WEALTH CREATION THROUGH SUSTAINABLE FORESTRY

generating wealth creation models in the Appalachian wood-products industry
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CHAPTER 1
introduction
The purpose of this report is to examine and present wealth creation models adapted to the needs and context of sustainable forestry in Appalachia. These wealth creation models seek to capture both environmental benefits for the entire region and also economic benefits for the players along the supply chain. By integrating the value chain with the supply chain, it is our hope to see how the interaction between them presents opportunities and problems within the industry that can be solved through wealth creation mechanisms.

The methodology adopted for this paper was through literature reviews to establish the concepts and terminology of the Appalachian forestry industry and that of wealth creation. This was complemented by primary source interviews with Rural Action, the Mountain Association for Community Economic Development (MACED), Appalachian Sustainable Development, MIT Professor Karl Seidman, and MIT’s Department of Urban and Studies Director, Dr. Amy Glasmeier.

The report will first establish the framework and issues within which Rural Action is working by presenting an overview of how the Appalachian forestry industry functions as well as its community context. Chapter III presents the concept of ‘local wealth creation’ and how this model and approach can be superimposed both upon the supply and value chain of the forestry industry. This chapter will extrapolate on the general stages of the forestry supply chain, and how with each step along the supply chain the value of the product increases. Finally, the chapter will introduce different wealth creation opportunities that exist along the supply/value chain and present potential ways in which Rural Action and its partners could contribute to these opportunities. Chapter IV will expound upon wealth creation opportunities (and challenges) along the value chain, and how different players such as landowners, loggers or secondary manufacturers interact with the value chain, and the potential role Rural Action could play in influencing these relationships. The remainder of the paper presents alternative models of wealth creation – at their conceptual phase – along Rural Action’s value chain.
FORESTRY IN APPALACHIA

Approximately 30% of the world’s land area is covered by forests. North America accounts for 12% of this forested land and with 558,500,000 acres of forest, the US ranks as the 4th most forested country in the world. While Canada’s forest area has not grown over the past 10 years, the US has increased its forest land cover by nearly 9,500,000 acres (Nix n.d.). As of 2002, the US was the largest global producer of sawn hardwood products and was generating approximately one quarter of the world’s lumber (American Hardwood Export Council 2002). Demand for US hardwoods exists in both domestic and foreign markets, where the US is considered an important supplier of specialty hardwoods to such global markets as Europe (Timber Trade Federation 2007).

Hardwood Products in Appalachia

Hardwood tree species commonly include red and white oak, cherry, birch, basswood, maple, ash, poplar, walnut, hickory, and beech. Unlike softwood, most hardwood is used in applications where appearance is crucial, such as furniture. Other common uses of hardwood timber include hardwood flooring, veneer, plywood, molding, in addition to other architectural components (American Hardwood Export Council 2002). Railroad ties are almost exclusively constructed of hardwood timber, but this product only accounts for a small (0.5% in 2007) segment of the sales market. The furniture market lost 37 percent of sales from 2003 to 2007, and cabinetry lost 3 percent in that same period. Researchers found sales to the railroad tie industry segment grew by 103 percent from 2003 to 2007. Retail (+40%), flooring (+34%), exports (+29%), millwork (+14%), and other (+23%) gained as well between 2003 and 2007 (Buehlmann, et al. 2010). The market for hardwood timber products is shifting, however, in response to the economic recession and the decline of housing construction. Many of these hardwood products are closely tied to demands from the new housing and remodeling markets. However, according to the October 2011 Report from North America, furniture is expected to increasingly be produced in the US as China’s labor cost advantage erodes – a trend that will likely accelerate in the next five years (Global Wood 2010).

The Appalachian Mountains in the US specifically boasts of some of the highest quality hardwood timber in the world. Timber production out of Appalachia was at its peak around 1909-1910, but poor harvesting and managing practices were employed to maximize this product output. This mountainous region primarily continues to be a timber-producing area since the rugged terrain discourages extensive land clearing for farming, and the soil, climate, and topography are particularly conducive to growing hardwood trees. The Appalachian Mountains alone represent about 15% of the global hardwood forest land area and furnishes more than 20% of the total hardwood lumber production (Appalachian Hardwood Manufacturers, Inc n.d.).

