

Report to the Joint Senate Environment & Energy and Assembly Environment & Solid Waste Committees

March 15, 2023

We are writing this report to provide a different perspective on the “consensual framework” as provided by the NJ Forest Task Force (FTF). Who are “We”? We are: The member organizations of the New Jersey Highlands Coalition; we are the individual members of the Coalition’s Natural Heritage Committee, which is a gathering of organizations, interested individuals and credentialed science professionals who seek to recommend the most appropriate and protective strategies and policies for New Jersey’s heritage species and habitats for public lands with a non-exclusive focus on the Highlands region; we are also the individuals and organizations who have participated in the FTF and believe there is more knowledge and recommendation that should be shared with the Legislature at this time than the sixteen recommendations reported by the official NJ Forest Task Force to be the basis for a consensual framework.

Our report builds on the substantial body of information and knowledge we have compiled, which informs our attached policy recommendations (and which is appropriately cited in the Recommendations section of this document). Because of the climate crisis, it is imperative that we quickly adjust how we view our publicly owned forests—but do so wisely and informed by science. That is the reason we are providing this alternative report. It would be inaccurate for anyone to characterize this as a *minority report*, because there was no direct polling by the FTF to establish which side one aligned with—traditional forestry or ecological restoration. We believe we very well may represent a majority.

Why have we prepared this report? The FTF was charged to “*identify and debate the major issues and ultimately develop consensus solutions which could form the basis for future legislation*” (emphasis added). There was, however, very little debate in the FTF’s process, particularly on the most controversial and divisive subjects of mechanized cutting and clear-cutting of mature, public forest and of wood removal.

Although there were two FTF meetings at which proponents of proforestation were provided with a limited opportunity to present their views on a complicated issue, followed by counter presentations by foresters, and then FTF participants were allowed to ask clarifying questions, such a forum could hardly be called a robust debate about logging. By not debating this issue, aside from failing to fully respond to its charge to do so and to address climate change, the FTF missed a critical opportunity to better inform participants about these matters. Although many FTF participants were committed to one or the other side of this issue, there are also many participants who remain undecided. There are also no shortages of misunderstanding and misinformation surrounding the issues for which a moderated, thorough debate could have provided clarity, perhaps also providing those who were undecided ample facts upon which to draw a conclusion. Many of us share the opinion that the FTF leadership intentionally suppressed debate on this issue. The FTF leadership was unexpectedly weighted in favor of a

more traditional forestry approach to forest management. **Proforestation is a newer concept that is responsive to the carbon sequestration values of the forest's ecology and diminishes timber value as the primary lens through which to view forest health.** If the legislature were to direct the NJDEP Commissioner to promulgate regulations that elevated proforestation to a primary goal in its management of mature public forests, the NJDEP would be required to make significant changes in how public forests are managed and how forest stewardship plans are approved. Similarly, non-profit organizations, such as New Jersey Audubon, which have fee-for-service programs and receive grant funding to write and implement forest stewardship plans would also be required to significantly modify their operational models when proposing work on public lands—including the work that is currently underway at the Sparta Mountain Wildlife Management Area.

What is the difference between *ecological restoration*—a relatively new concept of forest management, which draws heavily upon the principle of proforestation, and traditional forestry? Ecological Restoration considers the primary ecological components of the forest: water resource production and storage; biodiversity; soil complexity; compatible human recreation; and carbon capture and storage, to be of equal importance. Traditional forestry, on the other hand, elevates timber production as the primary focus. A healthy forest to a forester is one that maximizes board/feet numbers. Sustainable forestry seeks to maintain high productivity of wood products in the long term. As mitigation for greenhouse gas emissions becomes a greater concern, public land managers would more appropriately turn to a practitioner of ecological restoration, a forest professional who employs the principles developed by the [Society for Ecological Restoration](#).

We hope you agree that *climate change* must more fully inform the management of New Jersey's public forests than it does today. To avoid worsening the climate crisis and to improve climate resilience, our public forest policies must: stop cutting mature native trees; stop clearing the canopy and stop removing logs; and most importantly, stop clearing old forests to grow young forests. **The scientific proof for larger, mature trees sequestering the most carbon is unequivocal.**

A significant accomplishment of the FTF is the recognition that the NJDEP is managing State-owned forests without formal regulations adopted pursuant to the Administrative Procedure Act, as it was directed several years ago by the Legislature. They are also approving Forest Management Plans (FMP) for county, municipal and non-profit owned lands, despite these FMPs being defined in the regulations as applicable only for private lands— clearly misapplying the criteria used for a private property owner to qualify for an agricultural tax assessment. This acknowledgement came after we provided a deeply detailed, written analysis of the NJSA Title 13 statutes and the adopted NJAC Title 7 regulations to the Regulatory Subgroup of the FTF.

