# Forest Management Policy in the Northern Forest: Ecological Economics Approach to Assessing Policy Implications

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#### **Abstract**

The Northern Forest is a unique resource for the communities that exist within its boundaries which extend through portions of New York, Vermont, New Hampshire and Maine. The 26 million acre expanse of forest is the economic, cultural, recreational, and perhaps most importantly, ecological mainstay of the region. Currently, over 80% of the total acreage is owned privately, 17% lies within public parks and forests, and a mere 3% is managed by the federal government. In recent years, shifts in ownership within the privately owned portions of the forest have increased in both numbers of transactions as well as size of transactions. A threat to the stability of the Northern Forest arises from the change in the nature of ownership (a new trend toward short term "investment ownership" and vacation home encroachment has occurred), and the volatility in land tenure.

Forest management policies and programs play an important role in the Northern Forest due to its inherent private ownership makeup. Unlike the larger expanses of federally managed forestland in the western United States, the northeastern lands are largely subject to the whims of the private owners. Similarly, a considerable amount of public value is derived from privately owned lands. Management policy guides private landowners' actions through underlying incentives for action. The Northern Forest Lands Council (NFLC) is the figurehead of policy recommendation and research currently. This paper aims to review forest management policy recommendations put forth by the NFLC. Furthermore, it will evaluate the policy incentives and implications in the context of ecological economics, particularly in regards to scale, distribution, and allocation.

## Introduction

The Northern Forest is a vast 26 million acre expanse of forest ecosystem that stretches from Maine through northern New Hampshire and Vermont to the Great Lakes in New York. It constitutes the largest contiguous stretch of undeveloped land in the eastern United States and is unique in several ways. It not only supports a diverse array of ecosystems, it also serves as a major social and ecological engine for the millions of people who live in and visit the area each year.

As with many similar tracts of forested land in the western half of the country, the Northern Forest Land (NFL) provides major ecosystem services such as air and water purification, habitat provision, and stock-flow resources. However, unlike the primarily public-owned/managed western forests, the NFL is predominantly owned privately. This has major implications for management of the land, especially when the trends of land ownership in the northeast are moving shorter land tenure periods and large scale transfers of land. In addition to the private ownership issues, the NFL is also currently being threatened by unsustainable forestry practices, economic disincentives to conserve the land, as well as air and water pollution. (Northern Forest Alliance, 2002)

The Northern Forest Lands Council (NFLC) was created in the early 1990's to serve as a policy research committee with the specific goal of "identifying ways to reinforce the region's existing patterns of land ownership and use." (NFLC, 1994) This paper aims to investigate and analyze a number of management policies that the have been implemented or are recommended to be implemented by the NFLC. This will be done in a three part process: First, a brief history of some of the key economic and political events that led to the relatively large amount of attention being brought to the NFL. Next the policy recommendations and general approach of the NFLC will be reviewed. Finally, the specific impacts and implications of these policies will be analyzed through the lens of ecological economics with special respect given to the core areas of appropriate scale, just distribution, and efficient allocation.

# Before the NFLC: Political and Economic Events Trigger a Crisis

In 1990, the Northern Forest Lands Council was created by the U.S. Congress with the specific mission to investigate and recommend policy changes that would prevent threats to the existing way of life within the region. (Northern Forest Lands website, 2000) Prior to that, two other groups - the Northern Forest Lands Study and the Governors' Task Force - studied the interaction of the communities within the forest and the land itself. Several key events led up to the creation of these committees and the subsequent policy changes the committees influenced.