Forest Management as a Sustainable Practice

Today, the industry paradigm to productive forestry is centered around sustainability and forest management. Years of exclusive harvesting of high-grade trees have led to the pervasiveness of low-grade and small diameter trees in the forests of the central Appalachian region. While there are still adequate markets and incentives for these trees, they need to be thinned, or removed as defective or less promising trees, in order to give the more superior trees sufficient room and sunlight for maximum growth. Material that has been removed from thinning can be used as pulp for paper production or as small saw logs for boards and dimension lumber. Regardless if the forest is slated for the commercial production of timber, tree harvesting is an essential forest management tool (Appalachian Hardwood Manufacturers, Inc n.d.). The Forestry and Agriculture Organization of the United Nations (FAO) reported that “Canada and the United States of America will continue to have fairly stable forest areas, although the divestment of woodlands owned by large forest companies could affect their management.” (Nix n.d.) Forest management is important for both commercial and non-commercial purposes, but the American hardwood species are recognized to be one of the most sustainably managed forest resources in the world. (American Hardwood Export Council 2002)

Forestry is not much different from financing. A growing tree is an asset that is gaining about 3% volume every year. The supply chain is heavily reliant on the landowners to be the forestry stewards, but there is very little profit derived from management. In order to culture these forestry resources, one must invest in the forest by inputting capital, materials, and time. Forestry is a long term industry. The time it takes to put enough quality products into a timber harvest may realistically supersede an investor’s lifetime. This point highlights a disincentive for landowners to heavily invest in managing their forestry products. They accrue no benefit from managing their forest for the succeeding landowner and are rightfully concerned with deriving gains for their own profit. There seems to be equally little incentive for industry players near the source of the supply chain to manage the land. Loggers also have a disincentive since they are a heavy
equipment employee. They will profit more from moving their equipment less, but this economic structure would lead to clear cutting. For this reason, loggers are not in a position to be the manager. Landowners need to enforce the management principles by ensuring that loggers only take what they are allowed. (Shouse 2011)

**Green Building Codes & Certification**

The current trend in Appalachia to increase the value of forestry products is in certification and branding as methods. The push towards green building standards, such as the US Green Building Council’s (USGBC) LEED Certification, in the building and construction industry is driving this trend toward certified wood products as the public becomes increasingly concerned with natural resource management. A study released by the US Forest Service reported that wood is expected to be the primary building material in green building practices (Global Wood 2010). The green building market, led by USGBC, is growing exponentially in the US as LEED gains wide recognition. By specifying Forest Stewardship Council (FSC) certified wood products in the building design and construction, the building receives points towards its green building certification. This green building market serves as the link between the sustainable building codes of the urban market and the sustainable certified wood products of the rural market.

Certification has rapidly advanced in the US in general, but a large portion of this certified forest come from large industrial estates. Only a limited amount of independently certified hardwood lumber is available since it is almost exclusively derived from small non-industrial forest owners (Timber Trade Federation 2007). Such is the scene in Appalachia. The have been some efforts, primarily spearheaded by the Forest Certification Center at the University of Kentucky, to establish a forest products certification system in Appalachia, but this movement has been peppered by a number of challenges – one being the enormous lack of certified land to draw from. Certified products must come from sustainably managed and operated lands that have official recognition through a certification (Shouse 2011). Branding is another mechanism that is currently being employed. Through branding, the final product indicates that it was product was “made/produced in Appalachia,” reaching a niche market that may demand this type of product.

Certification, however, presents another issue. If most hardwood comes from Appalachia, and all of this hardwood is certified, the supply of certified wood increases, thus reducing its price. Landowners, in turn, bear the burden of receiving certification when they do not see the benefits in the market.
COMMUNITY CHARACTER

Appalachia is an area rich in natural resources but is riddled with poverty. A fundamental problem in Central Appalachia stems from the fact that 72% of the surface acreage is absentee-owned. With this percentage of property owned by people outside of the region, there is a shortage of land that forces local residents to compete with each other, businesses, and municipalities for a balance of uses (Appalachia Service Project n.d.).

