



## NATURAL HERITAGE COMMITTEE

### STATEMENT OF PRINCIPLES ON FOREST MANAGEMENT AND RESTORATION FOR PUBLIC LANDS

#### **Introduction**

New Jersey is facing increasingly damaging climate related events. New Jersey is one of the fastest warming states and one of the most vulnerable to flooding. As NJDEP Commissioner LaTourette stated in the aftermath of Hurricane Ida, “New Jersey is ground zero for the worst impacts of climate change — period.” As part of its plans to mitigate this threat the GWRA plan calls for a 33% increase in carbon sequestration by 2050. Achieving this goal will be challenging. The GWRA 80x50 Report states, “*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) (emphasis added).

A significant portion of this increase will have to come from public forests. Unfortunately, these forests are under attack today by insects, deer, invasive plant species and special interests who are clear-cutting a significant acreage of public lands, based on questionable claims regarding the need to protect selected species, defend against climate change and mitigate carbon loss. In addition to actually reducing overall carbon storage and carbon sequestration capacity these threats also imperil our drinking water, increase flood risks, reduce biodiversity and diminish the use of our public lands for recreation.

New Jersey has no policies or regulations to address these threats to our public lands. We are inappropriately applying regulations promulgated to discourage the development of private forests to manage public lands, resulting in the logging of public forests. Specific policies must be based on clear priorities for public forest management such as maximizing carbon storage and sequestration and the most current peer-reviewed science. We need a better approach, based on the principles of *ecological restoration* as the standard for stewarding and managing public forest lands and to maximize carbon sequestration and we must end the extraction of timber and wood products for virtually any purpose. Stewardship plans must incorporate a transparent stakeholder process; require comprehensive inventories of rare flora and fauna; identification of regulated environmental features such as riparian corridors; and include broad interdisciplinary oversight. In order to ensure these policies are followed they need to be mandated by legislation.

New Jersey Highlands Coalition, as recommended by its Natural Heritage Committee and by New Jersey Forest Watch, propose fundamental principles to guide the development of new legislation and regulations for the stewardship and management of publicly owned forested lands.

The people of New Jersey highly value its public open spaces and in particular, intact forests. Preserved forests are essential parts of a healthy environment providing a number of ecosystem services, including a plentiful supply of clean drinking water and climate change mitigation. Further, public forests offer us abundant opportunities for accessible outdoor recreation, greatly benefiting our physical and mental health. In many cases, forests provide the only viable habitat for a range of wildlife species, including many that are rare, threatened, or endangered. Legislation including the Pinelands Protection Act and the Highlands Water Protection & Planning Act were enacted in large part to protect the ecosystem services of the natural landscape. And the State and many counties and municipalities continue to vigorously purchase open space, regularly increasing the statewide inventory of protected open space.

Current, peer-reviewed science shows that older, larger trees and established maturing forests absorb and store greater amounts of carbon per acre compared to younger forests and continue to do so for hundreds of years. Furthermore, New Jersey's maturing deciduous forests that have remained relatively undisturbed in the last century represent an enormous potential for sequestering carbon over the next century. Outside of the Pinelands, the most productive option for maximizing carbon sequestration is to allow our maturing deciduous forests to continue to mature on their own. If our priorities for managing public lands are to promote biodiversity, maximize carbon sequestration and to ensure the sustainability of the ecosystem, we must *discontinue* the mechanized harvesting of timber from preserved, maturing forests.

Before moving on to specific recommendations for managing public lands in New Jersey, it is important to recognize that the current practice of forest stewardship represents a wide range of activities, from innovative restoration projects, to veiled timber harvesting projects that claim conservation objectives as a disguise to access the valuable timber stock thriving on protected public lands or are based on false narratives such as our forests being at risk from too much carbon and therefore needing thinning. In other instances, the rubric of forest stewardship is misapplied to justify projects that manipulate environments to benefit a single interest. In the development of a framework for the management of public forest lands it is critical that projects without a sound ecological justification be prohibited, such as extracting wood for commercial sale from public lands or manipulating a forest stand's structure to favor a single game species instead of true biodiversity across all species in all types of forests. Instead, new procedures and criteria are required to ensure projects on public lands are in the public's interest and always uphold the public's trust. Standards and regulations to protect other natural resources present on a site must be followed and enforced. This new procedure must consider which practices are appropriate and scientifically justified on public lands, and limited to forestry restoration activities that promote biodiversity, maximize carbon sequestration and ensure the sustainability of the ecosystem.