During the 1980's, a chain of events, both economic and political in nature, brought about an air of instability in the NFL region. The "crisis" was triggered by several huge land sales - most notably, the massive Diamond International land purchase made by British financier James Goldsmith. Diamond International, one of many similar large scale timber companies in the area, was in economic doldrums following years of low timber prices and high overhead costs related to holding millions of acres of timberland. The Diamond Purchase (and its subsequent division and resale) along with a booming economy in the mid-80's sparked fears among state and local governments that the working forest landscape that surrounded them was in danger. The specific fears stemmed from development of housing, both new first home and "second" vacation homes, and short term-profit oriented land tenure trends (i.e. cut and run tactics in the timber industry). (Klyza and Trombulak, 1994)

These perceived threats led to two somewhat coincidental creations from the political sphere: The Governor's Task Force on the Northern Forest Lands and the Northern Forest Lands Study (NFLS), conducted by the USDA Forest Service. Both organizations, which worked in conjunction with each other to evaluate the extent of the threats, were "politically" possible due to several characteristics of the northeast. First, the population of the area was relatively environmentally conscious and had generations of interaction with the NFL. Second, the congressional delegates from Maine, New Hampshire, Vermont and New York held influential positions in congress during the time period. And finally, extremely dedicated and outspoken private property rights activists had an overwhelmingly loud voice in the issues. This property right faction ended up

playing a very high impact role in the policy recommendations (see below) and nearly prevented the creation of the NFLC. (Klyza and Trombulak, 1994)

After the conclusion of the NFLS in 1990, they put forth a recommendation to congress to create a council that could further investigate the incredibly complex issues surrounding the future of the NFL and make recommendations on how to form effective policy to address the issues. The NFLC was created in 1990 and was given the mission to conduct public forums and research in the attempt to discover ways to maintain the status quo in terms of land use and ownership. (NFLC, 1994)

### NFLC Policy Recommendation Approach

In 1994, the NFLC submitted a publication, *Finding Common Ground*, to federal and state legislatures. The document, which was subtitled "Conserving the Northern Forest", specified 37 policy recommendations that were grouped in four main areas: fostering the stewardship of private lands, protecting "exceptional" resources, strengthening economies of rural communities, and finally, promoting informed decisions.

In 2000, a follow study was conducted by Malsheimer, Bentley, and Floyd that review the policies in terms of implementation and effectiveness. The study found that in general, the four states at least partially implemented most of the recommendations directed towards them. However, the federal policies were hardly addressed, and of those that were even partially addressed, all were economic in focus and typically in the "shotgun fashion commonly known as the pork barrel." (Malsheimer, et al. 2000)

In general, the NFLC seems to have done a reasonable job at involving the public in the recommendation process (one of their original mandates), especially given the complexity of the issues, conflicting views of stakeholders, and the relatively small budget when compared to the size of the task. However, the council itself was not completely objective. One aspect of this was related to the composition of the committee. Since Maine contains the largest portion of the NFL of the four states, it holds the majority of the representation on the council. Also, since the timber industry contributes more than any other industry to Maine's economy, timber interests are

represented very well for Maine and, as a result, on the council as a whole. The implications of this imbalance of decision-making power are great. While the council states in *Common Ground* that the final policy recommendations were the outcomes of public input, expert testimony, and discussions amongst council members, one can only hope that the non-timber interests were served justly.

Aside from makeup of the council, the strategies for recommending the policies could arguably be brought into question as well. At first glance, the majority of policy recommendations look reasonable (and many are) but the way the recommendations are addressed at treating symptoms of the problem rather than treating the cause. For example, the policies proposed by the NFLC are all geared toward the respective agency with an outline of the specific desired policy outcomes. They lack however, an overarching policy goal that can give all participating parties a big picture idea of the overall outcome. In the resource protection portion of their recommendations, the NFLC gives advice that is very specific in some regards, yet equally vague in others. Or, they will make blanket statements such as: "increase funding for land acquisition programs" but fail to set a target level of funds or even a target for land acquisition. Granted, the council was tip-toeing around the interests of both the conservationists and property rights activists, but vague recommendations are open to interpretation from any party and can result in further tension and disagreement in the end.

