

# Forest Industry Sector: A Panel Discussion

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**ABSTRACT.**—This panel discussion focused broadly on the forest industry sector and how forest management and research on public lands is important to the forest industry sector. Panel members provided different perspectives from the forest industry sector and highlighted some key market topics for the forest industry. The panel addressed opportunities and challenges that the USDA Forest Service will face to increase the pace and scale of forest restoration while providing forest products for the forest industry sector. The panel discussed four themes including: (1) forest market updates and wood product innovations; (2) private landowner perspectives; (3) forest industry perspectives on the forestry sector; and (4) partnerships between the Forest Service and wood products industry and private forests including the use of various contracting mechanisms such as stewardship contracts and Good Neighbor Authority. The panel included four members who addressed the four subthemes. This moderated 1-hour panel began with each panelist providing a 5-minute introduction followed by a series of questions about the forest industry sector, forest products, and forest services that come from Forest Service and private and publicly managed lands. Overall, this panel provided different perspectives on the connection among forest management, research, and the forest industry sector.

## FOREST INDUSTRY SECTOR PANELISTS

**Brian Brashaw:** Program Manager for the Forest Products Marketing Unit (FPMU) at the USDA Forest Service's Forest Products Laboratory (FPL) in Madison, Wisconsin. FPMU's mission is to work collaboratively and strategically with Forest Service and external partners to advance high-value, high-volume markets for forest products. Utilization and marketing emphasis areas include lumber, engineered wood materials, mass timber, wood energy, biochemicals and biofuels, and cellulosic nanomaterials.

**Paul DeLong:** Senior Vice President for the American Tree Farm System & Conservation at the American Forest Foundation (AFF). He leads a team of conservationists working with partners to administer the 20-million-acre Tree Farm Program and implement projects on family-owned forest lands designed to protect drinking water supplies, at-risk wildlife, and sustainably produced wood across the country. Prior to joining the AFF team in 2016, Paul was for 13 years Wisconsin's Chief State Forester and Administrator of the Wisconsin Department of Natural Resources' Division of Forestry, part of his 24-year investment serving the people of Wisconsin.

**Rick Horton:** Director of Forest Policy for Minnesota Forest Industries (MFI), a trade organization representing the major timber consuming mills in Minnesota. He advises and informs MFI members of policies, guidelines, and actions that will have an impact on timber supply and forest management activities. Horton is a Wildlife Society certified wildlife biologist with a master's degree from the University of Wisconsin-Madison. He has focused on forest wildlife management throughout most of his 25-year career, including a significant amount of Forest Service NEPA document analysis and engagement.

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**Karl Welch:** Timber Program Manager for the Chequamegon-Nicolet National Forest (CNNF). Prior to 2019, Welch also served as the CNNF Timber Sale Contracting Officer. His duties include short- and medium-term budget and implementation planning for the forest as well as direct oversight of timber sale preparation, appraisal, and contract development. Welch has planned, prepared, executed, and administered traditional timber sale contracts, stewardship contracts, stewardship agreements, and Good Neighbor Authority agreements with the State of Wisconsin, with combined volumes in excess of 1 billion board feet. Prior to working on the CNNF, Welch has worked for National Forests in Idaho and Alaska as well for the Itasca County Land Department in Minnesota.

## **PANEL SUMMARY COMMENTS**

### **Paul DeLong (PD): Private Forest Landowner Perspectives**

The influence of private landowners in forest landscapes can be shown through the example of the AFF, which supports American family-owned forests. Nationwide, a quarter of a billion acres are owned by over 11 million individuals and families with private landowners constituting the largest forest land ownership category. The daunting challenge is how to sustain this large chunk of forest land for present and future generations. First of all, it should be done through partnerships. In the last decade, AFF undertook an initiative looking at how it could achieve priority conservation outcomes in specific places. Twenty million acres of forests managed sustainably on a third-party certification occurs throughout the country, with a goal of achieving landowners' objectives and doing so in a sustainable manner. AFF recognizes the important challenges facing both forests and society. For example, in the western United States, public land dominates, but family owned private land plays a critical role in protecting water quality. Protecting water supplies requires working across private and public lands together. This is an example of shared stewardship. Maintaining healthy forest conditions on the landscape are important for providing community resilience and reducing threats to forests. In the southern United States, in a landscape dominated by private land, the scale of the biodiversity conservation effort is inspiring. There are many challenges with the prospect of building trust and in the ability of private landowners to be recognized as good land stewards, but this recognition is critical in order to achieve the outcomes everyone can benefit from.

What happens to our ability to manage forests when there are no markets for wood products? Inability to achieve a return on managed land and inability to invest in forest treatments lead to untreated forests, increased wildfire hazard, and increased risk of death and property damage. Where markets exist, incredible amounts of conservation occur; where absent (or limited), it becomes a greater challenge that puts forests at risks and conservation efforts are made more challenging. To sustain forests, there needs to be markets for forest products so that these forests can be managed using sound principles of good silviculture.