Small, Private, and Fragmented Tracts of Land
Most of the forestlands in Appalachia are privately owned and exist in small tracts of land. MACED estimates that land changes hands every 7 years on average. Fragmentation is a major issue and frequently occurs as landowners transition into retirement. Individuals will commonly divide up their estate and leave equal parts to their children which significantly reduce the security of the long term cohesive forest area. Most of these private land owners are not foresters by occupation, but rather value the trees for their aesthetic qualities and support themselves with day job. As a result, the efficiencies employed by large commercial forestland are largely not applicable to small and diffuse landscape.

Outreach Enabler: Tapping into the Woodlands
A landowner will only consider certification if he has a quality product that will exchange for a high dollar per linear board foot. Knowing which landowners are most eligible for certification comes from tapping into the local knowledge. MACED found that connecting to landowners through the sawmills was the best approach for outreach to only the most capable potential participants. The sawmills will evaluate the wood brought in from their “wood shed”, or a radius of forestlands around the sawmill where sending their forest products to the sawmill is still profitable, and inform the 3rd party organization to the highest quality source.

Outreach Inhibitor: General Lack of Trust
Certified land needs to be examined by authoritative entities in order to ensure that the sustainable practices are being abided by. The salient culture found in Central Appalachia exhibits resistance to the federal or state government entering into their property. Most entities in the forestry industry exist in independent and isolated conditions, not typically engaged in formal cooperative efforts, and regard organized interventions with a sense of caution.

Lack of Granular Data Sources

Most of the data on forestry production in Appalachia is only available at the county and aggregated industry level. Since these forestry operations are so rural on the resource end of the wood products industry, few sources of information exists to tell about their location, productivity, and measurement.

Lack of Sustainable Management
Many of the forests have not been properly managed to maximize their ecological health and economic benefits. In fact, MACED found only a small 5% of Appalachian landowners to manage their forests. This implies that a large proportion of the forests in Appalachia are not being managed to nurture high quality wood products. Poor management practices continue to threaten the future of Appalachia’s forests. Starting a forest from scratch can take up to 20 or 30 years before any profit is churned from the commercial harvest of the product. This means that a landowner must input 20 to 30 years of capital costs and time into their property as sunk costs with the anticipation of a return after nearly three decades. In order to reduce an individual’s sunk cost and increase the likelihood of sustainably managed forests, landowners are dependent on the forest stewardship of the previous landowner. Otherwise, few incentives and resources exist for private landowners to pursue sustainable management of their land. (MACED and KFTC 2010)

Many firms in the forestry industry in Appalachia are small and family owned. Most sawmills employ 5-10 people (Bailey 2009) -- loggers only 1-2 people. Lots of smaller mills are going out of business since they are not able to integrate new cost-cutting technologies. Fuel costs are high and workers-compensation for non-mechanized jobs is close to wage costs (Forest Stewardship Council n.d.) Landowners are a key player in the mission to achieve sustainable forest management since most other industry players are in a do not have an incentive to do so. A logger is a heavy equipment employee who needs to harvest as much wood as he can while moving the equipment as infrequently as possible. These metrics are conducive to clear cutting and unsustainable harvesting. The landowners need to ensure that the loggers only take as much wood as they are allotted (Shouse 2011).
RURAL ACTION AND PARTNERS

In an attempt to mitigate some of the economic disparity and isolation of the inhabitants of Appalachia, numerous organizations have been working on various models and integrating mechanisms. Rural Action and its partners were initially founded upon principles of sustainable development in the region, but have since begun to focus on asset building and local wealth creation. The following is a look into the organizations of Rural Action, Appalachian Sustainable Development, and the Mountain Association for Economic Development, three of the major players in the Sustainable Forestry program that have the potential to implement various wealth creation models in the region.

Rural Action

As an organization, Rural Action is rooted within the broader goals of sustainable development in Appalachia, and administers several programs in an attempt to foster economic, ecological, and social stability in Appalachian Ohio. These efforts are made to address the persistent poverty and environmental concerns of a region historically disregarded in the dialogue of development. Rural Action uses methods of knowledge transfer such as training and community engagement to further their wealth creation and asset building goals, in addition to working in tandem with various organizations such as Appalachian Sustainable Development and the Mountain Association for Community Economic Development to do so through certain programs. Sustainable forestry, sustainable agriculture and food systems, waste and recycling, watershed restoration, and environmental education are all areas that Rural Action and its partnering firms are working to expand and build upon any existing knowledge in asset building development in Appalachia. (Rural Action n.d.)