Given that the Department is approving and implementing FSPs/FMPs without duly adopted regulations, without a mandate from the Legislature, and without any accountability to the public, a moratorium on the approval of new FSPs/FMPs and on the implementation of the remaining phases of approved plans until rules could be promulgated is appropriate.

Although we support more of the individual recommendations of the FTF Framework than we oppose, the New Jersey Highlands Coalition decided not to sign on to the Framework because it is written with such vagueness that, depending upon how certain terms are defined or interpreted, forest management under the status quo, such as the current Sparta Mountain FSP, would likely continue unchanged and without any increased emphasis on climate resiliency. Maintaining the status quo, to continue with a forestry-centric management of public forests, appears to be an unacknowledged bias of the majority of the FTF leaders.

It also should be noted that some organizations that have signed on to this Report chose to sign on to support the NJFTF's Framework. They believe the Framework is a good starting point, but also believe it could have gone further and they also support the further direction we provide here. *This Report and the NJFTF's Framework are not mutually exclusive.*

On the Framework, Recommendation 15 states: *"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."* The goals of the Sparta Mt Wildlife Management Area Forest Stewardship Plan have *never* been expressly for commercial profit. DEP's stated goals for mechanized harvesting and removal/sale of wood products, on public lands, are always assigned an ecological basis such as habitat manipulation, or to reverse "mesophication." However, our concerns have consistently been that the ecological damage caused by mechanized harvesting is most often greater than the intended goal of the project. On county, municipal and non-profit owned lands that are subject to Green Acres jurisdiction, Green Acres Rules require that any activities or management must be in service of recreation or conservation. The commercial harvesting of wood is prohibited, but mechanized harvesting is permitted if for conservation purposes. Again, the negative ecological impacts outweigh the stated ecological benefit, or conservation purpose. We insist, that at the very least, before approving any management operation, even when an ecological goal is claimed, that there be a comprehensive impacts analysis that demonstrates a net environmental, or ecological benefit.

Commercial profit should never be the goal of public lands management, of course.

Moreover, the sale of wood products should *not even be a component* of public lands management under any circumstances because board/feet considerations place a financial value on timber extraction when the only considerations should be ecological restoration and climate mitigation. When the public land manager has to ensure that the operation is large enough to be profitable for the logging contractor, the ecological goal is corrupted. Further, except in very limited circumstances, felled wood should be left onsite because of the generations of habitat it provides, it also replenishes soils and wood carbon is transferred to soil carbon. The machinery and access roads needed to transport the logs are destructive to many ecological components of the forest.

We fully appreciate that these are controversial matters that require a serious and robust discussion and debate. We have been encouraged by some of the FTF leaders to press for this

debate after the work of the FTF concludes, when the legislative process is underway and during discussions with bill sponsors and during committee hearings. Another opportunity will emerge when regulations are promulgated, during stakeholder outreach and public comment. But we believe the NJ Forest Task Force was established as the forum for non-governmental, public, professional and stakeholder engagement and debate. Having avoided a meaningful discussion on this topic, the FTF's work is incomplete and the public's understanding of the issues diminished.

Getting our public forest policies in order in response to the changing climate is a State agency priority per Executive Order and because it is critically important. That does not mean diminishing the importance of water resources, biodiversity and recreation—but we must recalibrate public forest policy considering the demands of climate mitigation—and, once we do, our many groups believe that the ecological values of water resource production, biodiversity and recreation will be maintained and naturally fall into the proper balance.

Our proposed recommendations for state legislation for the management of public forests are outlined below.

We address deficiencies in the NJ Forest Task Force's policy recommendations, which are curiously silent on recommending policies that address climate mitigation and true ecological health, which include ending wood removal from public forests, ending the use of heavy, mechanized logging equipment, and sharply restricting the clearing of forest canopy of native trees in public forests.

We include citations in support of these principles. We hope you accept this report in the spirit it was intended: constructive and thoughtful. And we welcome your thoughts, questions, and concerns.

Thank you, Chairman Smith, Chairman Kennedy, and members of the Assembly and Senate Environment Committees, for your leadership as we work together to protect what today's science tells us are some of New Jersey's most effective tools to mitigate the impacts of climate change, as well as what has proven to be extraordinarily important to the public's mental and physical health: our public forests.

Recommendations

A. Incorporate New Jersey's climate defense initiatives into the management of public forests

As a primary principle, all of the State's public forests must be classified as **Climate Defense Reserves** (CDRs), an integral element of the New Jersey climate defense strategy, alongside the other elements specified in the *80x50 Global Warming Response Act Report of 2020*. The survival of subsequent generations will depend on how quickly we respond to the climate crisis, by taking the responsible steps we can take today.