### **Rick Horton (RH): Forest Industry Perspectives**

Everybody wants something from the forest: timber, clean water, wildlife habitat, healthy soils, protection of their communities from fires—and all of it takes industry to help accomplish. Grants and partnerships allow us to do things on a small scale, but to do it at the large scale, there has to be an economic driver, which industry provides. This represents a unique partnership between public agencies who have the mandate to manage lands for all the public interests and the industry who gets it done but exists in the competitive economic world. The industry cannot do it just from the goodness of their heart; workers have to be paid, materials purchased, and facilities maintained. There is a lot of forest products competition from the global to local scale, among countries, among companies, and even within big companies.

Industry is concerned about mills completely shutting down due to the loss of the markets, which leads to the loss of jobs. The main causes of the mills' business dwindling are decreases in wood availability and high energy costs. But what can be controlled to sustain the industry?

- First and foremost is having a sustainable and reliable supply of wood. A long-term, reliable supply of wood plays a key role in the decision to invest.
- The other thing is the quality of the wood. Here in Minnesota, for example, people have been chasing old aspen for the last 20–25 years. Now there is a whole generation of foresters that thinks that aspen should be managed on a 75–80 year rotation, but it should not. A better rotation length is 50 years. There is a need to change that and start putting some quality wood on the market instead of old, decadent stuff that is no longer any good.
- Thinning operations produce a lot of small-sized products, which are difficult to use for the industry.
- Another major concern is transportation cost. Foresters need to know where their mills are located, know where their procurement zones are, and understand that transportation is a big cost to the mills. They should put emphasis on production in the forests that are close to the mills, and those forests that are far away can be utilized for experimentation and other options.
- While designing timber harvesting prescriptions, foresters should think about efficiency onsite: Is the site an efficient landing area for the operators, can equipment be placed and used there, can equipment be transported, etc.? Every constraint put on operation leads to loss of efficiency.
- Everything should be done to keep the local industry thriving. It is a lot easier to keep a mill open than to restart a closed one or bring in a new one.
- Forest Service staff should tour the local mills, meet with their managers, get to know the local industry and what their needs are, and work with them to help manage the things that the Forest Service wants from the forest.

### **Brian Brashaw (BB): Forest Products Research Perspectives**

The FPL focuses on a couple of core principles. First, healthy, sustainable forests need a healthy and competitive industry. Second, the industry needs markets for all of the parts of harvested materials (there are gaps in the market right now). These markets exist both locally and globally. To support these core principles, the FPL focuses on research and demonstration projects and technical assistance. For example, about \$9 million was recently granted through the National Wood Envision Program to spur market development in areas of wood products and wood energy.

Paper and pulp are still incredibly important. Currently, mills are diversifying by looking for new product applications. Although the paper market is decreasing, packaging, tissue, and toilet paper markets are increasing, and there is diversification in specialty paper. Some of the pulpwood in the southern United States goes through the Panama Canal and starts filling markets in Japan or Korea or other Asian countries, as it is cheaper to get low-cost fiber out of the southeastern United States and barge it across the ocean rather than get it out of Pacific Northwest region.

The lumber market is driven by housing and the United States is still below the 60 years average in housing starts. In the lumber market, about \$5 billion in softwood lumber is coming on sales from the United States with even some lumber exports to Canada, as it is cheaper to ship pine to Canada than their local spruce/pine/fir. The hardwood industry has

changed: For example, there has been a loss of furniture manufacturing to China over the last couple of decades.

Another important market to cover is the wood energy market. Although in the U.S. midwest region, solar and wind are now prevailing alternative energy sources, wood-based energy is the only energy source that helps us manage our lands. In this particular market, success depends on location. In the U.S. southern region, exports of 15 million tons of wood pellets go to Europe, primarily the United Kingdom, where wood energy is policy driven and creates an opportunity. However, in the U.S. midwest region, wood pellets are only for the domestic market, as it would be too expensive to deliver them to the coast and export them overseas.

### **Karl Welch: Forest Service's Forest Products Perspective**

The existence of a robust industry makes forest management much easier. The relationship between the wood products industry, private businesses, and public land management are symbiotic. Recognizing the benefits of this relationship helps to get things done; if there is a need for a product, there is an opportunity to sell and budget to manage and implement what needs to be done. A bright future for wood products and forest management are codependent on the health and stability of each other. There is a need for both a viable industry and well managed public and private lands. It is essential to communicate achievable forest goals to the forest products industry and to ensure that a reliable supply and even flow of fiber can be available to the industry from national forests. No one is interested in one-time sale projects and waiting for another one in the next decade; that won't work for either the land or for the industry. We all benefit from a healthy forest and multiple-use objectives and that should be taken into account for the long-term goals.

*Question: What is the best opportunity for family forest landowners and the Forest Service to work together to develop the forest product sector? What's the biggest challenge?*

**PD:** Greatest opportunity is related to looking at a broad picture of the cross-boundary nature of this work and understanding what is required to have a robust forest products industry. Part of it is predictability of supply. For the part of the national forest management side, it is the maintaining of a robust program of active vegetation management.

