buffers are considered "critical habitat" in the state of NJ and should be protected accordingly.

Ken Dolsky
Proposal to Introduce Wolves to Deal with Deer in NJ
The need for improved and effective deer management is clearly one of the most likely areas for consensus on the NJFTF.

Solutions to the deer problem are challenging. Major obstacles include the high cost and effort required for fencing, small number of hunters, limited-length hunting seasons and the need for a law that would allow a market for deer meat. Wolves solve all these problems. Wolves require minimal expense – only the capture and importation costs (which might be shared by Western states anxious to reduce their wolf populations). Wolves hunt year round so there in no need for a hunting season. The substantial number of deer will provide plenty of food so that wolf populations will increase greatly over time and there will be no need for a market for deer meat as the wolves will consume it all (with help from coyotes and other scavengers).

Wolves are being shot in Western states because they are attacking cattle and other farm animals. Those states should welcome our efforts to capture and relocate their wolves and might be willing to pay some of the expenses involved. An alternative is to ship NJ deer to those states to give wolves more prey and reduce their need to kill cattle, which could be a fallback plan for NJ.

Ancillary problems from attacks on humans and pets and farm animals should be minimal because deer will be the easiest prey. According to wolf.org, "The risks associated with a wolf attacking a human are 'above zero, but far too low to calculate,' between 2002 and 2020, researchers found [only] 26 fatal attacks throughout the world. Of those, 14 were due to rabies [and, therefore, don't count].* Overall there were 489 victims of wolf attacks across the world from 2002 until 2020. Of those, 380 (78%) were rabid attacks, 67 were considered predatory attacks and 42 were provoked/defensive attacks.

Once the deer population has been reduced to the point where it is difficult for all the wolves to find food, the wolves should migrate to NY and PA, which also have substantial deer populations, and those states should welcome this influx. In addition, once the deer population is under control, hunters will need new prey so they can switch to shooting wolves which should be more challenging and enjoyable to hunt. Hunters could also hire out as protectors for people who want to enjoy our forests without the risk of wolf attacks., thus providing a boost to the economies of those areas.

Importing wolves to kill deer – a win-win solution for all (except the deer).

* https://wolf.org/wolf-info/factsvsfiction/are-wolves-dangerous-to-humans/

Kristi MacDonald

Watershed protections on public forestlands: Implement strong protections of streams, springs, wetlands, vernal pools and steep slopes

Forested land at the watershed scale is associated with higher water quality in streams and aquifers and is the main source of clean drinking water for the majority of the U.S. population (Frimpong et al. 2005; Neary et al. 2009). Forested riparian ecosystems and wetlands provide critical functions of maintaining water quality by filtering nutrients and other contaminants, shading and cooling water temperatures, providing habitat for aquatic and terrestrial organisms, maintaining channel morphology by stabilizing banks, and slowing and storing floodwater (review in NRC 2002). It would cost billions of dollars a year in infrastructure to replace these ecosystem services.

Requirements must be put in place to protect critical watershed features such as streams, springs, wetlands, vernal pools, aquifers and steep slopes on public forestlands subject to logging, agriculture, and other human disturbances. These requirements include: 1. Mapping of all critical watershed features including permanent and ephemeral habitats such as small headwater streams and vernal pools; 2. Establishing science-based, meaningful minimum buffer sizes to protect watershed features within public forestlands. To provide maximum protection of all ecosystem services and functions we recommend a standard for all public forests of 300-foot buffers for streams and wetlands and a 1000-foot buffer for vernal pool habitat protection; 3. Protecting soils on steep slopes to prevent soil loss, degradation of water quality and silting of streams and wetland areas. There should be no alteration of slopes with a gradient of 10% or greater.

There are several reviews of the literature on the effective riparian buffer width necessary to protect stream health from land use impacts; climate change is necessitating a higher level of concerted planning to mitigate these impacts (Wenger 1999, Army Corps of Engineers 1991, Fischer and Fischenich 2000, Broadmeadow and Nisbet 2004, Sweeney and Newbold 2014). Stream and wetland buffer recommendations depend on targeted parameter, but in general they range from 50ft to 300ft (15-91m); in some cases buffering beyond the entire floodplain is recommended (Wenger 1999), which for the 500-year storm could range up to 250 ft. (76 m) or more. Narrower forest strips act as de facto small forest patches and experience edge effects from adjacent land use (review in Murcia 1995) and for instance, do not reach 100% of natural shade until approximately 250 feet (76 m) from the edge of clearcuts (Brosofske et al. 1997). Vernal pool buffers of 1,000 feet protect and promote biodiversity and address the habitat requirements of vernal pool-breeding wildlife.

Leslie Sauer

ECOLOGICAL HEALTH PROPOSAL- The monitoring for public forest management decisions should include Floristic Quality Assessment to assess both baseline and changing conditions over time so that management can be assessed and modified.

The ecological health of our public forests need to be monitored, including all species of plants and animals. Forestry FIA data is not suited to monitoring ecological health and is not sufficient for management decisions in public forests. On a recently logged site in NJ described as 60-80 years old by FIA, dozens of trees in excess of 100 years of age were harvested to create young forest (1,2).

The state is in a position to support best management by endorsing a universal monitoring approach that clearly documents well-executed projects and which is widely regarded as indicative of ecological health (3). Floristic Quality Assessment (FQA) tool assessing the quality of wild plant communities surveyed in the field and for generating metrics that attest to that quality (4,5). It is universally applicable to all vegetated sites, is sanctioned for use in all 50 states by the Environmental Protection Agency, and is well-established among ecological management practitioners in Pa and NJ (6,7,8). The website (universalfqa.org) is an open source database that maintains plant inventory databases for NJ and can be organized by region as well such as Highlands. Total FQA is available as well as well as Cover-Weighted FQA.

Standards for pre- and post-management monitoring involving FQA have been proposed for the New Jersey Highlands by the New Jersey Highlands Council, and similar principles should be adopted for the State for the management of public lands (9,10). FQA is not the only monitoring that should be included in policy. Additional documentation of wildlife and other conditions is important. Many sites have conducted National Geographic BioBlitz surveys for example and Audubon bird count data is extensive. For monitoring to be effective, it must be performed as a baseline, prior to management, and repeated at appropriate intervals after management to assess change. Groups sharing information on on-the-ground, such as The Stewardship Round Table efforts should be encouraged and supported.

Forest management approaches vary necessarily by site and practitioner. Ecology is complex and restoration is a new field (11). The Society for Ecological Restoration has started certifying practitioners (12,13) . Many restoration efforts have been led by amateurs and land trusts whose expertise is vital. The State needs to establish a forest management project database that is reviewable by the public and standardizes documentation, including FQA.

Margaret Wood

Fun Statewide Invasive Picking Competition (8-01-2022)

In the US, Invasive Alien Species is probably the #1 threat to biodiversity, with estimates of $120 billion/year in damage and pest control" (Refs 1,2,3). It will take all NJ communities working every year to combat this problem.

4 proposal items:

Item 1: State of NJ STRONGLY promotes fun public engagement in invasive eradication through all partnerships, as well as public schools, county & local govts, (Ref 4-a). FoHVOS & NYNJTC will be asked to assign work areas. Work is recorded in EDDMapS. FoHVOS NJISST & NYNJTC staff will be asked to

train ""Conservation Corps"" (Ref 4-b) who will in-turn train the public for items 2, 3, & 4. Ask NJ DEC for funding per EPF.

Item 2: Promote invasive eradication competitions via press releases and News12NJ interviews: Earth Day through Arbor Day will have FUN activities facilitating invasive eradication.
- Town fairs,
- School field trips,
- Civic group work parties.

Classes will educate participants on invasive identification, eradication, hiking safety, equipment required, and "Jersey Native" replacement plants pursuant to Jersey Native Plants Program (Refs 5,6,7). Certificates of Training will be earned.

Town fairs may be located in parks safe for beginners, where invasives exist, or shuttle buses can run between the fair and invasive locations.
- Vendors shall offer "Jersey Natives", weeding & garden tools for sale.
- Children may engage in crafts such as making clay wildflower seed balls to plant. (Ref 8)
- Pickers must have training certificates. They receive a Certificate of Appreciation, noting name, phone, address, weight of invasive collected. Tallies recorded in a central database. Prizes awarded in various categories, to best invasive pickers. (Ex: "Grampa's weeder" or ""Jersey Natives""- Ref 9). Pickers encouraged to continue their work (per Item 3).

Item 3: March 1 – May 31: NJ statewide competition: bringing invasives to county disposal facilities. Invasives must be in clear garbage bags, to identify the contents. Certificates of Appreciation given to each picker. Tallies logged into the central database. Prizes awarded to NJ residents for the most invasives picked by weight, (professionals excluded). (Ex: leaf blower equipped with an "eXtreme Blower Spreader" to plant native seed in hard-to-reach areas. - Ref 9.)

Item 4: Professionals adopt a highway, forest trail, or grounds of a public facility, where they will eradicate invasives and plant ""Jersey Natives"". The reward will be a sign advertising them at the road/park/facility, thanking them for their services.

Press releases announcing the winners of the competitions to be sent to the winners' local newspapers, thanking them.

Margaret Wood
Create a State Run, New Jersey Invasive Species Council (NJISC)
Proposal to create a science based, State run, New Jersey Invasive Species Council (NJISC), to work on reporting, treating and eradicating NJ invasives, with initiatives for both public and private lands. The Council should be empowered to influence other governmental entities to achieve State goals. (Ref 1, Background information.)

The need: In the US, Invasive Alien Species is probably the #1 threat to biodiversity, with estimates of $120 billion/year in damage and pest control" (Ref 2)

NJ is loosing the war on invasives, (Ref 3).

All across the US, Invasive Strike Team members report lack of funding, resulting in insufficient manpower.

"The Invasion Curve" (Ref 4) from paper (Ref 5, p.17), prioritizes which invasives to battle.

NJ focuses on eradicating new invasives. Meanwhile, established invasives spread, choking out new areas of the forest and private lands. Habitable land for native species declines. Extinctions rise.

NJ has different organizations (FoHVOS & NYNJTC) with Strike Teams using different reporting tools, under different funding committees.

NJ should see what other states have done to create a Unified Statewide Plan.

Copy Washington State, Tennessee, and NYS initiatives, (Refs 6a, 6b, 7).

NJ needs to:
- Partner several independent groups under one state organization, to achieve goals of a statewide plan,
- Focus on preventing the introduction and movement of invasives first.
- Get all partners to use one unified data reporting system.
- Form a citizen-scientist initiative, lead by agencies & universities on the front lines, training everyone to use uniform reporting tools.
- Utilize the program everywhere in the state on both public & private lands.
- Create a State curriculum to educate students about invasives.
- Teachers get recertification credits for attending annual workshops to teach this curriculum.
- Create a media blitz to form Garden Club of America groups throughout NJ. They successfully form invasive strike team activities called "Weed Wrangles".
- All NJ groups should use EDDMapS invasive reporting tools. It is used in most of the US and Canada. Make it mandatory for any project receiving state funding. The US must unite under one reporting tool, (Ref 8).
- Assign Regional-Land Managers responsible for directing activities in specific regions of NJ, similar to NYS-PRISMs. NJ-PRISM regions could be North, Central, South, and Shore. See (Ref 9).
- Learn from NYNJTC, schools, religious orgs, how to attract volunteers to eradicate invasives. Bring a BOOM-BOX! Afterwards, build a campfire, cook hotdogs, marshmallows, some-mores. Enjoy a traditional American experience. Make it fun. Keep them proud!

Margaret Wood
Fun Statewide Invasive Picking Competition (8-01-2022)
In the US, Invasive Alien Species is probably the #1 threat to biodiversity, with estimates of $120 billion/year in damage and pest control" (Refs 1,2,3). It will take all NJ communities working every year to combat this problem.

4 proposal items:

Item 1: State of NJ STRONGLY promotes fun public engagement in invasive eradication through all partnerships, as well as public schools, county & local govts, (Ref 4-a). FoHVOS & NYNJTC will be asked to assign work areas. Work is recorded in EDDMapS. FoHVOS NJISST & NYNJTC staff will be asked to

train ""Conservation Corps"" (Ref 4-b) who will in-turn train the public for items 2, 3, & 4. Ask NJ DEC for funding per EPF.