The argument by many ecological economists today is that policy should provide "macro-control" without compromising "micro-freedom." (Daly and Farley, 2004) The outcome of the NFLC recommendations could be summarized as micro-control with macro-confusion. The bottom line is that there is a large gap (and therefore room for interpretation) between the stated goals of the council and the implied goals put forth by the policy recommendations.

### **Ecological Economics Policy Review**

Ecological economics is based on three core principles. A *sustainable scale*, or ratio of the economy and the environment that contains it, must be determined in order to properly determine the acceptable levels of impact on the supporting ecosystem (i.e. resource stocks consumed, pollution emitted, etc.). This in turn is controlled via policy. The *just distribution* of wealth, income, and resource access in general is another key component. If the balance of wealth is not addressed, sustainability is directly affected on a number of levels. *Efficient Allocation* of resources – whether they are market or public goods – depends heavily on the policy mechanisms that are put in place. The following sections critique the NFLC policies in terms (roughly) of these three areas.

#### Scale

In order to effectively design policy, particularly when dealing with interaction between natural resources and economic activity, a set of acceptable guidelines must be established. One would assume that the NFLC had tackled this issue right away, yet upon close inspection it appears that they have nearly neglected the issue altogether. There is no discussion in their report of any findings pertaining to a minimal quantity or quality or forest land that must be maintained to ensure the vital ecosystem services are provided in perpetuity. General recommendations are made in terms of conservation on a number of scales, but the larger parameters are never set.

Aside from the fact that the scale issue was not addressed is the problem of the mission statement. "To reinforce traditional patterns of use" implicitly states that an anthropocentric stance will be taken and that the current patterns of human impact on the NFL are what hold the "rights" to remain static at a minimum. Some argue that when discussing scale, there is a "grey area" between what the economic carrying capacity is for the ecosystem and what is truly "needed" by the economic system to maintain itself. In other words, although it is usually not the case, the economic system does not necessarily need to grow to the absolute limit of what the supporting ecosystem can sustain. However, based on the mission statement, the approach taken by the NFLC is one in which, had the scale issue been addressed, the grey area would undoubtedly be consumed by the expanding economy that is merely trying to maintain status quo in terms of land use and tenure.

The final scale issue is one of political nature. The Governors' Task Force, the NFLS, and the NFLC were all addressing a specific area of forest land that was predetermined and dubbed "the northern forest." However, the effective green line placed around the region for policy and management reasons was determined for political reasons and does not reflect natural boundaries of the ecosystem. The biologically defined forest ecosystem spills over the arbitrary boundary well into Canada, Southern Vermont and New Hampshire, and Western Massachusetts. (Northern Forest Center, 2003) This brings up the issue of what "scale" is the NFLC addressing? Are the conservation and economic stability policy recommendations and outcomes only suitable for the designated NFLC area? If they were to address the scale issue, shouldn't they include the greater ecosystem and the economic activity within it?

#### Distribution

When approaching the issue of just distribution, the idea of equity is a crucial concept. Equity plays a major role in the property rights debate that held a considerable amount of sway in the public input portion of the NFLC work. Several problems arise from the property rights argument that influenced policy formation to an extent. First, those who were arguing for their own property rights (most likely local landowners within communities) feared that conservation policies would infringe on their rights to "do as they please" with their land. To a certain extent this holds merit. However, they were also inadvertently aiding every large absentee landowner that could potentially be holding vast tracts of land. The harm imposed by local land owners operating in their own self interest is minute in comparison to the harm that could be imposed by an absentee landlord. The local owner has ties to the community and is probably less likely to abuse a piece of land that has been holds value to the community or their family. On the other hand, an absentee owner has no ties to the community and is much more likely to either invest in land for short-run gain or even abuse the land over a longer term without remorse. The overall economic gains to be made by the small local owner are dwarfed by the potential gains from a large-scale land owner with no ties to the local community. The end result of these types of situations is communities left with depleted

resources and absentee landlords reaping huge profits and paying relatively little. This is far from equitable by any stretch of the imagination.