The work that has been done concentrated a lot on the tools and techniques to increase the engagement of private landowners because the majority of wood harvested in this country comes from their lands. We need to get the landowners interested and have their own ethics and confidence in making decisions about how they can achieve their objectives. Often, managing timber can be daunting and of concern for obvious reasons. That is why it is crucial to help landowners become confident in their decisions to achieve the outcomes they care about, be it the creation of wildlife habitat, or timber, or something else. Their concern relates to questions about the market being there in the future. If the market has been lost, it is hard to bring it back.

Another challenge for landowners is figuring out how much it is going to cost them if they want to create a wildlife habitat or reach some other goal. The win-win situation is when they break even or earn a profit by creating the forests they want that produce the desired benefits. That requires the relationships where the Forest Service, other public and private land managers, and industry are all working together to deliver that desired outcome. A challenge is trying to synchronize that work. Part of overcoming that challenge is policy work on the state and federal level. Another part is sending signals of what resources (states' investments in the system) are available to help private owners. Where states work collectively, there are more robust market opportunities—and a more robust industry as a result.

*Question: Why are folks so excited about building with wood right now?*

**BB:** It is common to build homes out of wood; however, new products are coming up for nonresidential use. Now, wood is being used where it was never used before, such as multi-family high-rise residential housing and industrial, commercial, and retail applications. Mass timber (cross-laminated lumber, like “plywood on steroids”) creates really durable products. With architects designing with mass-wood products as a material of choice, it has become a preferred building material for high tech companies like Google, Amazon, and Facebook. Mass timber helps them meet their sustainability goals for carbon sequestration and it is fast to build with such material. In addition, people enjoy working in offices and living in residential housing made of mass timbers. There are seven mass-wood companies currently operating in the United States, with three more in construction (and there are six in Canada). It is about 1 billion board feet of purchased lumber that starts filling this market and it’s developing. Mass wood mostly uses low structural grade softwood 2 x 6 or 2 x 8 inch boards, and there are many opportunities for research on how to move that size down. Hardwoods have potential in the future for that as well. Overall, there is a huge opportunity for growth in this area.

*Question: How is industry (paper, lumber, composites) being more innovative to remain competitive in today’s marketplace?*

**RH:** Most of the industry has their own research programs. Industry is looking at ways to increase efficiency, increase safety, be more innovative, be able to adapt and change quickly, and utilize every available species. If there’s an abundance of the relatively cheap raw materials, there is a good opportunity to make investments to find ways to use that material. An example from Minnesota is the production of cellulosic fiber: The pulp gets shipped from the mill to another facility, which turns it to the equivalent of cotton, so that now trees can be used to make clothing. It is very innovative. Another example is Louisiana Pacific’s siding mill that produces rot- and insect-resistant siding out of aspen with a 30- to 50-year warranty. Mills are looking at equipment that can rapidly (in less than a day) change from one product to another—like switching from siding to OSB and vice-versa to adapt quickly to changing prices on the market. Mass timber (as previously mentioned), and also mill residues, are being used for energy production. Underutilized species can be turned in something else, such as biochar, as a way to sequester carbon and address soil health issues.

Innovations are one thing, but the biggest thing for the industry to remain competitive is the supply of wood. If the industry has wood, it will find a way to use it.

*Question: How do the new authorities and partnerships create opportunities for increasing forest management and restoration?*

**KW:** Authorities and partnerships are a collection of tools that are made available through legislation and legislative tools for funding, etc. Sometimes, policies have been developed by people who did not have on-the-ground experience on the impacts of these policies and their effects on forest management. When such tools come out, there is an “opportunity cost” to learn how to use a tool, to get it in place, and to develop experience to implement it. The cost is generally commensurate with the size of the desired outcome. Thus, it is better to start small, and even if the tool did not initially work as planned, keep trying to utilize it.

Incentivizing traditional opponents of forest management and having them come to the table and be part of the process can reduce appeals, reduce litigation associated with environmental planning, and eventually achieve greater outcomes. Having diversity in the stakeholders

brings value through more creative thoughts and discussion that can be leveraged to greater outcomes. Having that discussion and figuring out how to tweak that tool to make it more efficient helps to get over those “opportunity costs.” Also, without a commitment to those tools, improvement is unlikely as land management is a long-term prospect. There may not be tangible outcomes right away, but they should materialize with time, especially on the landscape level. There are many tools and opportunities that should be used strategically as a team effort to reach the desired outcomes. Partnerships that can be granted through the regulation or legislation are available. The first and foremost step in going into a partnership is the mutual agreement and overlap of desired outcomes. Partnerships need to stay focused on the highest priority outcomes without adding additional objectives that may be desired by only one party. Also, staying focused on mutual goals will allow the partnership to leverage additional resources.

*Question from audience: We’ve seen the fallout of the industry from genetics tree-improvement programs. What’s the hook now? How can industry be engaged in long-term projects important for managing resources?*

**RH:** Today, industry is dedicated to the future health of the forest and it has its own research projects. Talk to individual companies. I can help to get in with the right people. It is a good question to have because it is connected with the long-term survival of the forest and the industry.

The content of this paper reflects the views of the authors, who are responsible for the facts and accuracy of the information presented herein.

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