Item 2: Promote invasive eradication competitions via press releases and News12NJ interviews: Earth Day through Arbor Day will have FUN activities facilitating invasive eradication.
- Town fairs,
- School field trips,
- Civic group work parties.

Classes will educate participants on invasive identification, eradication, hiking safety, equipment required, and “Jersey Native” replacement plants pursuant to Jersey Native Plants Program (Refs 5,6,7). Certificates of Training will be earned.

Town fairs may be located in parks safe for beginners, where invasives exist, or shuttle buses can run between the fair and invasive locations.
- Vendors shall offer “Jersey Natives”, weeding & garden tools for sale.
- Children may engage in crafts such as making clay wildflower seed balls to plant. (Ref 8)
- Pickers must have training certificates. They receive a Certificate of Appreciation, noting name, phone, address, weight of invasive collected. Tallies recorded in a central database. Prizes awarded in various categories, to best invasive pickers. (Ex: “Grampa's weeder” or ""Jersey Natives""-Ref 9). Pickers encouraged to continue their work (per Item 3).

Item 3: March 1 – May 31: NJ statewide competition: bringing invasives to county disposal facilities. Invasives must be in clear garbage bags, to identify the contents. Certificates of Appreciation given to each picker. Tallies logged into the central database. Prizes awarded to NJ residents for the most invasives picked by weight, (professionals excluded). (Ex: leaf blower equipped with an “eXtreme Blower Spreader” to plant native seed in hard-to-reach areas. - Ref 9.)

Item 4: Professionals adopt a highway, forest trail, or grounds of a public facility, where they will eradicate invasives and plant ""Jersey Natives"". The reward will be a sign advertising them at the road/park/facility, thanking them for their services.

Press releases announcing the winners of the competitions to be sent to the winners' local newspapers, thanking them.

Matt Olson
Revised proposal: Need for an actionable and comprehensive forest management strategy for NJ public lands
There is a growing consensus in forest science that narrowly focused management frameworks (e.g., production forestry, preservation) are not up to the challenge of sustaining healthy forests under changing climate and disturbance regimes (Park et al. 2014, D’Amato and Palik 2021). Successful management systems will need to remain flexible to adapt to future uncertainties in real-time.

One-size-fits-all strategies can have negative ecological consequences. A policy of suppressing and excluding wildfire has left many US forests vulnerable to catastrophic fire. In the Lake States, decades of uneven-aged silviculture have homogenized forests, raising concerns about increased vulnerability to climate change and forest health threats (Knapp et al. 2019). In central Europe, forests under uneven-

aged management were found to support fewer taxa at multiple scales compared to forests under even-aged management approaches, which was tied to greater habitat diversity in the latter (Schall et al. 2018).

Ecological forestry is a naturalistic approach to forest management that integrates our understanding of natural forest dynamics at multiple spatial and temporal scales in the design and implementation of silvicultural systems. Although conservation of biodiversity and ecosystem function are primary goals, ecological forestry has the flexibility to address a much wider range of goals, including ecological restoration, climate change adaptation, and forest health threat mitigation (D'Amato and Palik 2021).

Active and passive forest management may be deployed as an integrated climate change response strategy that also addresses biodiversity conservation. I propose that the New Jersey DEP develops a comprehensive forest management strategy for state lands that integrates both ecological forestry and preservation at the state and forest levels. Furthermore, I propose zoning state lands into two broad land-use categories: preserves and ecological silviculture areas. For example, the state could designate sections of Wharton State Forest adjacent to residential communities as areas for ecological silviculture to reduce fuels through a combination of thinning and prescribed burning with a goal of reducing the risk of lethal wildfire spreading from state forest lands into vulnerable communities. The state could also prioritize designation of old forests on state land as preserves, especially forest types considered high conservation value.

Matthew Olson

Encourage forest industry to address multiple threats to NJ forests

Milling locally grown and harvested timber can be environmentally and economically beneficial. Forest scientists argue that silviculture can increase the resilience and adaptive capacity of forests to health threats, such as destructive insect outbreaks and anthropogenic climate change (Dymond et al. 2014, Park et al. 2014). Life cycle assessment studies on forest carbon consistently show carbon emissions from transportation of timber to the mill increase as haul distance increases (Weyrens et al. 2022). Therefore, milling timber locally can help to reduce the amount of carbon released in the transportation of wood from New Jersey forests to mills out of State.

Our position is that the state should take steps to increase local utilization of New Jersey grown timber. We feel the state should encourage the expansion of the wood products industry in New Jersey, which, in turn, will create a demand for New Jersey timber. This demand would create opportunities to practice ecological silviculture for addressing climate change and forest health threats, while also reducing carbon emissions from the transportation sector.

Michael Van Clef

Comprehensive State Forest Stewardship Plan

The State Forest Action Plan contains a tremendous amount of information and identifies broad objectives. However, it does not provide a spatially and temporally explicit overarching plan for state lands (parks, forests, natural lands, and wildlife management areas) within the overall landscape context that includes all lands (public and private). In addition, it focuses primarily on trees with less focus on non-tree forest elements (e.g., understory shrubs, wildflowers, rare species).

This proposal suggests a more comprehensive overarching plan that identifies broad forest stewardship goals including current and future desired conditions over the next 10 years. This would include enumerating acreage goals to enhance biodiversity through diversification of forest age classes (e.g., old growth, middle-aged, young) across all state lands – goals should be stratified across the physiographic provinces. Age class goals should be strongly guided by historical documentation of past forests that were less impacted by intensive human activities and include broad goals for forest composition (e.g., oak-hickory, birch-maple). Statewide goals should be given context through individual state land goals.

The proposed level of specificity would clarify the states' goals for stakeholders and the general public. This would reduce concerns that have arisen from planning and implementation at individual state lands outside the context of a specific overarching plan.

A comprehensive overarching plan should elucidate and enumerate methods for creating age class diversity (e.g., types of timber extractive or non-extractive methods and fostering forest development on currently non-forest lands or those heavily impacted by Emerald Ash Borer). Methods and specific goals to assure successful tree regeneration and healthy understory shrub and wildflower layers through necessary deer herd reduction should be included as current densities prohibit successful regeneration (See references for deer density associated with healthy forests and rules implemented in Pennsylvania which currently requires deer fencing to assure regeneration following timber removal). It should also clearly define how stewards will prevent invasive plant infestations that are typically associated with tree canopy reduction in the context of overabundant deer (see reference to state invasive species plan).

Mitalee Pasricha

Raising Ecological Literacy: Public Education on Forest Value in New Jersey

Mature, intact forests are vital to the health of ecosystems in NJ and worldwide and are considered the most effective natural means to combat climate change and biodiversity loss (1). Mature forests encourage diversity in insect, arthropod, and plant species by providing stable temperature, humidity, and resources (2). Older growth forests also sequester more carbon than young forests, making them critical in slowing climate change. Intact forests also contain rich biological legacies, complex ecosystem functioning, interior forest species, land use history and native flora which are more resilient to climate change.

In addition to above ground biomass of trees, mycorrhizal fungal networks are invisible, underground systems that sequester large amounts of carbon and are equally important to preserve. Plants direct between 10-50% of their photosynthates to fungi and in exchange fungi can direct up to 80% of soil nutrients for its host plant (3).

Although the public is aware of climate change, most are unaware of the huge role of forests and fungi in mitigating climate change and biodiversity loss. In addition, studies indicate that Americans spend up to 90% of their time indoors (4). The objective of this proposal is to raise ecological literacy by helping citizens take local action against the twin global crises of climate change and species extinction. This will be accomplished through invasive species removal, forest restoration and protection.

Aims:

Create seasonal workshops in town, county and state parks on forest value and restoration. These workshops could include practical activities identifying native flora, fauna, and fungi, understanding the impact of deer on forest health, and the deleterious impact of invasive species on native flora and fauna. Students & retirees can be trained to lead workshops.

Raise public awareness by engaging citizens in forest stewardship. Recruit citizen scientists and new members for invasive species strike teams, leading to healthier ecosystems in NJ.

Institute a statewide mandate for 50 hours of volunteer service for all high school students which will help recruit youth and boost the mental health of teens through outdoor service in forests.

Create a NJ State Forest Day featuring environmental careers, indigenous perspectives, and guided walks. Celebrate forests through collaborative art projects, wild forest edibles, woodland traditions, history, storytimes, and revival of the cultural values of forests.

Nicholas Homyak

New Paradigm No harvesting and extraction of trees from NJ public forests.

Disturbance is Unhealthy. No harvesting and extraction of trees from NJ public forests.

Pre-Ecological Paradigm versus Ecological Paradigm.

The world, man's place in it, and a host of policy issues all look different when viewed in traditional pre-ecological perspectives. These Paradigms must be sorted as one necessary for the climate crisis, the other obsolete, and not ecologically sound.

Politics and Science must become one. Public Forest ""Remaining"", must not be logged, for any purposes

Logging is Disturbance:

Two scientific aspects of any forest or biosphere integrity to be considered is disturbance, and increased contamination from spread of invasive, and damage to remaining indigenous biome of the forest dynamic. The degree of workforce conscience disciplines and contamination procedures required for logging are highly unlikely, and need not be attempted under any guise.

Biodiversity per se is not the underpinning of ecological stability. Ecosystem integrity and function set the necessary conditions for biodiversity to flourish by achieving stability. Biodiversity then is a function of the relationship between ecosystem structure and dynamics and processes. But it is a stability precariously balanced-constantly ebbing and flowing with each wave of ecosystem change. The Critical Natural Keystone species in maintaining this delicate and ever-shifting balance is Homo sapiens...

The Harvard Forest since their research shows that as forests age they take up more CO2 each year. It used to be thought that forest growth slowed after about 80 years, but their research is showing that forest growth continues to increase for trees up to 150-200 years of age. Letting our forests grow older is one of the biggest mitigating factors we have regarding climate change.

Think of any environmental problem and you will see it is a process where complex systems are being simplified or concentrated materials are being diffused.

Forests can play a large role in climate change through the sequestration or emission of carbon, an important greenhouse gas; through biological growth, which can increase forest stocks; or through deforestation, which can increase carbon emissions.

Every day, a 40 foot tree takes in 50 gallons of dissolved nutrients from the soil, raises this mixture to it’s upmost leaves,converts into 10 pounds of carbohydrates and releases about 60 cubic feet of pure oxygen into the air.

Soil Loss: “one percent of organic matter in the top six inches of soil holds approximately 27,000 gallons of water per acre! Removal of this minimal amount of organic matter can have significant water flow implications, especially in a flood prone area.

Patricia Shanley, Ph.D.
National and Indigenous Forest Initiatives with Relevance to NJ
40% of the earth’s forest has been lost and what remains is significantly degraded (1). The rate of forest loss is increasing, close to doubling between 2001 and 2020 (2). Worldwide, less than 20% of forests remain intact. In the US, intact forests constitute an estimated 6-7% of forest cover (3). Given the urgency, inter-governmental bodies are calling for system-wide changes whereby indigenous and local people’s perspectives are incorporated (4). This proposal recommends that plans for NJ public forests be informed by relevant national and indigenous initiatives.

Global scientific consensus to protect mature forests, align with indigenous worldviews, and are affirmed in the following:

UNFCC. 2021, World leaders issued a declaration to halt and reverse forest loss and degradation by 2030.

US Executive Order on Forests 2022, “to conserve our mature and old-growth forests on Federal lands and restore the health and vibrancy of our Nation’s forests.”

US Executive Order - Climate Crisis, 30 x 30. 90 countries agreed to this global mandate to protect 30% of the world’s terrestrial and marine habitats by 2030.

Forever Wild: Adirondack Park was saved to protect water and wild areas for recreation and aesthetics.

Expert Consensus: Letter to USFS 8/2022, from 37 eminent scientists recognizing the role of mature forests in curbing climate change, calls for a national prohibition of logging large, mature trees.

Logging Ban 2018: In West VA citizens sent 16,866 letters in opposition to a bill to end an 80-yr ban on logging in state parks. The Forest Steward’s Guild stated, Parks are for preserving scenic, aesthetic, scientific, cultural values and natural wonder & provide a balance to areas managed for timber.

NJ Exec. Order #122 2008 by Governor Corzine cites the Nanticoke Lenni Lenape, the Ramapough Mountain Indians, and the Powhatan Lenape Nation and their unique importance in NJ’s political, social, and cultural life, calling for “protecting the environment ... and promoting communication between Native Americans and all levels of government”.