The public forests of northern New Jersey are particularly important CDRs because these forests substantially outperform in their delivery of climate defense services critical to all the communities across the northern region of the State and beyond.¹

CDRs deliver ecosystem services for both greenhouse gas (GHG) mitigation and climate adaptation. (Note: Managing public forests as CDRs is compatible with continued management for water resource production and storage, biodiversity, recreational, cultural, and educational services).

- Net GHG emissions mitigation services are critical now and at least across the next few decades, until we decarbonize the global economy.² CO₂ increases in the atmosphere will persist for centuries.
 - The 80x50 report estimated that natural land carbon sequestration offsets 8% of NJ GHG emissions in 2018. *Once NJ achieves 80x50, NJ natural land carbon sequestration will be offsetting 33% of NJ GHG production.*³
 - Protecting and strengthening carbon capture and storage capability provides the highest return-on-investment available to New Jersey.⁴
 - Mature forests represent the highest rates of carbon capture and storage and annual carbon sequestration among all terrestrial systems.⁵
 - Public forests comprise half of New Jersey forests.
 - Public forest carbon management is in the top tier of public domain net GHG emission mitigation actions available to NJ.³
- Climate adaptation services must be meaningfully protected *now* to minimize the impacts of climate disruption.
 - Forests carry a major role to intercept and infiltrate the increasingly heavy rainfall as experienced in events like Ida in 2021. They are 40% of NJ's rainfall catchment area (one half of which is public forests)⁶.

¹ [Resilient Land Mapping Tool](#) The Nature Conservancy

² New Jersey's Global Warming Response Act 80x50 Report – 2020

³ New Jersey's Global Warming Response Act 80x50 Report – 2020 p. xix

⁴ Griscom, B. W., J. Adams, et al. 2017. Natural climate solutions. PNAS 114(44): 11645–11650

⁵ Mark Anderson Wild Carbon: A Synthesis of recent finding on Carbon Storage in Old Forests – International Journal of Wilderness – Dec 2021

⁶ New Jersey State Forest Action Plan – 2020

- Forests reduce and slow runoff that otherwise makes flooding more acute.
- Forests filter and infiltrate drinking water.
- These same forests are NJ’s reservoir for biodiversity, the basis for ecosystem resilience.
 - NJ ecosystems already damaged by 19th and 20th century development must be managed through the major additional stresses of climate change.

B. New Jersey Public Forest Management, Specific Recommendations

A growing scientific consensus based on a growing body of recent research leads to the following recommendations regarding public forest management practices in the forests of northern New Jersey (i.e., forests outside of the Pinelands Reserve):

1. Mechanized harvesting of mature native trees in public forests shall be prohibited.
 - Mature forests capture, store and annually sequester the most carbon both above and below ground.⁶
 - Mature forests intercept and infiltrate the most stormwater.
 - Interception is proportional to leaf area.
 - Infiltration (sponginess) is proportional to surface litter and soil biomass.
 - Mature forests host the broadest biodiversity.⁷
 - Older forests develop more diverse micro-environments both above and below ground.
2. Deadwood in public forests shall be kept in place unless safety dictates that it be moved– but it should still be retained in the forest unit.
 - Deadwood is an important carbon store, and as it decomposes over the decades, it is an important habitat and food resource for the ecosystem and replenishes forest soils.⁸
 - Standing snags are important wildlife habitat.
3. Cutting trees for safety reasons may sometimes be warranted.
 - Felled wood must remain on site.
 - The wood shall be managed as deadwood as stipulated here, but removal may occasionally be warranted, e.g., for Asian Long Horn Beetle treatments.
4. Heavy equipment shall not be used off-road in public forests and natural areas except in limited circumstances and unless on weight-distributing panels.

⁷ McMahan, J.S Biodiversity: The Language of Wilderness Northeast Wilderness Trust – 2021.

⁸ Table 1. Anderson, Mark. Wild Carbon: A Synthesis of recent finding on Carbon Storage in Old Forests – International Journal of Wilderness. Dec 2021.