A major issue in New Jersey today is the cutting or thinning of trees in intact forests outside of the Pinelands. This practice releases most of the carbon stored in harvested trees and compromises a forests' effectiveness to further sequester carbon. Recent studies have shown that logging sites become net carbon emitters for decades before enough regrowth is present to again become a carbon sink.

Logging a site reduces biodiversity and disrupts habitats and natural systems on a much larger scale than the actual area of disturbance. It is imperative that any legislation developed under these principles mandates strict guidelines to prohibit board/feet considerations from influencing forest stewardship plans. Removal of trees must be limited to circumstances when there is an unequivocal ecological objective and a clear conservation goal (e.g., to remove a pathogenic threat, or to quarantine a pest infestation), or as part of the development of structures that directly support the public's use of the park. As already occurs in the Pinelands under the Comprehensive Management Plan, timber removal requires regulatory review and permits. Outside of the Pinelands a specific permit should also be required, and no timber or wood product should be removed from the site unless for quarantining purposes. Leaving felled trees on site provides habitat for a succession of bird, amphibian, insect, fungi and microbial species. Further, use of heavy machinery should be highly restricted and less intense methods such as girdling, which replicates a natural process, should be employed whenever practicable, when the felling of trees is required and justified.

Most regulations protecting environmental and natural resources are essentially compromises, written in such a way as to not overreach to the extent of trampling private property rights, which are constitutionally protected. Private property rights are not a consideration on publicly owned lands. Maximum protection of the natural resource values provided by public lands—preserved precisely because of their natural resource values—must be the standard. Exemptions from regulations that are written to prevent a claim of a regulatory taking of private property simply do not apply on public lands.

We will support legislation that is in accordance with the principles stated here and informed by current forest and climate science, ecology and observations by experts focused on New Jersey with an aim to protect and steward the state's treasured and limited public forests. At the core of this proposal is the urgent necessity for New Jersey to promote ecological restoration of public forests and to end extraction of timber from public forests. To this end, we recommend the establishment of *Ecological Restoration Plans* as a framework to guide practices that address major problems in New Jersey's public forests, which are: the need to maximize carbon sequestration; the control of overabundant deer populations that are decimating the forest understory and inhibiting the natural regeneration of the forest; removal of non-native plant species invading public forests; promoting biodiversity; water production and filtration; air filtration; and compatible outdoor recreation; and the protection of cultural resources. *These are the necessary objectives if the goal is to protect the public's investment in these forests.*

The procedure for developing and implementing *Ecological Restoration Plans* must be by nature interdisciplinary in order that the full suite of natural and environmental resources present on a proposed site are identified and appropriately protected. Comprehensive inventories of flora, fauna and regulated environmental features must be required before a project proposal is written to ensure it is meeting the needs of that particular site and its ecosystem, and that the stewardship activities do not sacrifice any one ecological component in favor of another. This procedure must also include robust and meaningful stakeholder engagement with the public. This will inform the plan's objectives based on local use, local knowledge and expertise, while also eliciting community support for projects to ensure that the public's trust is upheld.

### **Statement of Principles**

- When drafting a legislative framework through which New Jersey protects its public forest lands, we urge the Legislature to start with a findings report of the existing documented threats and emerging concerns for the State's forests. An evaluation of the conditions of forests held by state, county and local government units. The legislative findings report should characterize distinct forest regions in the State as well as the evolution of these regions, including the effects of the deforestation from charcoaling, land clearing and agricultural development and the qualitative differences in forest integrity, such as between forests with undisturbed soils and post-agricultural forests. Such a study should also include an assessment of carbon stocks and the potential maximum carbon tonnage. New Jersey's forests cannot be characterized as one ecosystem, and a one-size-fits-all approach will render any framework or legislation insufficient.
- It is imperative that local government units and land managers be encouraged to develop and implement plans that restore public forest lands. Sources of financial assistance and incentives should be investigated and discussed. The NJDEP could be tasked with helping local government units locate grant funding and interested non-profits or academic institutions with qualified expertise might be enlisted to support this outreach.
- Logging or the removal of any wood product should not be permitted on public lands, except when absolutely necessary to address a documented threat to health and safety, to remove a pathogenic or insect threat, or as part of an ecological restoration project under the jurisdiction of the Pinelands Commission, or for the development of structural amenities that directly support the public's use of the park. The majority of New Jersey's public forests were acquired for preservation and the protection of the natural resources on that land. The commercial sale of timber extracted from public forests contravenes the public trust and runs completely counter to the intended protection of the natural resources on these lands.
- To maximize climate resilience no wood or forest products shall be removed from publicly owned forests. All woody material must be left in the forest as habitat and as carbon sequestered in soil. Invasive, or infected plants, or those that pose a hazard must be managed on site rather than moved and disposed of elsewhere.
- New Jersey must increase its overall carbon sequestration rate by 33% by 2050 if we are to meet our Global Warming Response Act (GWRA) objectives. To meet this critical objective, we must retain as much existing carbon storage as possible and greatly increase sequestration capacity to overcome constantly increasing development pressures. While planting trees in previously disturbed areas is welcomed, this is far less effective than preserving maturing and old growth, which must be the priority. The current and potential carbon storage in our public forests must be quantified.
- One of the most significant pitfalls with the current procedure for preparing Stewardship Plans for public land is that their design and approval is carried out almost exclusively by foresters whose training and expertise is generally restricted to traditional forestry, without requiring an understanding of ecology. Traditional forestry prioritizes a forest's timber productivity. Ecological Restoration Plans on public land should be developed and approved by an interdisciplinary council that includes a diverse expertise related to forest sciences and