Lenape representatives and the NJ Comm. on American Indian Affairs need to be involved in decisions about NJ public forests. A process to ensure Native American representation on Advisory Committees is needed. National mandates, such as 30x30, require state-wide implementation; NJ has only 20% public

forests. Given NJs high human population density and development pressure, there is strong citizen support for preserving public forests.

Renee
Logging of Sparta Mountain
National Geographic Magazine "Saving Forests – They Are Key to Protecting the Planet" is a must read for everyone on this Task Force. In its 144 pages not one article refers to "clear cutting" or "creating young forests" as a solution. Trees are not isolated individuals and clear cutting/logging only produces additional stress on our forests. (ATCH A, B, C)
As a solution, Senator Menendez supports the "No Road Rule" in our National Forests. We need to adopt similar legislation in New Jersey. As the most populated state per capita/sq mile thousands of trucks a day releases carbon dioxide statewide. Logging exacerbates the problem. Intact forests sequester CO2. Based on science young forests just do not do the job.
The American Legislative Exchange Council (ALEC) uses terms "young forests" "healthy forests" or "clear cutting". This organization helps provide legislative bills for our congressmen. A major contributor to this group is David Koch, the owner of "Bounty" and other paper products. Koch is a proponent of logging. ALEC endorses those terms making logging more acceptable. This is a marketing ploy to turn a negative (logging) into a positive (clear cutting). As a retired advertising executive, I know the jargon. And it works. Nonsense, don't let it fool you!
The National Audubon Society fought in court to stop logging in Alaska and elsewhere. See Senator Lesniack's article (ATCH D) (ATCH E)
I attended a meeting given by Cailin O'Connor from Kean University regarding the Motus Network. The installation of receivers along with transmitters has the ability to tract migratory birds. The information gathered is invaluable. Each installation costs $100,000 each. There are plans to install a fourth. We are talking $400,000.
Not all members of FSC (Forest Stewardship Council) support the logging of Sparta Mountain. (ATCH F, G, H).
I propose:
1. Stop the logging of Sparta Mountain and stop logging throughout New Jersey; the negatives far out way the positives. Our legislature needs to pass a "No Roads Rule" for New Jersey.
2. Eliminate ALL money incentives to logging, be it grants, or sale of timber. Let science alone dictate a course of action. Money often distorts one's view.
3. Instead of logging, create tree farms for the purpose of harvesting timber. Wawayanda Tree Farm in Vernon is an example.

Renee Becker
Logging of Sparta Mountain
Senator Menendez supports the "No Road Rule" in our National Forests. We need to adopt similar legislation in New Jersey.

I hate to pick on NJ Audubon (NJA) because they do a lot of good, but not when it comes to Sparta Mountain. NJA along with the NJDEP promotes the use of logging/clear cutting to create a "more balanced ecosystem". They should instead protect our forests to offset CO2.

As the most populated state per capita/sq mile, thousands of trucks release carbon dioxide statewide. Our forests are neeeded to sequester CO2. Based on science, young forests do not do the job.

The American Legislative Exchange Council (ALEC) uses terms “young forests” “healthy forests” or “clear cutting”. This organization provides sample legislative bills for our congressmen. A major contributor to this group is David Koch, the owner of “Bounty” and other paper products. Koch is a proponent of logging. ALEC endorses those terms making logging more acceptable. This is a marketing ploy to turn a negative (logging) into a positive (clear cutting). As a retired advertising executive, I know the jargon. And it works. But don’t let it fool you!

I attended a meeting given by Cailin O’Connor from Kean University regarding the Motus Network. NJA installed three receivers along with transmitters having the ability to tract migratory birds. The information gathered is invaluable. I applaud NJA for this effort. But each installation costs $100,000 each. There are plans to install a fourth. We are talking $400,000. Where is the money coming from? We need transparency.

I propose:
1. Stop the logging of Sparta Mountain; the damage done far out way any positives. Our legislature needs to pass a “No Roads Rule” for New Jersey. Read National Geographic, “Saving Forests – They’re key to protecting the planet”. No ambiguity here. (ATCH A)
(ATCH A1)

2. Eliminate ALL money incentives to logging, be it grants, or sale of timber. Let science alone dictate a course of action. Money often distorts one’s view.

3. NJA is NOT affiliated with The National Audubon Society. This confusion works to NJA’s advantage, providing it with perceived leverage. See Senator Lesniack’s article (ATCH B). National Audubon fought in court to stop logging in Alaska (ATCH C). These two organizations are on opposite sides.

NJA’s website implies that Sierra Club and Greenpeace support logging of Sparta Mountain. They do not. These groups are all members of FSC (Forest Stewardship Council) but they don’t support logging. (ATCH D, E, F). We need transparency.

4. Instead of logging, create tree farms for the purpose of harvesting timber. Wawayanda Tree Farm in Vernon is an example.

Silvia Solaun
NJ must look to sustainable alternatives and keep public forests intact and unfragmented
This proposal discusses the need to protect public lands from extractive timber harvests. Public Lands belong to the people and hence their natural resources should not be exploited or mismanaged by groups and individuals who can benefit from their extraction. NJ should instead look to growing alternative, sustainable crops, like hemp & wheat grass, as alternatives to wood consumption on its 750,000+ acres of current agricultural lands. 1 To promote logging in the most densely populated state is deleterious to the state’s 2050 GHG reduction goals and runs counter to all good climate action.
In the 200+ Scientists’ letter to Congress, it is stated, “We find no scientific evidence to support increased logging to store more carbon in wood products, such as dimensional lumber or cross-laminated timber (CLT) for tall buildings, as a natural climate solution. The growing consensus of scientific findings is that, to effectively mitigate the worst impacts of climate change, we must not only move beyond fossil fuel consumption but must also substantially increase protection of our native

forests in order to absorb more CO2 from the atmosphere and store more, not less, carbon in our forests (Depro et al. 2008, Harris et al. 2016, Woodwell 2016, Erb et al. 2018, IPCC 2018, Law et al. 2018, Harmon 2019, Moomaw et al. 2019).
Furthermore, the scientific evidence does not support the burning of wood in place of fossil fuels as a climate solution. Current science finds that burning trees for energy produces even more CO2 than burning coal, for equal electricity produced (Sterman et al. 2018), and the considerable accumulated carbon debt from the delay in growing a replacement forest is not made up by planting trees or wood substitution (noted below). We need to increase growing forests to more rapidly close the gap between emissions and removal of CO2 by forests, while we simultaneously lower emissions from our energy, industrial and agricultural sectors." 2
It is Imperative that NJ protect and preserve its public forested lands and allow them to remain intact, unfragmented so they can continue to sequester CO2, filter our air/water and prevent stormwater runoff. With the over 750,000 acres of current agriculture land in the state, incentives could be created for farmers to grow sustainable crops like hemp. The hemp plant in just four months can provide an alternative to fulfill the demands of the average NJ consumer in a more sustainable and cost-effective manner.

Vinh Lang
Climate Workgroup - Carbon/Climate impacts of Demand and Leakage
Recognizing the need for an effective and progressive response to the uncertainty of global climate change and the disproportionate effects of climate on ecosystems, socio-ecological values, and globalized economics among global regions, (IPCC, 2022). Taking into account, "human activities have become globally interconnected and intensified through new technology, capital markets, and systems of governance, with decisions in one place influencing people elsewhere," (Folke et al., 2005). Emphasizing the responsibility of New Jersey citizens as diverse global market consumers of forest products, ecosystem services, and carbon emission dynamics participants. Also recognizing the specific needs and special circumstances of people's livelihoods, locally and beyond our jurisdictional boundaries with regard to natural resources. And emphasizing the importance of ensuring global ecosystem integrity and resilience to uncertain changes. Affirming the importance of education, training, public awareness, public participation, public access and cooperation among different levels of governance:

This proposal recommends a bipartisan pledge and review system to increase climate diplomacy and resilience strategies among differing forest stakeholders across New Jersey. Strategies to achieve preferable climate resilience may include but are not limited to:

1. Optimizing local carbon pathways with special regard to leakage and substitution effects, (Franklin, 2018).

2. Fostering ecologically based forest management for ecosystem resilience, recognizing humans impacts over time in disrupting natural processes such as forest fires, etc.

3. Accounting of New Jersey's dependence on forest products and ecosystem services; Forestry and sustainable generation of wood, coupled with meaningful preservation strategies (locally), within our jurisdictional boundaries would allow preservation of primary forests elsewhere in the world, (Berlik et al., 2002).

New Jersey public forest stakeholders recognize that adaptation is a global challenge faced by all within local, national, and international dimensions. "Our decisions are a key component and collectively we

pledge to make a contribution to protect people, livelihoods and ecosystems, taking into account the urgent and immediate needs of those regions that are particularly vulnerable to the adverse effects of climate change," (Paris Agreement, 2015).

This proposal would require marginal costs for policy formulation, planning, education, and public engagement.

Appendix E-7
Proposals that were not accepted

Proposals that were not accepted by the co-chairs as aligning with the criteria for acceptance. At least three of four co-chairs agree that proposal did not meet the criteria. These proposals were not discussed by workgroup participants. Because numerous participants requested access to all proposals regardless of whether or not they met the criteria for acceptance, they are included here. There were 21 proposals in this category (one was submitted and revised).

Narratives were limited to 2500 characters. Proposal sponsors were invited to also submit references, which are not included here due to space limitations but are available using the sponsor's citation(s) when provided. Footnotes in the proposals indicate a reference to an article, file, memo, or other document. Note that references submitted ranged from unpublished opinions, magazine and news articles, webinars, and journal articles (some peer-reviewed and some not peer reviewed).

- **Bill Wolfe**

DEP moratorium, policy and management hierarchy, and proforestation.
1) a policy of "first, do not harm" by calling upon DEP Commissioner LaTourette to issue an Administrative Moratorium on further development or implementation of DEP forest management policy, including logging projects on public lands pending adoption of reforms;
2) adoption of a policy hierarchy to prioritize competing and conflicting goals, objectives, and management strategies; and 3) adoption of a policy of "proforestation".

- **Chris Hepburn, Ph.D.**

Evaluate Action Proposals Based on Ecological Health Independently From Funding Considerations
To quote from an email from the Task Force chairs, "Senate Environment and Energy Committee Chairman Bob Smith has convened a Forest Stewardship Task Force to seek consensus and prepare a report on actions needed to better protect and manage New Jersey's public forestlands.'

Task Force Chairs have asked for proposals describing ways to meet this goal of better protecting and managing NJ's public forests and also proposals regarding funding. Care must be taken here as evaluating proposed actions to further the health of state forests, based on ecological science, is much different than evaluating how to fund activities. Appropriately, the Ecological Health subgroup includes many individuals who are experts in areas such as ecology, forestry, and conservation.

The Task Force needs to generate, evaluate and reach consensus where possible on actions to better protect and manage NJ's public forestlands. Right now we don't know where there will be consensus. It is most sensible to determine what actions the task force is recommending, and the magnitude of funding needed, before working on the means of funding.

If some proposals for actions to better manage forest land come tied to potential revenue generation, for example selling wood products or deer meat, the proposed actions' need to be evaluated according to their effects on a healthy forest ecology and not on their ability to generate funding.

Once the best actions are identified, their costs need to be estimated and funding ideas can be evaluated. Funding may or may not come directly from recommended forest activity (in fact probably not, such as Joe Basralian's proposal for a dedicated water rate increase). And of course, current state budgeting should be examined for existing spending that is lower in priority than forest health and climate change mitigation. Experts on revenue and budgeting should be involved.

The first priority for the Forest Task Force should be on recommending actions to better protect and manage New Jersey's public forestlands.
"

- **Cynthia Soroka-Dunn**

Breathe Wild NJ

Approach owners of lands that have abandoned buildings on them. Request government in NJ to pay to purchase these lands throughout in the state and have the buildings either torn down and plant trees in those areas to reforest them or have those areas put aside for affordable housing. When those areas are put aside for affordable housing there will be a land swap to save another wooded area in NJ that already has open space. This will add forest areas around the state and also take down unsafe areas around the State.