- Soil compaction causes severe damage to the soil structure;⁹
 - Ruts and depressions when filled with standing water are mistaken by amphibians as vernal pools; ¹⁰
 - Disturbed soils attract invasions by non-native species.¹¹
5. Early successional habitat projects shall be prohibited in mature public forests, but acceptable in already disturbed areas such as utility rights of way, abandoned farmland, etc.
- Cutting to convert mature forests to early succession habitat to protect forest edge species (e.g., golden winged warbler) causes corresponding losses of the habitat required for forest interior species (e.g., wood thrush).¹²
 - Contiguous mature forest habitat is already exceptionally scarce in New Jersey.
 - The majority of forestland in New Jersey are forest fragments, or patches of forest smaller than 1,000 acres.
 - Only 47% of forests have interior forest conditions. ¹³
 - The carbon cost of converting mature forest to early successional habit or other logging-as-management strategies will take several decades to recover to a condition of positive carbon sequestration and will always result in a decline in sequestered carbon.
6. Deer management in New Jersey will require a commitment to innovation to bring the deer population down to sustainable levels.
- Overabundant deer are a primary threat to New Jersey’s public and private forests.
 - Forest regeneration in many forests is suspended because native saplings, shrubs and ground plants cannot grow due to deer herbivory.
 - Invasive, non-native plants take over and block regrowth of native forest flora because of the deer’s preference for native species, from tree seedlings to trilliums.
 - Research has found that native plant communities will rebound when a deer population is held to sustainable levels.¹⁴

⁹ Adams and Froelich Compaction of Forest Soils Pacific Northwest Extension – 1984.

¹⁰ Calhoun, A. J. K. and Klemens, M.W. 2002. Best development practices: Conserving pool-breeding amphibians in residential and commercial developments in the northeastern United States. MCA Technical Paper No. 5, Metropolitan Conservation Alliance, Wildlife Conservation Society, Bronx, New York.

¹¹ [Forest Vulnerability to Invasion by Exotic Plants](#) Northern Research Station USFS.

¹² [New Jersey Endangered and Threatened Species Field Guide](#) Conserve Wildlife Foundation of New Jersey

¹³ [Restoration and Resilience in New Jersey's Forests](#) Forest Guild

¹⁴ Almendinger, Van Clef, Kelly, Allen, Barreca. Restoring Forests in Central New Jersey through Effective Deer Management. Ecological Restoration – Dec 2021.

- NJ should cease all current programs that encourage increases of deer populations or provide deer habitat.
 - Creating early successional habitat encourages increased deer populations by providing the edge habitat deer prefer.
- 7. NJ Invasive Species management requires a strategy and plan for timely and efficient control of emerging and threatening invasives and also containment of widespread invasives.
 - Important elements include establishing an Invasives Species Council and collaboration with neighboring states and private organizations.
 - The NJFTF Invasives Species work group, which includes members working on this report, has documented suggestions and is working with Senate staff on legislation.

C. New Jersey Public Forest Governance Recommendations

1. The Legislature, based on principles outlined here, will direct the NJDEP to pursue a transparent and publicly engaged process to amend New Jersey's Forestry rules at NJAC 7:3 to include rules and regulations specifically pertaining to forest stewardship plans for publicly owned forest lands, including state-owned forest lands, as authorized by Section 13:1L-36.
 - The NJFTF regulatory subgroup agreed with our analysis that determined that "The NJDEP has not adopted any rules and regulations, pursuant to the 'Administrative Procedures Act', for forest stewardship plans for publicly owned forests in NJ ..., other than the Pineland Comprehensive management plan rules at NJAC 7:50 and New Jersey's Natural Areas System rules at NJAC 7:5-A."
2. Pending DEP's adoption of rules for the management of public forests, there shall be an executive order, or a legislative mandate, or an Administrative Order, prohibiting approval of any new public forest management or stewardship plan and the suspension of activities of any approved forest stewardship or management plans for public forests.
 - Future phases of existing, formerly approved plans shall require approval per the new rules.
3. The Legislature will clarify that the Exemption under the Highlands Water Protection and Planning Act for forestry activities approved by the State Forester is only applicable to privately-owned lands.
4. Similarly, clarification that the permit-by-rule for forest stewardship activities under Freshwater Wetlands Rules at NJAC 7:7A-2.4(d) et al and Flood Hazard Area Control Act Rules, Permit-by-Rule 26, at NJAC 7:13-7.26 are intended exclusively for privately owned lands and do not apply to publicly owned forests.

SIGNATORIES

Organizations:

New Jersey Highlands Coalition
NJHC's Natural Heritage Committee
The Watershed Institute
Raritan Headwaters Association
Pinelands Preservation Alliance
Turtle Clan of the Ramapough Luunape Nation
Sourland Conservancy
Passaic River Coalition
Great Swamp Watershed Association
Great Egg Harbor Watershed Association
New Jersey Environmental Lobby
New Jersey Environmental Education Fund
Alliance for Historic Hamlets
Morris County Trust for Historic Preservation
Ridgeview Conservancy
Thonet Associates
Princeton Environmental Commission
Sustainable Madison Advisory Committee
Friends of Drew Forest
UU (Unitarian Universalist) Faith Action Now
New Jersey Student Sustainability Coalition
Woods & Wayside International
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