Appalachian Sustainable Development

ASD’s primary focus is to help economically develop rural areas in ways that are not at the expense of the region’s long term natural asset health. Although the organization was founded on a strictly environmental lens, it has since shifted by recognizing the realities of poverty in the region. Thus one of ASD’s primary goals has become to bring jobs into Appalachia that can utilize the existing natural resources, but in a way that is sustainable.

According to ASD, because of the common miseducation about the field of forestry, one of their aims both structurally and beyond, has been to recreate perceptions on forestry that are more geared toward protecting the natural assets of Appalachia and ensuring that it is not degrading while ensuring successful economic development in areas that are in desperate need of it. Forestry has been traditionally received negatively, and ASD’s approach has been to become the marketing arm of forestry that has the credibility of “wood done right,” instead of shifting the conversation in forestry to solely wood alternative products, something with the potential for severe economic repercussions to landowners. (Rowe 2011)

Mountain Association for Economic Development

MACED is an organization rooted in Kentucky and Central Appalachia with a number of strategies. First, they seek to bring financial investment and technical assistance to help local Appalachians prosper. In addition, one of their main strategies is to have better development tools to allow Appalachian communities to retain some of the natural resources that are being stripped away from them. Their main contribution and success has been through the Carbon Credits program that they have developed and administer. The Carbon Credit program (discussed more on the section on value chains) has been a major way that MACED has been able to work landowners to capture the natural wealth that they own in a way that is environmentally sustainable. (MACED n.d.)
CHAPTER 3
the value chain discussion
WEALTH CREATION

Geographically isolated rural communities in the United States, oft relegated to the corners of societal concern, can frequently become pockets of constant poverty and remain on the fringe of the mainstream economy. However, the emerging trend of the rising value of natural capital in rural communities and the nascent opportunities for wealth creation, invites and enables these communities to better integrate into regional economies and to play a more central role in their own economic growth and sustainability. Moreover, the associated concept and challenge of “keeping wealth local” has emerged as a strategy for the economic wellbeing and development of rural communities, as a way for rural areas to increase their ownership and influence over their own wealth. According to Wealth Creation in Rural Communities (Kelly and Ratner 2009) the wealth of communities is often being given away - instead of major financial benefits going toward increasing the wealth and development of the rural community in question, it is directed and provided to absentee owners (Kelly and Ratner 2009). Local wealth creation concepts assert that these assets need to be owned and controlled differently; the community needs to both retain control (e.g., through governance, or in the decision-making processes) and direct ownership of the assets so as to redirect the flow of benefits and to redirect and generate local wealth-generation. Hence resources only become a form of community wealth if controlled, influenced and owned by the communities themselves. This ownership and influence spans the various forms of potential wealth a community can have, from financial capital to intellectual capital to natural capital, among others.

Locally-Based Shared Ownership

Shared ownership is an emerging and potent model that encompasses various forms of ownership design. Essentially, shared ownership is built into the life of the community by involving and cementing the connection between the communities’ interests (whether it be the natural environment, the community, or the employees) and the enterprise. The ownership model as well as the legal and governance framework of shared ownership designs further reflect this objective, rooting local assets within the community and enhancing the ability of resource sharing and mission alignment within the community. Shared ownership designs range from cooperatives or employee-owned firms to land trusts, to various forms of land ownership such as community easements or covenants, and to forms of wealth creation that are not owner-centric but rather influence wealth flows through community endowments or community fees and taxes. (Kelly and Ratner 2009)

Multiple Types of Assets

Defining wealth within this new model of shared ownership and local wealth creation goes beyond the singular conception of financial wealth, as it recognizes not one, but three forms through a Triple Bottom Line model of economic gain, social return and ecological stewardship (i.e., natural capital that encompasses both renewable and non-renewable resources). To fully adopt and benefit from shared ownership and local wealth creation, Kelley and Ratner underscore the importance that rural communities understand the value of having assets over income, as it is only through the valuation of the former that the community can obtain long-term and sustained wealth. Unlike income, where flow is unpredictable and dependent on others, assets (such as forests that can produce long term income through carbon credit sales) are long term stocks of value and investments that are not as easily lost. Assets therefore enable longer-term planning, decision-making and purchasing since they create “a stable flow of income over the long term.” (Kelly and Ratner 2009)