- **Dorothea Stillinger**

NO DISTURBANCE OF VEGETATION, SOIL OR WATER FEATURES ON PUBLIC FORESTS

- Because under most circumstances leaving forests alone is the best way to enhance habitat and increase carbon sequestration the Great Swamp Watershed Association's proposal is that public forests should almost always be left undisturbed; exceptions might be allowed only after public comment and peer-reviewed scientific justification.
- Until updated rules for public forests are adopted no logging, vegetation removal or disturbance on public forests should occur.
- Public forests including Wildlife Management Areas and drinking water preserves are in the public trust and in most cases public funds were used for their acquisition so any disturbance including but not limited to destruction of vegetation such as tree cutting, movement of soil or alteration of watercourses, shouldn't proceed without public input and adherence to restrictions in all documents and deeds for the specific tract, Green Acres restrictions, or wetlands restrictions, for instance.
- Logging and clearcutting upset the ecological balance of the forest so should not occur. Even if any resulting funds support the NJDEP.
- Machinery that causes rutting, compaction or erosion, including but not limited to skidders, earth moving vehicles, heavy trucks, off-road vehicles, motorcycles, causes damage which limits sequestration of carbon and enhancement of habitat so should not be allowed on public forests.
- On public forests vegetation, including but not limited to trees and woody shrubs, that is disturbed, say for invasive management or health reasons, should be left on the site to decay and restore the soil and habitat.

Other considerations found in the references are:
- The age of the trees doesn't much affect the amount of carbon removed from the air, sequestered in the wood of the tree, or retained in the soil when the tree decays. Young and old forests behave pretty much the same in this regard.
- Cooperation of plants is known (plant marigolds with tomatoes to control nematodes) and is beginning to be investigated in depth with regard to mother trees and tree cohorts. An intact forest promotes species and interspecies dependencies.

- There isn't enough scientific evidence to support cutting forests as a management strategy for any particular species, plant or animal. Leaving forests alone, however, is known to benefit species, Indiana bats for instance.

- **Elaine Mann**

Tiny Forests

On September10, 2019, reintroduced April 12,2021, S 2452.S2452 is a Climate Changing Bill focused on Voluntary farm and ranch conservatation practices, MASSIVE REFORESTATION and wetlands restoration. Climate Stewardship Act of 2019 would support voluntary climate stewardship practices on more than 100 million acres of farmland, plantmore than 15 BILLION TREES to revive deforested landscapes and expand Urban Tree Cover, reestablish 08802, phone
he Civilian Conservatation Corps,restore over 2 million acres of coastal wetlands and create paid employment.

Senator Booker in New Jersey Forest to City introduces two very special people
1. Charles Rosen, Ironbound Farm , 360 Co. Rd., Asbury, N.J., 1-908-904-4115
2.Deacon Willie Davis, 218 Rosa Parks Blvd.,Paterson, N.J. 07501,1-862-264-7059

Please watch a Table For All video this will explain how two men can change the landscape of the inner cities and beyond.

Tiny Forest Planting Method is a invaluable to begain , six easy steps;
1. Forest cover type field survey
2. Soil Survey
3. Soil Preparation
4. Draw Up A Planting Plan
5. Planting Day
6.Management

Appendix
1. Checklist is my forest a tiny forest
2. Species distribution
3, List of edible plants

Tiny forests can be the size of a tennis court.

All new commercial and comerical residential construction should be required to provide a Mini Forest.

- **Elaine Mann**

Urban Mini Forests

Our focus should truly be on preserving the trees and forests that we have first.
I urge you to consider the Mini Urban Forest in our presentation to the Legislature.
Akira Miyawaki's method has been proven around the world.
Estimated3,300 billion tons of carbon held in trerestial ecosystems. That is four times more carbon than in the atmosphere in the form of Co2.

If in the next 30 years, we increase the amount of carbon held in land by 9% we will have brought back to earth all of the CO2 emitted by coal, gas,and oil combustion, deforestation and extractive agriculture since 1800.That would be by increasing the amount of carbon in our lands by 3% per year.
We know how to do that by regenerative agriculture, wetland restoration, managed grazing,mangrove planting and reforestation.
There are 5 billion acres of degraded land on earth. A mini forest will increase the amount of carbon in that land at least 10 times, likely much more.
If 1/5 of our degraded lands become Mini Forests we would achieve the goal of returning all the carbon emitted into the atmosphere from 1800 till now.
Several examples are in the book.
MiniForest Revolution by Hannah Lewis printed 5/2022

- **Jamie Zaccaria**

Proposal to Reverse Enclosed Foothold Trap Use to Increase Ecological Health and Public Safety of New Jersey Forests

I propose the reversal of the New Jersey Fish and Game Council Regulation that allows the use of "enclosed foothold traps" by fur trappers and a return to our original ban on all enclosed body-part traps that capture and hold animals (from here on, referred to as "leghold traps") using jaw-contraptions. Any spring-loaded traps designed to capture a live animal by its limb should be considered illegal–and can be restored as such, under the original law–with a reversal of the 2015 regulation (from here on, referred to as "regulation").

In 1984, the New Jersey legislature banned the sale, use, possession, importation, and transportation of any type of leghold trap. However, in 2015, the New Jersey Fish and Game Council (FGC) voted to adopt a regulation allowing the use of three "enclosed foothold" traps, circumventing the 1984 law. It is the opinion of most environmental groups that this action was a clear undercut of the statute by arbitrarily modifying language.

These traps are indiscriminate, and while fur trappers use them to target species such as raccoons, mink, muskrat, nutria, beaver, and otter, they have shown to be lethal to many other species, including endangered and threatened rats and birds of prey, household pets, and possibly even humans. Animals that have been inadvertently caught in these traps include Bald Eagles, golden retrievers, domestic cats, and mesopredators such as coyotes that are integral to New Jersey's ecosystem.

The traps snap shut on a limb or other body part of an animal with up to 60 pounds of force and inflict excruciating pain, injury, anxiety, and fear–resulting in some animals chewing off their limbs to escape. The alleged "modifications" targeted in the 2015 regulation do not change the use or impact of these traps and thus directly conflict with the 1984 law. Language that aims to release accidentally captured species such as bobcats and fishers is irrelevant, considering the fatal damage done to the animals once captured by these traps.

These traps threaten New Jersey's wildlife, pets, and even the citizen population itself and should be banned from use across the state to protect our forests and the people who use them. Therefore, the NJ State Forest Taskforce should encourage the New Jersey Fish and Game Council (FGC) to immediately repeal the regulation and ban the use of any enclosed body part trap in state lands.

- **Jean Publiee**

massive influehnces on forests are not deer but human 25 years experience involved in following njdfgw actions against deer and forests

- **Ken Dolsky**

Prioritize Reducing Global Warming to Save Birds

A 2019 report from the National Audubon Society* found that two-thirds of North American bird species will be vulnerable to extinction if global temperatures are allowed to rise at the current rate. The report states:

""By stabilizing carbon emissions and holding warming to 1.5°C above pre-industrial levels, 76 percent of vulnerable species will be better off, and nearly 150 species would no longer be vulnerable to extinction from climate change.""

The only way to reduce global warming is by reducing carbon in the atmosphere by a combination of reducing new emissions and absorbing the carbon in the atmosphere through plant sequestration and ocean absorption. We cannot control ocean absorption of carbon but we can control and optimize plant absorption of carbon by maximizing leaf areas and underground carbon in forests and elsewhere. Leaf area and soil carbon are maximized by allowing all trees to grow to maturity and reach their largest size. Mature forests contain more carbon per acre than young forests. (See proposal #31).

Note: Report is interactive and is not downloadable.
*https://www.audubon.org/climate/survivalbydegrees

- **Lew Gorman**

Forest Habitat Creation on Currently Mowed Areas along NJ Highways

This proposes that an organized plan be developed and implemented by the NJ Department of Transportation to drastically reduce mowing especially on limited access highways such as I-295, I-195, and Garden State Highway consistent with safety standards, such as sight lines.

Areas such as clover leafs must be allowed to grow without mowing. These non-mowed will advance to forests after going through natural plant secessional stages that will support pollinators until the habitat reaches young, then forest stages.

This practice of reduced mowing will create forests naturally and will not incur any costs to NJDOT budgets. Rather, it will reduce costs to state budgets and lower emissions. Fuel consumption will be reduced since less mowing will occur.

This proposal builds on the 2017 NJ Statute created by bills S227/A963 that require native vegetation be planted when highways are restored in NJ. However, the law does not deal with native vegetation management when there is no active restoration. This proposal should be codified into a law that deals with forest or meadow creation due simply by a reduction in mowing along NJ highways in areas that do not have to be mowed for highway safety reasons.

Biodiversity will naturally increase, emissions will decrease, state budget dollars will be saved.

- **Margaret Wood**

NJ Plant Identification App/Website

Invasives are a primary cause of species extinction in the US (Refs 1, 2). They spread from trade to private lands. Seeds, eggs, and microbes are then carried between private and public lands on humans,

animals, birds, wind, flying insects, waterways, vehicles, boats, firewood, etc. To prevent extinctions, invasives must be eradicated on private lands before they reach the forest.

The public will want to eliminate invasives once they become aware, (Ref 3). The best time to pick invasive plants is early Spring, when natives are dormant. Most will be flowerless. For lay-people, flowerless plants can look alike. To manage their land correctly, residents will want to identify all of their plants: invasives, natives, and cultivated.

NJ needs a plant identification app similar to New England's “Go Botany”, (Ref. 4), with 3500 plants in the database. People can't flip through 3500 photos looking for a match to the plant in their yard. The ""Go Botany” app does an amazing job of narrowing down the species, using a dichotomous key. It prompts the user for physical traits to discern families, genera, and species. If there is no flower or seed, the app will ask what they can see: stem, nodes, leaves. Based on that, it will narrow down the possibilities. Once narrowed to a few plants, then 'full profiles' further help users figure out which plant they have.

When residents confidently identify the plants on their properties, they can let natives live and spread, eradicate invasives, and replant “Jersey Natives” in their place. The app would support NJ Stat. 4:10-25.10 (Ref 5).

Partially funded by USDA NRCS, a copy of “Go Botany” might be donated to NJS or purchased.
- Plants that only exist in Hardiness Zones 1-5 would be removed.
- Because of climate change, plants that are between New Jersey and North Carolina, will soon be here. We should add plants from all Mid-Atlantic States, to be Climate-Change proactive, (Ref 6).

Partners from other Mid-Atlantic states and the USDA NRCS could help fund the revised app.

App profiles of invasives should have eradication instructions, and links to report them to the NJ Invasive Strike Force.

Links to other useful websites could be included:
- NJ Invasive identification app, (Ref 7).
- Forest animal identification
- Endangered animal Identification, (Ref 8). Sightings should be reported to protect their habitat or move them to safe habitats.
- Fungi identification, (Ref 9): Learn before you eat!
  Identify mycorrhizal fungi for restoration plants in damaged soils.
  Private land with curious children or pets may ID & remove poisonous fungi. Have links to poison control centers or advise to call 911.

- **Margaret Wood**

Put a Moratorium on all Fossil Fuel Infrastructure

Reasons:

1-Climate Change caused by fossil fuels is a major cause of species decline and extinction (Refs: 1; 2 p.5; 3). Since all life is interdependent, it will eventually lead to our own extinction.

2- The population is declining. The birth rate for young women is 16% below what is needed to maintain the population. Net immigration is also declining, as many immigrants choose to leave the US (Ref 4).
NJ & NY had their population decrease since the 2020 census (Ref 5, Tbl 4).
We do not need more fossil fuel infrastructure beyond what we have now.

3- NJ increases it's green energy every year, satisfying our future energy needs (Ref 6 p.3).

4- If we increase our fossil fuel infrastructure, we will not meet Gov. Murphy's climate agenda (Ref 7).

5- Most of the fossil-fuel expansions will export the fuel to other states and countries (Ref 9 p.1-2). New Jersey gets the toxins and dangers, but none of the energy.

6- Green energy projects provide more jobs than fossil-fuel projects. If we build more fossil-fuel projects we will reduce long term green jobs that support our communities (Refs 8; 7 p.2)

7- PHMSA approved the transport of LNG by rail, to Gibbstown, NJ, for a future LNG export terminal. The exports are for foreign countries. Rail tankers of LNG act as moving bombs. An accident igniting 22 rail tankers will set off a blast equal to Hiroshima. Trains can have 100+ tankers. (Refs: 9 p.2; 10 highlights p2-31; 11 p15).
If it doesn't explode, a spill will freeze and suffocate everything nearby (Ref 10 p.4).

8- Bakken crude oil is being transported by rail through the Highlands in Hunterdon. It is very volatile. (Ref 12, p.6; Ref 13).

