

**Report of the Blue Ribbon Task Force  
On The Low-Use Wood Resource**

**PENNSYLVANIA HARDWOODS DEVELOPMENT COUNCIL**

**September 2008**

TO: Secretary, Pennsylvania Department of Agriculture

FROM: Executive Director, Pennsylvania Hardwoods Development Council

SUBJECT: Report of the Secretary of Agriculture's Blue Ribbon Task Force on the Low Use Wood Resource of Pennsylvania

DATE: September 8, 2008

Pursuant to the Charter of the Pennsylvania Hardwoods Blue Ribbon Task Force, established by the Secretary of the Pennsylvania Department of Agriculture on November 16, 2004, we hereby submit the final report of the Task Force. The recommendations adopted and presented here are the culmination of efforts on the part of the Task Force and its members. It is the hope of the Task Force that the information and recommendations in this report will contribute to the development of public policy for effective promotion of profitable uses of the total forest resource in the Commonwealth.

Mr. William Sturges of the Governor's Advisory Council on Rural Affairs and Dr. Charles Ray of the PSU School of Forest Resources served as co-chairs of the Task Force.

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## **FORWARD**

The hardwoods industry in Pennsylvania enjoyed long-term growth through the past decades, despite drastic changes in global business factors. A 2007 PSU study (Strauss, et al.)<sup>2</sup> concluded that the industry had reached the \$17 billion annual level, with an economic impact of over \$25 billion, particularly significant in rural Pennsylvania. Production had reached about 1.1 billion board feet. Over the past two years, that trend reversed. Today, business is down an estimated 20-30%, with every segment of the industry experiencing serious downturns. Production is estimated to be below 800 million board feet. The housing slowdown, shifts in foreign demand, state of the US economy, and sharply rising fuel costs have all had significant impacts on the industry. Hardwood exports reached the \$1 billion mark in 2006, but were flat in 2007 and expected to be down in 2008. Shipping costs, shortage of containers and low priority for loading on ships have exacerbated foreign demand concerns. These downward trends are expected to eventually reverse, however, it is more critical than ever to recognize that support for this industry is needed to weather the cycle and emerge in a stronger competitive position. One immediately available mechanism is to increase funding to the Pennsylvania Hardwoods Development Council, as it is positioned to deliver focused support in industry priority areas. A second significant mechanism is to provide funding necessary to implement the recommendations described in this report, which will strengthen the existing industry and logging infrastructure and enable development of the vast low use wood resource to develop alternative energy initiatives critical to Pennsylvania's Renewable Alternative Energy Strategy.

## EXECUTIVE SUMMARY

The total wood biomass on Pennsylvania's timberland is 1,145.8 million tons. Fifty-seven percent of the total biomass, or 657.8 million tons, is classified as "low-use wood", that is, low-grade wood material that is often not harvested due to various market factors. Applying management constraints that support sustainable harvesting of this resource yields an estimate of available low-use wood of 468.7 million tons. US Forest Service estimates clearly indicate that growth of the Pennsylvania forest clearly exceeds utilization by a significant margin. Further, unconstrained buildup of low-use biomass is a forest health issue that needs to be addressed to mitigate future risk to the Commonwealth's forestland. A major portion of this excess growth is in additional low-use wood, and the percentage of this non-economic natural resource will continue to grow as a percentage of the forest. The Task Force estimates that 6 million dry tons of "low use wood" could be harvested annually without depleting the forest from which it comes. In the 1990s, roughly 3 million dry tons were being used by industry, and current use has dropped to barely more than 1 million dry tons.

Traditional lumber producers have tested the opportunity to harvest the smaller diameter low-use wood for lumber stock, but processing constraints and wood characteristics allow for little success, thus precluding any growth in utilization of low-use wood from this important sector. High wood fiber costs, lack of uniform species, and the recent increase of engineered wood production by international competition all point toward little chance that there will be significant engineered wood investment in Pennsylvania in the foreseeable future. The wooden pallet and wood flooring industries appear to be the only growing wood products sectors in the state that utilize low-use wood; while the pallet industry appears relatively stable for now, the wood flooring industry is under growing international competition. The net effect may be negligible demand change for low-use wood from these two sectors. Taken together, the net impact of the increasing low-use wood resource with decreasing use of this resource by the traditional wood products industry indicate a continued increase in the Pennsylvania forest inventory of low-use wood relative to merchantable timber.

“Bio-refineries” and a complementary biomass energy industry of district energy projects, wood pellet and firewood production, and initiatives such as “Fuels for Schools and Beyond” would seem to be a potential significant industry for utilization of low-use wood, especially considering that most existing pulp operations have the facilities to convert to the bio-refinery concept. The only apparent way to significantly and controllably reverse the trend of increasing forest inventory of low-use wood is through the expansion of wood-based energy production and development of a Pennsylvania regional hub in bio-refinery competency and production. Wood consumed for energy is clearly accepted as a carbon neutral concept when based on harvesting from well-managed forests, as is done in Pennsylvania. Governor Rendell’s announced goal of one billion gallons a year of bio-based transportation fuels is certainly a major step in projecting an economic basis for developing our internal energy-wood based ethanol production facilities. If this step is followed by supportive legislative action in the near term, the private sector will step up to the plate with additional research and investment. However, without clear and firm state and/or federal cellulosic ethanol requirements, the development of a viable wood to cellulosic ethanol market and production capacity will not develop nearly fast enough to have the environmental and economic effects that otherwise could be enjoyed in Pennsylvania within the next decade.

The harvesting of our low-use wood would be both sustainable in perpetuity and environmentally sound from a standpoint of carbon neutrality. Conversion of the Commonwealth’s stocks of low-use wood to energy and bio-refinery products at a sustainable rate is the most socially responsible and ecologically sensible strategy for this vast, yet vastly underutilized, natural forest resource.

#### *Key recommendations in this report*

This Task Force, in the process of examining the over-abundance of so-called “Low-Use Wood” in the state, and its potential best utilization, has discovered a literal energy gold mine on the forestlands of Pennsylvania, one that will renew itself into perpetuity with proper, sustainable management and clear, consistent policy, legislation, and funding. A bulleted summary of the key recommendations of the Task Force to most productively develop and utilize this green energy source are listed here; the full set of recommendations are given in Chapter 4 of this report.

Area 1. General:

- Increase funding for PA Hardwoods Development Council

Area 2. Renewable Alternative Energy:

- Promote "Fuels for Schools and Beyond" type projects
- Encourage "smart" location of new cellulosic ethanol facilities
- Develop new technologies for low use wood
- Classify wood residue electricity as Tier I generation
- Consider co-location of ethanol plants with paper mills
- Develop cellulosic biomass information and mapping systems

Area 3. Wood Industry Infrastructure:

- Increase funding for PA Bureau of Forestry to maximize achievement of harvest goals
- Seed partnership with Allegheny National Forest to achieve 100% of harvest goals
- Promote regional rail service
- Stimulate supply from private forest landowners
- Mitigate troublesome local ordinances
- Increase education and assistance for private forest landowners

Area 4: Logging Infrastructure:

- Expand education, training, and access to capital
- Increase transportation weight limits for forest products
- Address high cost of workers compensation and unemployment insurance

For the detailed description of these recommendations, please refer to the Recommendations section of this report, Section 4, pages 70-72.

*The views represented herein are solely those of the The Blue Ribbon Hardwood Task Force and should not be deemed to represent the position of any agency, university, or individuals who assisted in this effort or any of the institutions with which those individuals are affiliated.*

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