interested members of the public. This may include ecologists, a botanists, a wildlife experts, Certified Ecological Restoration Professionals or other qualified persons. Individuals or parties with financial interests in the Stewardship Plan may not participate (a recently approved Woodland Management Plan for a municipal forest in Washington Township, Warren County included the provision of 20% of the income from the sale of timber going to the plan's author/manager).

- Habitat creation by clearing forests should prohibited.
- Current inventories of forest stands for the purpose of Forest Stewardship Plans are not sufficient and often irrelevant to the concerns on public land because they do not adequately quantify any values beyond timber production. The federally adopted Floristic Quality Assessment Index (FQI) should be used to identify all species present and to rank their value accordingly as well as recorded on the national FQI database. Simply identifying a site's threatened and endangered species is inadequate. The site inventory should also designate any areas of native soil and identify tracts of forest that have remained undisturbed since the era of second growth (e.g., cultivated soils, abandoned former settlements, etc.).

Non-native species that are identified in the FQI should be addressed in the management recommendations. Replanting should be restricted to species native to that habitat type. While invasive species management is referenced in current Forest Stewardship Plans, interventions to mitigate the spread are rarely implemented. In fact, in the wake of the mechanized logging of a site, invasive species are generally among the first to repopulate the area, being transported by machinery moving through the forest, exploiting the newly exposed soil.

- Overabundant deer populations—which almost always increase after logging due to the newly available forest edge and increased browse—are an urgent threat to the regeneration of our forests and illustrate the deficiencies of the typical objectives of current Forest Stewardship Plans. Deer management is rarely incorporated into such plans. The phenomenon of “empty forests” is evident all across the State and is driven by overabundant deer destroying the understory of the forest, allowing non-native plant species to out-compete native species (this issue persists on private land as well as State owned forests, with very few exceptions).
- Off road vehicles (ORVs/ ATVs) present an ongoing concern on both public and private land. ORV's regularly take advantage of newly cut logging roads in areas where motor vehicles are prohibited, accelerating forest degradation by severely disturbing soils, negatively impacting wildlife and diminishing the visitor's experience. Discouraging access for this activity is not currently required of a Woodland Management Plan or Forest Stewardship Plan.
- Fire Management is especially important in the Pinelands and can be implemented as a useful tool in a variety of environments. Where fire is part of a restoration plan a detailed assessment of potential hazards should be noted and state-of-the-art surveillance technology included, guided by a state-wide Fire Strategies Plan with robust fire-proofing strategies required. Mechanized thinning has been proven to often result in more intense burns, rather than stop fires and should never be used outside of specifically appropriate areas such as

designated sections of the Pine Barrens. There is no justification for setting a minimum acreage for prescribed burns in New Jersey.

- Monitoring of environmental conditions is vital on public land and needs to be expanded. All proposed projects should be available for review and comment online, including regular updates on the results and achievements of implemented restoration plans (not merely activities completed) and serving to inform future projects on similar landscapes or facing similar threats.

The New Jersey Highlands Coalition and the NJHC Natural Heritage Committee wish to have a continuing constructive dialogue towards drafting urgently needed legislation establishing an effective program for the stewardship of New Jersey's treasured public forests, to meet the state's climate and biodiversity objectives and to protect the public's trust and investment in its forests for now and for future generations.