9- The fracked gas TGP pipeline, through the Highlands forest and watersheds, is adding a compressor sta. in the forest, by the Monksville Reservoir that supplies water to NNJ & Newark. TGP is expanding a compressor in Wantage. The increased pressure can create hazardous leaks. The blow-downs have toxic VOCs. The extra gas is for unneeded expansion in Westchester NY, not NJ.

10- The Transco fracked gas pipeline will expand compressor sta 505 in Branchberg that recieves Marcellus gas through Centerville meter sta #23, sending it south. Then it splits:
--S.West to new compressor sta 201 in New Deptford, then to Repaupo meter sta. by the future Gibbstown LNG export station.
--or East to sta 207 in Oldbridge, to Morgan meter sta #24 on the Raritan Bay.
Is Transco positioning itself for future exports? (Ref 14)

NJ's proximity to the coast, and reputation as a toxic super-fund state, make it a target for toxic fossil-fuel exports. Fossil-fuel companies exploit us, planning to get away with it again.

- **Margaret Wood**

Regulate Bakkan Volatility Below 9.0 for Transport

The oil being transported by rail today is not your grandfathers oil. It is Bakken crude. This oil has been extracted from shale by fracking (Ref 1). It is extremely combustible, due to its high concentration of volatile fuels like propane, butane, and ethane released by the fracking process. When shaken during transport, the gases distill out of the oil, like shaking a can of soda, increasing the vapor pressure. The highly flammable and explosive nature of the cargo makes them rolling “bombs”, hence their nickname: “Oil-bomb-trains”. The trains can be 120 cars, a mile long. Each tanker can hold 30,000 gallons (Ref 4).

Because of loopholes there is no limit on cargo flammability. The science clearly shows that fracked oil is far more ignitable than ordinary crude (Ref 2, pages 7-8 & Ref 3). The government deliberately chose not to look at the ignitability in it's regulatory process, in an act of corruption that favors the fossil fuel industry over the safety of the people, (Ref 2, pages 7-8).

"...in early 2014, after three train derailments involving Bakken crude oil all resulted in large fires with explosions, the Wall Street Journal published an article
(https://www.wsj.com/articles/SB10001424052702303640604579294794222692778)

...Lynn Helms, director of North Dakota's Department of Mineral Resources,
made it clear that to remove the volatile elements of the Bakken crude oil mixture would "devalue the crude oil immensely." (https://bismarcktribune.com/opinion/editorial/washington-state-n-d-need-to-agree-on-oil/article_d9264dd4-1853-50d6-9cc7-4f76b2756439.html)

...The reality is that in this case, protecting the public would cut into oil industry profits which is why efforts to make the crude less explosive have not been made."

…The science is clear on this. State regulators and attorneys general
(https://www.desmog.com/2019/10/29/new-york-washington-phmsa-oil-vapor-pressure-rail-rule
)have all made efforts to address the issue. And yet, the oil industry has successfully fought these efforts and that is why the public continues to be at risk."
- (Ref 2) https://www.desmog.com/2021/02/02/bakken-oil-trains-unsafe-volatile-oil

It is time for the government to protect the people. There were few problems with oil trains that had vapor pressures of less than 9.0 psi RVP. If volatile gases are removed from the oil at the fracking cite, it's vapor pressures can be reduced to 9.0 psi RVP. Government regulations should require this before the oil is allowed to be transported.

NJ does not need any expansion of it's fossil fuel industry. The amount of Bakken that is transported through NJ should not increase.

- **Nicholas Homyak**

A simple solution to urgent Problem

Public Lands are Public Trust and in the case of Climate Change Scientifically Sacred.
Are these Federal and Earth Justice Comments now open for further comments? Why isn't NJFTF part of this effort or in conjunction with? The loggers are not listening nor grounding themselves in the issue of Climate and Loss of Biodiversity, in fact they are using ecological health, aka loss of biodiversity, as a ploy to mine maturing trees, under the guise of habitat creation, ignoring there is no waste in a forest, and forest self-govern under the phenomena of self-organization.
It seems although Doctor Willam Moonaw was one of the NJFTF first speakers, his Proforestation - A Simple Solution to an Urgent Problem, is being brushed aside. He is in possession of the Cole Map; above ground carbon density in NE forest. This map from the US Forest Service date of 2010, was actually taken off the UDFS website by the Trump Presidency. This map shows evidence that under the International Panel on Climate, this zone which includes Northern New Jersey can qualify for a State Constitutional Protection Zone for Global Carbon Cycle. Mark Harmon & William K Ferrel study and conclusions ""effects of carbon storage conversion of old growth forest to young. 9/2/1990 Volume 247 pages 699-702 should be known by this Task Force. The fact this Task Force is being dragged into talking

trees by the loggers and not forest ecology in any wholesome scientific sense in troubling; for example soils in a forest contain 1/4 of all species of life on Earth.
Every day, a 40 foot tree takes in 50 gallons of dissolved nutrients from the soil, raises this mixture to it's upmost leaves,converts into 10 pounds of carbohydrates and releases about 60 cubic feet of pure oxygen into the air.Trees absorb noise as in traffic noise. Soil Loss: "one percent of organic matter in the top six inches of soil holds approximately 27,000 gallons of water per acre! Removal of this minimal amount of organic matter can have significant water flow implications, especially in a flood prone area. We need to consider Complex Systems Science; logging is disturbance entropyThink of any environmental problem and you will see it is a process where complex systems are being simplified or concentrated materials are being diffused.

- **Nicholas Homyak**

Funding Possibilities

State Lottery as a funding Source: GROW NJ GRANTS
In the past NJ has alleged and or used as an excuse to begin the State Lottery that monies would be allotted to education to relieve local BOE taxes.
The New Jersey Lottery Commission held its July Commission meeting last week and announced its unaudited results for the fiscal year that ended on June 30, 2021, posting a record $3.68 billion in sales, the highest in Lottery history and 14.6% higher than Fiscal Year 2020.
Where do the proceeds of the New Jersey lottery fund go? New Jersey Lottery funds numerous state programs and more than half of the money goes back to lottery players in cash and prizes. New Jersey can imitate California is spreading these monies to support Climate defense and Natural Resource Preservations and enhancements. The NJ-Lotteries now seem completely-non-transparent as to exactly where the monies go.
The former Christie Administration allowed, gave grants to private corporations through State programs called GROW NEW JERSEY, for example: The state had awarded UPS a Grow New Jersey grant for $40 million over a ten year period. Grow New Jersey is an incentive program that aims to create and retain jobs while also strengthening the state's competitive edge against tax incentive programs in nearby states. The state's subsidy programs have been criticized by some as corporate welfare. NOT ONLY DID UPS here for example receive the grant, but gained a PILOT Deal, rather than a true rateable for the Town, Parsippany in this case. (Former Christie Administration also raided green acre and open space funds for tax patches and most likely these Grown NJ private give-aways.
Why can't similar grants be had for Climate defense; State Park Needs, and Proforestation projects, like invasives, and or Deer Control?

- **Nicholas Homyak**

Language Associated Management for Climate Biodiversity

Rebuttal to Ken Dolsky on proper Language and Specific understands
In Regards to Your proper scope of understanding in specifics of a language; again Professor Emeritus Tom Wessels Glossary of terms, and another word or concept; ""recreation""; another word or concept meaning too many different things to too many people. It should be some healthy outcome for the recreationist and the resource; minimum impacts and disturbance inflicted on remaining wild places.
Thresholds Rules and Regulations
Our Outdoors and or Remaining Forest Areas require Thresholds to prevent ATV's, Single-use Plastics; Smokers, Alcohol, and fires. Litter control and abatements, are a must; would not it be better to enhance the outdoor experience that can be gotten on NJ's remaining frontiers, a goal of Zero-Light-

Pollution rather than camp fires? A new Paradigm pressed on the Parks Management Goals; people bending toward the resource, not the resource to some form of free for all of consumption and left behinds. Expect Something or you'll get No-thing.
As a Volunteer in parks over 47+ years i may attest to the impacts and abuse; present, obvious and sinful. Hauled tons of trash out of Nice Places over the years; sadly our Parks and the American Landscapes have become de facto trash-dumps. Only more diligent Law Enforcements can remedy the abuse. Logging for sure would only increase the abuse from ATVs and their associated impacts and trash more prominent (Graffiti is another all too common crime in our remaining natural areas).
On the impacts of consumption type recreational pastimes *Sustainable scale Ecological economics contend that for any given ecosystems setting, there is an optimum scale of the economy beyond which physical growth in the economy (throughput)(waste) starts costing more than it is worth in terms of human welfare, and resource degradation. Whatever become of Governor Murphy's Plastic Reduction Task Force?

- **Nicholas Homyak**

Public Forest and Forest Remaining Already Been Compromised

Moratorium Now and Amendment to the NJ Highlands Pineland Acts to Exclude logging in Public Forest remaining..If Government as intended is not the means proper in this predicament; of climate change then what is?..Without good government we are doomed. No economic interest, under any circumstances, can ever be above the reverence for life. A huge part of the problem is the Jeffersonian notion that"" the government that governs best is the one that governs least"". While it is true as regards individual liberties, it is absolutely dangerous to think that way as regards economy..
Necessity of a Moratorium: Reasoning ""there already is, was a compromise Private verse Public. Now NJFA wants to compromise all public forest, while they have already without a management plan inflicted disturbance in several public forest.
 Moratorium Now! Reasoning a compromise already exists.
The crux of the matter being if Private lands, and lands being lost, and trees being removed on other properties, not to mention diseases now active in the various ""remaining wooded or forested areas""; how can this not be a limit to any further logging, and demonstrate an inappropriate theft of a public owned trust? the Public Forest Remaining, have already been compromised!
Put in another way, this scope of private logging for tax-breaks, and unknown destinations for trees and biomass markets, is already a ""compromise"" in itself. NJ Forestry Association desires a further compromise of the Public Forest Remaining; how can this be allowed under State auspices? It is simply too much of a give away and at the wrong time.
Amend Highlands/ Pineland Acts: 2004-2022 Too much change in too little time..
This also stands as a reason for NJ Highlands Act to amend itself to include No logging within it's Prime Core Protection Zones. Proforestation as a management creed within these remaining ecology spheres Private logging brings tax breaks not income to NJDEP.

- **Nicholas Homyak**

Title Change: Legislation with Language NJDEP/Forest Service

1.NJDEP/Forest Service 2. Tom Wessels Professor Emeritus Antioch U. Myth of Progress

- **Nicholas Homyak**

Pro-Forestation articles

Please except this sources of study in proforestation as proposals in sources to oppose any attempts at logging our Remaining Public Forest Domains: Jones Sauer's work Once and Future Forest should be the Bible Here and incentive for a new Ecological Paradigm

Science References:
Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good
https://www.frontiersin.org/articles/10.3389/ffgc.2019.00027/full

There are many citations in this article that may also be of use.
Another is:
Dominick A Dellasala, Cyril F Kormos, Heather Keith, Brendan Mackey, Virginia Young, Brendan Rogers, Russell A Mittermeier, Primary Forests Are Undervalued in the Climate Emergency, BioScience, Volume 70, Issue 6, June 2020, Page 445, https://doi.org/10.1093/biosci/biaa030

You may need to get this through your library's interlibrary loan system as it isn't Open Access.

*As for your other topic, try searching online Mycorrhizae and ""old growth forest"". May USFS and OA articles come up on this topic which may suit your needs.

Additional Science References:
The Once and Future Forest: Leslie Jones Sauer. A principal and landscape architect and adjuct professor U of Pennsylvania.."a guide to forest restoration strategies"(New Jersey included in the Index/chapters).
Leslie Jones Sauer.. "Once and Future Forest.
Use, Misuse and Management. Atmospheric Change/ Changing types of Impacts: See all of: Part 1 The Forest Today Part 2 The Restoration Process Part 3 Monitoring and Management.

The Myth of Progress. Toward a Sustainable Future Professor Emeritus Tom Wessels: Tom Wessels (born 1951) is an American terrestrial ecologist working as a professor at Antioch University New England in the Department of Environmental
Author of several books
*No Forest Task Force can operate outside the Paradigm and understanding of Wessels Glossary of Scientific Terms : Myth of Progress pages 143-146.