The majority of the sustainable management policies recommended for the private landowner are either voluntary or have small (or negative) incentives. This leads to low acceptance rates and poor results. Therefore, the private owner who does not follow sustainable management principles has the ability to gain on an individual level in the short run while the landowner that participates in a management program and "does the right thing" will be rewarded poorly (or even penalized as with some types of green certifications, another private management policy recommendation).

Although it does not necessarily apply to wealth distribution, the approach the NFLC takes on focusing on protecting high amenity "exceptional" lands affects resource equity among communities. The NFLC states that the "exceptional" lands that hold the best views or lake frontage are at the most risk for development. However, their policies may be focused too heavily on these areas. One could argue that these areas are doing a tiny fraction of the greater ecosystem service provision, yet receiving the lion's share of the resources in terms of protection. So, communities that hold little or no high amenity land could potentially be at a higher risk of losing their undisturbed forest land while a wealthier community near a lake gets even more money from the government to protect water front property.

#### Allocation

The efficient allocation issue in terms of the NFL boils down to what mechanism will be used to allocate the valuable resources. The objective observer would look at the situation from a distance and argue that a free market system for land and resources that has historically been loosely regulated is a large part of what created the crisis that brought the NFLC into existence. However, the political powers that be essentially provided the council with the mission to fix the problem while maintaining the characteristics of the very system that created it.

The question then, of course, is raised as to how to fix the problem. As it stands right now, a large portion of the treatment of the problem deals with taxation and adjusting the price of the resources in question. As Daly and Farley argue, this is a less effective strategy for regulating the consumption of a given resource. Since demand curves fluctuate and are hard to estimate, the resulting "desired quantity" may not be the result. A more effective method would be to actually set the acceptable quantity and let the market set the appropriate price.

Finally, without going into great detail, the Northern Forest is a public good. The federal and state governments are attempting to accommodate the market system to address the characteristics. As it has been shown many times before, public goods can not be allocated efficiently through the market system. Some basic limits need to be set to protect the rights of general public that reap the benefits from this resource base.

#### Conclusion

The NFLC was given a massive task of tackling an issue that could easily take millions of dollars and decades to address. The fact that the NFL crisis was addressed was a big step, but in the end it appears they had little productive outcome. The recommendations they made were only implemented when possible and/or convenient and were basically ignored by the organization that created them. The were under funded and disbanded at the end of their initial appointment even when their report to Congress admitted that they couldn't possibly get a grasp of many of the complex issues involved in the NFL and more work was needed. This leads one to believe that the council was never a serious attempt to address the real problems in the first place. If the goal was to distract the general public and make them think something major was being done to deal with the crisis. However, nothing significant was done to really change to conditions that made the initial crisis possible in the first place. Many of the policies recommended by the council sound good, look good on paper, and mean well, but in the end, they fall short of treating the illness rather than the disease.

## **Work Cited**

- Daly, Herman, Farley, Joshua (2004) Ecological Economics. Island Press: Washington
- Klyza, Christopher and Trombulak, Stephen (1994) *The Future of the Northern Forest*. Middlebury College Press: Hanover, NH
- Malmsheimer, Robert, Bentley, William, and Floyd, Donald (2000) The Implementation of the Northern Forest Lands Council's Recommendations: An Analysis Six Years
- Northern Forest Alliance (2002) *The Northern Forest: A Region at Risk.* www.northernforestalliance.org/newspubs/ Accessed 10/12/03.
- Northern Forest Center Website (2003)
  <a href="http://www.northernforest.org/techabout\_prog.htm">http://www.northernforest.org/techabout\_prog.htm</a> Accessed 12/5/03
- Northern Forest Lands Council (1994) Finding Common Ground: Conserving the Northern Forest. Portsmouth, NH.
- Northern Forest Lands Website (2000) *History*. http://www.northernforestlands.org/history.htm - Accessed 11/25/03.