NOVA Science Documentary aired 2/2/2022
Arctic Sinkholes:Colossal explosions shake a remote corner of the Siberian tundra, leaving behind massive craters. In Alaska, a huge lake erupts with bubbles of inflammable gas. Scientists are discovering that these mystifying phenomena add up to a ticking time bomb, as long-frozen permafrost melts and releases vast amounts of methane, a potent greenhouse gas.Science Focus:

Harvard University May 6 2019
Exploring The Underground Network of Trees – The Nervous System of the ForestValentina Lagomarsino is a first-year PhD student in the Biological Biomedical Sciences program at Harvard University.
Hannah Zucker is a second-year PhD candidate in the Program in Neuroscience at Harvard University.

- **Nick Homyak**

Task Force Inappropriate

Source: Rutgers Eagleton Institute Center on American Governor:Governor Thomas H. Kean Archive..May 27, 1986 ""Governor Kean creates the Governor's Council on New Jersey Outdoors in executive order number 138. The council is charged with planning for the current and future needs of outdoor space to meet the requirements of the current and future population of the state."" (of which i attended: Pyramid Mountain came out of it's bowels, not maturing trees on Public Lands)

Her is an example of what a real Governor who loved his State of New Jersey be doing:

We appear to have gone in another business, rather than ecological direction, a perversion of the trust for Public Forest; Sparta Mountain continues, despite it's non-transparent intrusion into the core of the NJ Highlands and Public Forest; despite the fact No Forest Plan actually exists. Sparta Mountain is beyond any compromise, and stands as a offensive to the People of this State, and why the present Governor can not put an end to this violation of the public trust.

The NJ Forestry Association a group of landscaper businessmen, is attempting to replace the NJ Forest Service under NJDEP. Their statement on June 30 Webinar, ""we should not put all our eggs in the same basket"" is revealing in speaking of ""public land"" management. Their realm is private alone, whereas NJ Forest Service is Public and private in encouraging private land owners to be conscience and considerate of ecological and healthily forest ecospheres on property they own or wish to manage. Are we not all in fact ""in the same basket"" especially with the climate crisis facing us on a planetary level?

Finally a common geopolitical dynamic that can unite US, Climate change ,Life or Death, Science or Political garbage. shall we chose the political inappropriate paradigm of business over science, garbage? Is not the climate change that faces us, the ""one basket"" we all need to enforce, and not divide into ""interest""?

The will of God prevails. In great contests each party claims to act in accordance with the will of God. Both may be, and one must be, wrong. God cannot be for and against the same thing at the same time. Science in the background of climate change, and all things according to their background. Shall the will of the Public Trust in government prevail, or be subverted by a Task Force that should never have been formed, a more appropriate scenario would of been Governor Murphy's Council on New Jersey Outdoors.

- **Sandra Chen**

Stewardship Plan Provisions

EcolHlth.Chen.Stewardship/Management1

New Jersey at N.J.A.C. 13:1L-31 et seq. offers private landowners the opportunity to manage their forest lands under Forest Stewardship Plans. The requirements for such plans are set forth in Subchapter 5 of NJDEP's Forestry Rules (https://www.nj.gov/dep/rules/rules/njac7_3.pdf).

If the Task Force recommends Forest Stewardship Plans for public forest lands, the recommendation should address the following:

• The standards set for public forest plans should not be less than those set in NJDEP's rules for private land plans.
• Plan applicability parameters should be clarified, including:

o Whether a minimum acreage is necessary. For private land plans, the minimum is five acres, but this limit would exclude many forested parks. Small mini forests could make a substantial contribution to addressing climate change, groundwater replenishment, and ecosystem vitality.
o What types of lands can qualify? Only wildlands? Or could an arboretum or manicured public garden qualify to have a plan?
o What qualified as “forest land”? Currently the NJDEP’s Forest Stewardship Program rules and Highlands Water Protection and Planning Act rules (https://www.nj.gov/dep/rules/rules/njac7_38.pdf), as well as the Pinelands Commission’s Pinelands Comprehensive Management Plan rules (https://www.nj.gov/pinelands/cmp/CMP.pdf) all use different approaches to determining “forest.”. The NJBPU’s Straw Proposal for rules implementing the Solar Siting Act of 2021, has yet another approach.
o What ownership coverage would be allowed. Could adjacent preserved areas, but with fully or partially different ownership be under a single plan?
o Must lands be contiguous? Could one or more non-contiguous parks be under one plan?
• Financial support should be available to municipalities. Private landowners can use a Forest Stewardship Plan to qualify their forests for reduced property taxes under Farmland Assessment (https://www.state.nj.us/treasury/taxation/lpt/lpt-farmland.shtml). The owners receive reduced taxes year after year which helps them pay for their management. Certainly, if municipalities are to be required to have plans for municipal forests, they will need some equivalent subsidy that accrues to them annually. There is precedent for the State to provide payment to affected municipalities to compensate for a burden placed on the municipality by State law. (For example, see N.J.A.C. 58:20-5 and N.J.A.C. 32:1-144.)

Appendix F: NJFTF Recommendations for Invasive Species Management Legislation

NJ Forest Task Force

Testimony to the NJ Senate Environment and Energy Committee in support of S2186 - Prohibits sale, distribution, or propagation of certain invasive plant species without permit from Department of Agriculture.

December 15, 2022

Consensus Recommendations for Invasives Species Management Legislation
Prepared by Invasive Species subgroup: Sandra Chen, Emile DeVito, Jeanne Fox, Amy Greene, John Landau, Patricia Shanley, and Michael Van Cleff

The NJ Forest Task Force came to a very strong consensus that robust management of invasive species (including plants, vertebrate and invertebrate animals, and pathogens) is imperative to protect New Jersey's public and private forests as well as agricultural production and urban landscapes.

- Accelerating environmental damages from invasive species in NJ are exacerbating negative global and local climate change impacts.
- Control of invasive species is necessary to maintain the climate defence ecosystem services required for New Jersey's future.

We understand that two bills have been introduced by the legislature (Invasive Plant Regulation bill S2186/A3677 and Invasive Species Task Force bill A2629), but we ask that the recommendations below be considered to strengthen them, ideally beginning with amendments to Invasive Plant Regulation bill S2186/A3677. This bill to regulate the sale, distribution, and propagation of invasive plants can be a foundational building block for invasive species management by halting the continuing purposeful spread of harmful species and establishing best practice invasive species management governance.

New Jersey is one of only four states in the continental US and two states in the Northeast that have no commercial plant regulations (the other Northeast state is Rhode Island). But there is an opportunity and need for regional leadership– the average overlap of regulated species lists across neighboring states is only 17% with the highest amount of neighbor overlap being just above 50%.[1] This neighbor-to-neighbor inconsistency seriously impairs

1

the effectiveness of state regulations because invasive species spread widely and freely without any regard for state borders.

The New Jersey Forest Task Force recommendations for Invasives Species Legislation to bring NJ towards leadership are:

1. Adopt the definition established by the National Invasive Species Council -
   "An invasive species is:
   1) non-native (alien) to the ecosystem under consideration, and
   2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health."

2. The foundational invasive species management bill, ideally an amended S2186, should legislatively re-establish a permanent and updated New Jersey Invasive Species Council (NJISC) to develop and manage a binding policy and process to regulate and manage invasive plants, vertebrate and invertebrate animals, and pathogens, operating with full public transparency and engagement.

   An NJISC should be 'in but not of' the Department of Agriculture and DEP, with additional experts and stakeholders representing other interests including New Jersey Invasive Species Strike Team, New Jersey Nursery and Landscape Association, New Jersey Highlands Council, Pinelands Commission, New Jersey Agricultural Experiment Station, universities, ecologists, botanists, non-profit conservation groups and indigenous peoples.

   The Invasives Species Council shall be authorized to:
   - Develop practical strategies and policy to collaboratively research, deploy, monitor, and promote invasive species control methods including but not limited to
     - Regulation of sale, distribution, and propagation
     - Integrated Pest Management methods
     - Biocontrols to mitigate existing widespread invasives
     - Application of deer herd reduction
     - Prescribed burns
     - Reducing unintended human-assisted spreading
     - Community outreach and engagement
   - Define a robust, transparent regulatory protocol consistent with proven best practices, with one model being the regulatory protocol established in New York and recently adopted in Pennsylvania.
   - Maximize the effectiveness and efficiency of invasive species management within the context of scarce resources of NJDEP and NJDA
     - Form partnerships with NJ organizations such as the New Jersey Invasive Species Strike Team (NJISST)
     - Harness volunteers, including youth volunteers to improve their connections to the natural world
     - Build multifaceted collaborations and cooperations with regional states and the Northeast Regional Invasive Species and Climate Control (NERISCC) consortium

- Promote and coordinate data from citizen-scientist mobile app and web-based tools and associated invasive species distribution databases
  - Includes EDDMaPs as managed by NJISST and other states, iMap Invasives as managed by New York State, and iNaturalist.
- Develop and manage the state strategic plan for invasive species control.
  - The first consideration should be to review the 2009 Invasive Species Strategic plan which is still largely relevant.
  - Re-adoption or adoption-with-updates should be done if it is determined to be the most timely and efficient approach.
  - The council should define a regular schedule to review the plan and update it as warranted
- Develop strategy and policy to slow the human-assisted spread of existing invasives through best practices adoption including
  - Firewood regulations
  - North America Invasives Species Management (NAISMA) "Play-Clean-Go" and "Weed Free Products" programs (Programs - NAISMA)
- Focus heavily on community outreach and education through partnerships and collaborations as well as direct outreach from NJDEP and NJDA
  - Focus on channels, media and content investments specific to New Jersey
  - Leverage existing and extensive outreach and training materials such as Penn State University extension, Lower Hudson PRISM and NJISST instead of spending time to recreate these resources.

3. Regarding regulation of the sale, distribution and propagation of invasive species:
   - The current proposed S2186 list of species to be regulated is acceptable as a quick start, but it is only a small and static sample of commercial invasive threats. The re-establishment of the NJISC should be authorized to proceed upon enactment of the law so that a more robust entity can immediately begin to evaluate the full suite of harmful invasive species.
   - Listing or de-listing an invasive species shall be an administrative (non-legislative) process to be initiated by the identification of specific species for regulation by NJISC. Identification for regulation shall be determined by NJISC original evaluation or by NJISC review of all species regulated by the states of NY, PA, CT, MD, DE or VA. The criteria to be considered include:

     (1) the threat the species poses to native species in the State;

     (2) the threat the species poses to any sensitive habitats or endangered or threatened species in the State;

     (3) the threat the species poses to any historical, cultural, or infrastructure resources in the State; and

     (4) the likelihood that the species will escape intended areas of use and propagate uncontrolled in the State.

     (1-4 are per proposed S2186 section 4.b. with "areas of use" replacing "cultivated areas")

        - Requiring that any protocol must consider the inclusion of species already vetted and listed (including any sterile cultivars within one of those species that are already vetted and excepted) by neighboring states will:
            - Save significant time and work during the review process, allow New Jersey to benefit from the significant efforts of our neighboring states
            - Efficiently enforce the regional coordination often cited as critical to controlling invasive species
        - Because invasives species management becomes exponentially more difficult and improbable as the population of a species grows, the legislation should stipulate that newly emerging invasive species should be priorities for NJISC review and listing even though many of these species are not yet 'obviously' causing severe damage in natural areas.
            - This strategy fits well with the widely established invasive species management practice of "Early Detection / Rapid Response" (EDRR) to prevent harm while it is still practical and possible.
    - A deadline of no more than 1 year should be mandated to create the first complete regulated invasive species list. The NJISC shall:
        - Designate for regulation the species listed in the proposed NJ S2186/A3677 as well as review for designation any species that are regulated in NY, PA, CT, MD, DE or VA . Not designating any species regulated in these states requires an active and fully documented decision.
        - Evaluate the 191 plant species and 97 other species listed as Widespread, Emerging, and Watch/Potential as of 2022 by the New Jersey Invasive Species Strike Team as candidates for regulation.
        - Continuing to evaluate and designate species for regulation, whether proposed in New Jersey or regulated in neighboring states, shall be an on-going responsibility of the council.
        - Allow the sale, distribution, and propagation of sterile cultivars of otherwise regulated species that are approved for sale in NY, PA, CT, DE, or VA and determined by the council to be safe for NJ.
        - Establish the policy and requirements for all permitted and regulatory exceptions.
        - Establish labeling and educational material requirements such as
            - Labeling and education material requirements regarding distribution and sale of excepted cultivars
            - Labeling of invasive plants being sold during their phase-out period
    - The NJISC shall consider the impacts of species regulation decisions on the New Jersey nursery and landscape industry, including making reasonable efforts to minimize economic burdens.
        - The inventory life cycle for growers may be less than a year for annuals to a decade or more for trees.

- The current proposed S2186 phase-out period of 24 months is an unfair and unnecessary economic burden for the nursery industry. We recommend building a dichotomy that emphasizes differences between newly emerging vs. already widespread species as well as the dichotomy between widely sold vs. not widely sold species. An example suggested phase-out period is provided below:

Pipeline Flush Category	Annual Plants Timeline	Perennial Herbaceous Plants Timeline	Woody Shrub Species Timeline	Tree Species Timeline
Species not widely planted or newly emerging species in natural areas	1 yr	2 yrs	3yrs	5 yrs
Widely planted species or already widespread species in natural areas	2 yrs	3 yrs	5 yrs	10 yrs

  - Penalties imposed by NJDA should involve fines sufficient to stop and prevent violation.
    - NJDA may give a warning or small fine for a first offense, but fines must escalate to many thousands of dollars for subsequent offenses.
  - Regulated species are permanently listed, requiring an administrative action to change a specific listing status. New listings may be added on an ongoing basis. To assure currency, the full regulated species list should be reviewed by NJISC at minimum of every three years. This will allow consideration of newly emerging invasive species, including species that are beginning to spread due to a warming climate.

4. To cost-effectively increase the pool of NJ Invasives Species Management Resources, legislation should allow for the creation of one or more formal public/private partnerships similar to the New York State PRISM's (Partnerships in Regional Invasives Species Management, e.g. LowerHudson PRISM).
   Partner Groups should include organizations such as:
   - New Jersey Invasive Species Strike Team
   - NY/NJ Trail Conference (this organization hosts Lower Hudson PRISM with headquarters in Mahwah New Jersey)
   - County Park Commissions
   - NJ Land Conservancies

- Rutgers Environmental Stewards, NJ Forestry Association Woodland Stewards and other citizen-steward organizations
- New Jersey Youth Corp and other youth-engagement organizations
- NJ Native Plant Society

Sources:

(1) Beaury, E.M., E.J. Fusco, J.M. Allen, and B.A. Bradley (2021) "Invasive plant regulations in the United States are reactive and inconsistent",Journal of Applied Ecology

Commented [1]: is this where 17% and 50% is cited? We should footnote it rather than put it here in text.

Neighboring State Information

New York
New York Regulation:
https://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf
Report to Legislators:
https://www.dec.ny.gov/docs/lands_forests_pdf/invasive062910.pdf
NY Invasive Species Council: https://www.dec.ny.gov/animals/6989.html
Specifics and background information:
https://www.dec.ny.gov/animals/99141.html

Pennsylvania
Pennsylvania Invasive Species Council -
https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/GISC/Pages/default.aspx
PA invasives plan -
https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/GISC/Documents/PISC%205%20Year%20Plan.pdf
PA legislation -
https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?act=46&sessInd=0&yr=2017
They utilized the species evaluation system established by New York and are considering adding species to the regulated list.
http://cedatareporting.pa.gov/reports/powerbi/Public/AG/PI/PBI/PISC%20Invasive%20Species
https://woodyinvasives.org/regulatory-information/pennsylvania/

Connecticut Regulation
https://cipwg.uconn.edu/ct-state-invasive-plant-laws/#

Delaware Regulation
https://whyy.org/articles/ban-on-invasive-plants-great-win-for-delaware-conservation/

https://legis.delaware.gov/json/BillDetail/GenerateHtmlDocument?legislationId=48260&legislationTypeId=1&docTT

Virginia Regulation
https://vnps.org/action-alert-phasing-out-the-propagation-and-sale-of-invasive-plants/

Maryland Regulation
Maryland Invasive Plants Prevention and Control

Individuals and organizations on the task force who support and sign off on this testimony.

NJ Forest Stewardship Task Force, Invasive Species subgroup members and authors of the testimony:

Sandra Chen, MS. EdD, Princeton Shade Tree Commission

Emile DeVito, PhD., Manager of Science & Stewardship, NJ Conservation Foundation

Jeanne Fox, JD, Adjunct Faculty Columbia SIPA & Rutgers Bloustein; former BPU President; former EPA Regional Administrator; former DEPE Commissioner/Deputy Commissioner

Amy Green, MS, PWS, Raritan Township Environmental Commission

John Landau, Member Morris township Environmental Commission, NJ Forestry Association Woodland Steward

Patricia Shanley, PhD, Woods & Wayside International

Michael Van Clef, PhD., FoHVOS NJ Invasive Species Strike Team

NJ Forest Stewardship Task Force co-chairs support this testimony.

Andrew Bennett,

Tom Gilbert, co-Executive Director, NJ Conservation Foundation

Eileen Murphy, Ph.D., Vice President Government Relations, NJ Audubon

Anjuli Ramos, NJ Chapter of Sierra Club

Last Name	First Name	Affiliation	NJ County or Town
Ace	Kristin	Chair, Morristown Shade Tree Commission	Morristown
Akers	Fred	Operations Manager, Great Egg harbor Watershed Association	Newtonville
Barreca, BS Environmental Science	Charles T	Duke Farms	Clinton
Basralian	Joseph	Chair, Open Space Advisoryy Committee	Chatham Twp

Bernier	Daniel	Director, Union County Dept Parks & Recreation, Div of Park Environmental Services	
Caccavale	Kathleen	Chair, Sustainable Madison Advisory Committee	Madison
Cahill-Makowsky	Ann M.	NJ Resident	Bordentown
Carola	Captain Hugh M.	Program Director, Hackensack Riverkeeper, Inc.	South Hackensack
Chambers	Lydia	Co-Chair, Friends of the Drew Forest Board	Harding
Chase, Jr, PhD (biochemistry)	Theodore	Former Board, NJ Conservation Foundation	Franklin Twp, Somerset
Conway	Thomas	Chair, Ringwood Environmental Commission	Ringwood
Cuthbert, EdDd	Barbara	NJ Resident	Princeton
Donnelly, BS natural Resource Management	David	Retired – Nj State park Service	Toms River
Dorwood	Sue	Beaver Lake Realty Company	Hardyston
Foelsch	Bill	Executive Director, NJ Recreation and Park Association Director of Parks and Recreation, Morris County	Morris County
Fox, J.D.	Jeanne	- Adjunct Faculty Columbia SIPA & Rutgers Bloustein -former BPU President; EPA Regional Administrator; DEPE Commissioner/Deputy Commissioner	

Frey, Master Landscape Architecture	Wilma	NJ Resident	Tewksbury
Helmer	David	Executive Director, Morris County park Commission	Morris
Hepburn, PhD	Christine	Trustee, Ridge and Valley Conservancy, Friends of the Drew Forest	Hardwick
Homyak	Nicholas R.	- Member Invasives Strike Force (Laborer) - Highlands Coalition Member/ NY/NJ Trail Conference/ Volunteer in Parks	Parsippany Troy-Hills
Honachefsky, Jr.	William	Retired NJDEP	Clinton, Hunterdon County
Huntington, BS Landscape Architecture	Wayne	Founder, Steward Green Former Director of Research and Natural Resources for Duke Farms	Bridgewater
Johanson	Erica	NJ Resident	East Amwell
Kayman, SM Environmental Health Sciences and Air Pollution Congrol	Lindsey	Environmental Education Fund	Princeton
Kazimierczyk	Joe	Sourland Conservancy	Hillsborough
Kibler	William S.	Director of Policy, Raritan Headwaters	Flemington
Krehel	Kate	PHS for Climate Action	Princeton
Kroll	Judy	Co-Chair, Friends of the Drew Forest Board	Madison
Louie, MD, MPH	Diane	NJ Resident	Madison

Lyons, BS, MS Forestry	James	THW Conservation Strategies	Hewitt
Mann	Elaine	NJ Resident	Colts neck
McDermott, PhD	Melanie H	Co-President, Highland Park Shade Tree Committee	Highland Park
Meckel	Douglas	NJ Resident	Hopewell
Michniewski	Susan	NJ Resident	Hopewell
Middaugh	Petty	UUFaith Action Environmental Justice Task Force	
Miller, BS Environmental Science	Erica	NJ Tree Farm	Neptune
Moore	Shauna	Manager of Horticulture, Somerset County park Commission	Somerset County
Oltman	Laura	Support Roaring Rock Park	Washington
Partridge, PhD	Dustin	NJ Resident	Kennelon
Platz	Elmer	Owner, Mount Vernon Farms, LLC	Vernon
Quinnn, Ph.D.	James	Professor Emeritus, Rutgers Univ.	New Brunswick
Rhoads, PhD	Jaclyn	Assistant Executive Director, Pinelands Preservation Alliance	
Rinear	Paul	NJ Resident	

Roberts-Lawler, B.A. Biology	Nancy	Lebanon Township Environmental and Open Space Commission Musconetcong Watershed Association Water Quality Manager, retired New Jersey Water Quality Monitoring Council, member PEACE New Jersey, Founder/Board Chair	Lebanon Township, Hunterdon
Rosenbaum, Certified Ecological Restoration Practitioner, SER	Jared	Wild Ridge Plants, LLC	Pohatcong
Ruga	Elliott	Policy & Communications director, NJ Highlands Coalition	Boonton
Sands, Master Environmental Law & Policy	Tammy L.	Chair, Princeton Environmental Commission	Princeton
Sauer	Leslie	Brook Hollow Farms	Sergeantsville
Shebitz, PhD Ecosystem Science	Daniela J	Kean Univ, School of Environmental and Sustainability Science	Cranford
Sillars, BS Forestry, MBA	Scott	NJ Resident	Princeton
Soos, BA, Med	Anne	Princeton Environmental Commission	Princeton
Taylor, MS Geography, conc in Forest Management	Cindy	NJ Resident	Hightstown
Thein	Gary	NJ Resident	Livingston
Thonet, PE, PP	John	President, Thonet Associates	Pittstown
Tilly	Susi	Executive Director, Ridge and Valley Conservancy	Newton

Wander, PhD	Sharon	Ridge and Valley Conservancy	Fredon Twnp
Webb, Ph.D., Ecology and MS Ecology and Forest Resources	Sara	Professor emerita, Drew Univ.	Madison
Wilfert Eckel, PhD	Randi V.	President, the Native Plant Society of NJ	Frenchtown
Wilson	Jessica	Executive Director, NYC Audubon	NYC

Appendix G. Glossary

We provide standard definitions from professional societies or entities involved in forest stewardship and ecological restoration. These are terms that are used in the framework of recommendations and that were used during discussions of proposals and during meetings. While there are many more forest and ecology terms, these are the terms that were often raised during discussions.

Some participants requested we use terms defined by the Society for Ecological Restoration. However, this organization does not public a glossary or provide definitions in their reports.

Adaptive management (1) A process of iteratively planning, implementing and modifying strategies for managing resources in the face of uncertainty and change. Adaptive management involves adjusting approaches in response to observations of their effect on, and changes in, the system brought on by resulting feedback effects and other variables.

Adaptive management (2) Dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used, along with research results, to

Administrative Procedures Act (3) The Administrative Procedure Act (APA) governs the process by which federal agencies develop and issue regulations. It includes requirements for publishing notices of proposed and final rulemaking in the Federal Register, and provides opportunities for the public to comment on notices of proposed rulemaking.

Afforestation (1) Conversion to forest of land that historically has not contained forests. See also Deforestation.

Afforestation (2) The process of establishing trees on land that has lacked forest cover for a very long period of time or land that has never been forested.

Approved Forest Stewardship Plan – Minimum guidelines for NJ State Forest Stewardship Plans on private land.
https//www.nj.gov/dep/parksandforests/forest/docs/StewardshipPlanGuidelines1-18-18.pdf

Carbon Flux (2) Refers to the direction and rate of transfer or flows, of carbon between pools.

Biodiversity Biodiversity or biological diversity (1) means the variability among living organisms from all sources including, among other things, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems (UN, 1992). See also Ecosystem and Ecosystem services.

Biological diversity (4) Biological diversity refers to the variation among living organisms and the ecological complexes of which they are a part. This includes the interrelated nature of genetics, species, and populations across the landscape

Biodiversity hotspots (1) Biodiversity hotspots are geographic areas exceptionally rich in species, ecologically distinct, and often contain geographically rare endemic species. They are thus priorities for nature conservation action.

Carbon Pools (2) Reservoirs of carbon having the capacity to take in and release carbon.

Carbon sequestration (2) The uptake and storage of carbon. Trees and plants, for example, absorb carbon dioxide, release the oxygen and store the carbon. Fossil fuels were at one time biomass and continue to store the carbon until burned. Storage of carbon through natural, deliberate or technological processes in which carbon dioxide is diverted from emissions sources or removed from the atmosphere and stored biologically in the ocean and terrestrial environments (e.g., vegetation, soils and sediment) or in geological formations (USGS.gov).

Carbon sink (2) A carbon reservoir that absorbs and stores carbon from another part of the carbon cycle. A sink stores more carbon than it emits to the atmosphere. This store of carbon can also be termed a reservoir or pool. Although a growing forest can be considered a carbon sink, when the forest stops growing and its trees die and start decomposing, it becomes a carbon source, because it emits more carbon than it stores. A compartment within the Earth system that acquires carbon from the atmosphere and stores it for a specified period of time.

Carbon Storage (2) the quantity of forest carbon deposited in various pools and held for a period of time.

Climate change (1) A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use. Note that the United Nations Framework Convention on Climate Change (UNFCCC), in its Article 1, defines climate change as 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods'. The UNFCCC thus makes a distinction between climate change attributable to human activities altering the atmospheric composition and climate variability attributable to natural causes. See also Climate variability, Detection, Attribution and Ocean acidification (OA).

Climate Change (2) Changes in average weather conditions that persist over multiple decades or longer. Climate change encompasses both increases and decreases in temperature, as well as shifts in precipitation, changes in frequency and location of severe weather events and changes to other features of the climate system

Climate justice (1) Justice that links development and human rights to achieve a human-centered approach to addressing climate change, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly (MRFJC, 2018).

Climax forest (2) The final stage of forest succession, usually composed of shade-tolerant species that are self-perpetuating without a disturbance.

Deforestation Conversion of forest to non-forest. (1) See also Afforestation and Reforestation.

Ecological forestry (2) an approach to forest management placing special emphasis on and consideration of ecological processes and function.

Ecological restoration (5) s the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.

Ecosystem (1) A functional unit consisting of living organisms, their non-living environment and the interactions within and between them. The components included in a given ecosystem and its spatial boundaries depend on the purpose for which the ecosystem is defined in some cases, they are relatively sharp, while in others they are diffuse. Ecosystem boundaries can change over time. Ecosystems are nested within other ecosystems, and their scale can range from very small to the entire biosphere. In the current era, most ecosystems either contain people as key organisms or are influenced by the effects of human activities in their environment.

Ecosystem function (2) The major process of ecosystems that regulate or influence the structure, composition and pattern. These include nutrient cycles, energy flows, trophic levels (food chains), diversity patterns in time/space development and evolution, cybernetics (control), hydrologic cycles and weathering processes.

Ecosystem health (1) Ecosystem health is a metaphor used to describe the condition of an ecosystem, by analogy with human health. Note that there is no universally accepted benchmark for a healthy ecosystem. Rather, the apparent health status of an ecosystem is judged on the ecosystem's AII 2907 Glossary Annex II resilience to change, with details depending upon which metrics are employed in judging it and which societal aspirations are driving the assessment (following IPBES 2019).

Ecosystem services (1) Ecological processes or functions having monetary or non-monetary value to individuals or society at large. These are frequently classified as (1) supporting services such as productivity or biodiversity maintenance, (2) provisioning services such as food or fibre, (3) regulating services such as climate regulation or carbon sequestration and (4) cultural services such as tourism or spiritual and aesthetic appreciation. See also Ecosystem and Ecosystem health.

Ecosystem services (2) The combined resources and processes of natural ecosystems that provide benefit to humans, including, but not limited to, the production of food and water, the control of climate and disease, cycling of nutrients and crop pollination, spiritual and recreational benefits and the preservation or maintenance of biodiversity.

Ecosystem-based adaptation (EBA) (1) The use of ecosystem management activities to increase the resilience and reduce the vulnerability of people and ecosystems to climate change (Campbell et al., 2009). See also Nature-based solution (NBS).

Even-aged stand (4) Stand of trees in which there are only small differences in age among the individual trees (28)

Forest (1) A vegetation type dominated by trees. Many definitions of the term forest are in use throughout the world, reflecting wide differences in bio-geophysical conditions, social structure and economics. See also Afforestation, Deforestation and Reforestation [Note For a discussion of the term forest in the context of national GHG inventories, see the 2006 IPCC Guidelines for National GHG Inventories and their 2019 Refinement, and information provided by the United Nations Framework Convention on Climate Change (IPCC 2006, 2019; UNFCCC, 2021a, 2021b).]

Forest degradation (1) A reduction in the capacity of a forest to produce ecosystem services such as carbon storage and wood products as a result of anthropogenic and environmental changes.

Forest Density (2) The quantity of trees per unit of area, usually expressed as trees per acre.

Forest land (2) Land that has at least 10 percent crown cover by live tally trees of any size or has had at least 10 percent canopy cover of live tally species in the past, based on the presence of stumps, snags or other evidence. To qualify, the area must be at least 1.0 acre in size and 120.0 feet wide. Forest land includes transition zones, such as areas between forest and nonforest lands that meet the minimal tree stocking/cover and forest areas adjacent to urban and built—up lands. Roadside, streamside and shelterbelt strips of trees must have a width of at least 120 feet and continuous length of at least 363 feet to qualify as forest land. Unimproved roads and trails, streams and clearings in forest areas are classified as forest if they are less than 120 feet wide or less than an acre in size. Tree-covered areas in agricultural production settings, such as fruit orchards or tree—covered areas in urban settings, such as city parks, are not considered forest land.

Forest management Generally, the practical application of scientific, economic, and social principles to the administration and working of a specific forest area for specified objectives

Forest Planning (4) Forest plans set the overall management direction for forests.

Forest type groups (2) A combination of forest types that share closely associated species or site requirements.

Forest type (2) A classification of forest land based upon and named for the tree species that forms the plurality of live-tree stocking. A forest type classification for a field location indicates the predominant live-tree species cover for the field location; hardwoods and softwoods are the first group to be determine predominant group and Forest Type is selected from the predominant group.

Forest (4) Area managed for the production of timber and other forest products or maintained as wood vegetation for such indirect benefits as protection of catchment areas or recreation

Fragmentation (forest) (2) The breakup of a large land forest area into smaller patches isolated by areas converted to a different land type. Opposite of connectivity.

Fragmentation (habitat) (2) The break-up of a large continuous land area by reducing and dividing into smaller patches isolated by areas converted to a different land type. Habitat can be fragmented by natural events or development activities.

Habitat (2) The environment in which a population or individual lives; includes not only the place where a species is found, but also the particular characteristics of the place (for example, climate or the availability of suitable food and shelter) that make it especially well-suited to meet the life cycle needs of that species.

Harvest (4) The removal of trees for wood fiber use and other multiple use purposes (36 CFR 219.16). (FSH 1909.12, 60) Timber harvest transfers carbon off the forest ecosystem and stores it in wood products like lumber.

Indigenous Peoples (1) Indigenous Peoples and Nations are those that, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present principally non-dominant sectors of society and are often determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as Peoples, in accordance with their own cultural patterns, social institutions and common law system. Cobo (1987)

Invasive nonnative species (2) Are those animal and plant species with an extraordinary capacity for multiplication and spread at the expense of other native species. Plants in this category may or may not be designated as noxious weeds.

Invasive plant species (2) Nonnative plant species that invade or are introduced into an environment or ecosystem in which they did not evolve where they have the ability to compete with and at times overshadow, the existing native plant species. Invasive species are also likely to cause economic or environmental harm or harm to human health. Invasives include seeds, eggs, spores or other biological material capable of propagating that species, that is not native to that ecosystem (with respect to a particular ecosystem). Noxious weeds are a specific type of invasive plants that carry a legal designation due to their potential for detrimental impacts to the environment.

Invasive species (1) A species that is not native to a specific location or nearby, lacking natural controls, and that has a tendency to rapidly increase in abundance, displacing native species. Invasive species may also damage the human economy or human health.

Inventory (forest) (2) A survey of a forest area to determine data such as area, condition, timber, volume and species for a specific purpose, such

Keystone species (2) A species whose presence and role within an ecosystem has a disproportionate on other organisms within the system.

Land Use (2) Activities taking place on land, such as growing food, cutting trees or building citie

Monitoring (2) A process of collecting information to evaluate whether or not objectives of a project and its mitigation plan are being realized. Monitoring allows detection of undesirable and desirable changes so that management actions can be modified or designed to achieve desired goals and objectives while avoiding adverse effects to ecosystems.

Old growth forests (4) Old growth encompasses the later stages of stand development that typically differ from younger stages in a variety of characteristics that may include tree size, accumulations of large dead woody material, number of canopy layers, species composition and ecosystem function

Overstory (2) The portion of the trees, in a forest of more than one story, forming the upper or uppermost canopy layer.

Prescribed burn (4) refers to the controlled application of fire by a team of fire experts under specified weather conditions to restore health to ecosystems that depend on fire.

Proforestation (2) is the practice of growing a forest and keeping it intact in order to maximize its ecological potential.

Reforestation (2) the reestablishment of forest cover either naturally or artificially.

Regeneration (2) Seedlings or saplings existing in a stand or the act of renewing tree cover by establishing young trees naturally or artificially.

Riparian area (2) An area with distinctive soils and vegetation between a stream or other body of water and the adjacent upland area consisting of vegetation that requires free or unbound, water for survival.

Silviculture (2) Applying knowledge of silvics to culture the forest. Silviculture is practiced in four stages establishment, intermediate operations and harvesting and stand/forest protection.

Stand density (2) A quantitative measurement of tree stocking, expressed in terms of number of trees, total basal area or volume, per unit of area. More precisely, a measure of the degree of crowding of trees within a stand.

Succession (2) The process of one plant community modifying the environment in such a way that favors the establishment and eventual domination of another plant community. One overtakes another, which is then overtaken by another.

Sustainability (1) Involves ensuring the persistence of natural and human systems, implying the continuous functioning of ecosystems, the conservation of high biodiversity, the recycling of natural resources and, in the human sector, successful application of justice and equity.

Sustainable forest management (1) The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems (Forest Europe, 1993).

Sustainable land management (1) The stewardship and use of land resources, including soils, water, animals and plants, to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions (adapted from WOCAT, undated).

Thinning (4) Cuttings made in immature stands in order to stimulate the growth of the trees that remain and to increase the total yield of useful material from the stand

Thinning (2) The cutting and/or harvesting living trees to scientifically determined lower targeted densities, where a majority of the forest growth during this planning cycle in treated areas will come from existing living trees retained within the forest, rather than from the establishment of new trees (regeneration).

Timberland (2) Forest land that is producing or is capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation. (Note Areas qualifying as timberland are capable of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included.)

Understory (2) All forest vegetation growing under an overstory and midstory in a forest.

Wildland-urban interface (2) The line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Describes an area within or adjacent to private and public property where mitigation actions can occur to prevent damage or loss from wildfire.

Sources for definitions

(1) IPCC, 2022 Annex II Glossary [Möller, V., R. van Diemen, J.B.R. Matthews, C. Méndez, S. Semenov, J.S. Fuglestvedt, A. Reisinger (eds.)]. In Climate Change 2022 Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 2897–2930, doi10.1017/9781009325844.029

https//www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Annex-II.pdf

(2) NJ Forest Action Plan, NJ Department of Environmental Protection, Division Parks and Forestry, Trenton, NJ, December 2020. https//nj.gov/dep/parksandforests/forest/njsfap/docs/njsfap-final-12312020.pdf

(3) USEPA, Summary of the Administrative procedure Act, 1946. https//www.epa.gov/laws-regulations/summary-administrative-procedure-act#~text=The%20Administrative%20Procedure%20Act%20(APA,on%20notices%20of%20proposed%20rulemaking.

(4) US Department of Agriculture/US Forest Service, Glossary and List of Acronyms, March 2010. https//www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5260256.pdf

(5) Society of Ecological Restoration, Restoration Resource Center What is Ecological Restoration? (ser-rrc.org), https://www.ser-rrc.org/what-is-ecological-restoration/.