According to Kelley and Ratner’s Ford Foundation research, for communities to be able to prosper they need to be able to leverage and manage their assets effectively, and to adopt or create an ownership model that sustainably maximizes their community-owned resources. To do so communities must undertake the following three steps:

1. To take an inventory and recognize the assets of the community (whether it is built, natural or intellectual capital),

2. to manage these skills and assets effectively, and

3. apply the needed ownership and wealth control models that best capture and enable the community to sustainably capitalize and gain a return on their assets.
In this vein, the next section of the Chapter will present the concept of both the general supply and value chain within the context of Appalachian forestry, and potential wealth creation opportunities that can be applied within the flow of the wood product goods, their associated relationships and increased value along the value chain.

SUPPLY AND VALUE CHAINS OF FORESTRY IN APPALACHI:
A CLOSER LOOK

Supply Chain
A supply chain is often represented as a network that shows the processes that must occur to deliver a product to market. It tracks a wood product as it transitions from a forest resource into a final finished product for sale, and includes all parties involved to make this process flow. A supply chain is dynamic and involves the constant flow of information, product and funds between different stages. It not only includes the manufacturers and suppliers, but also landowners, loggers, saw mills, lumber yards, brokers, transporters, distribution centers, retailers, architects, and the customers themselves.

In order to manage the forestry supply chain, it requires an understanding of the entire gamut of products, their co-products, and how they react. While concentrating on a single product, such as the lumber or veneer lumber grade logs, and ignoring the co-products, such as the lower value pulp wood, may be easier to understand, this can create problems for the rest of the supply chain (Forest Operations n.d.). A simplified wood products supply chain is shown in Figure 1.

Value Chain
A value chain is a chain of activities within a specific industry where products pass through each activity in the chain in sequential order where, with each activity, the product gains some additional value. As a piece of lumber moves through the supply chain, transitioning from a standing tree, to a roughhewn log, to a sawn linear board, to a segment of hardwood floor, it gains financial and functional value at each transition.
Products garner higher value both by advancing through the transformative supply chains into a market commodity and by alternating the components of the supply chain. Pursuing higher-value opportunities for wood products, such as bio-chemicals, instead of railroad ties or flooring can heighten the overall value of the chain (The BioBusiness Alliance of Minnesota n.d.). Similarly, applying a sustainable certificate label on the supply chain processes can again heighten the value of the product and the chain. Heightening the value of the commodity will inherently increase the value of the resources that go into the production of that item.

See Figure 2 to correlate the process of a value chain as it relates to a supply chain.

ADDRESSING ECONOMIC DISPARITY THROUGH WEALTH CREATION

One of the major ways Rural Action has addressed economic disparity along various points along the value chain has been through its Wealth From Forests (WFF) initiative. According to Rural Actions' Executive Director Michelle Decker, “we’re building a wood products brokering business to help locally owned producers access the green market.” (M. Kelly 2011)

If local landowners sustainably manage their land and engage in sustainable harvesting practices, their wood products become certified, thus demanding higher prices in the market. According to Kevin Rowe, the Green and Regionally Oriented Wood Products Program Manager at ASD, at a time when the recession has hit virtually every industry, accessing a market that is not typically accessed can help increase a declining industry (Rowe 2011). The WFF initiative works to supply this market demand by connecting the producers in Appalachia with those who want to purchase the sustainably managed wood products. The concept of local wealth creation is nurtured through partnering almost exclusively with producers and mills that are locally owned. Meanwhile, events and meetings are held attempting to integrate multiple players along the value chain, from architects, to contractors to even a financial institution. Doing so strengthens the value chain by linking all players to each other physically, socially and ultimately, financially, indicating the mutual benefit all parties derive. The collaboration is a major shift in an area that typically runs their organizations in isolation from each other. In pursuit of moving the forestry industry toward sustainable forest management and harvesting, WFF has identified indicators by which they can measure whether progress has been made in both building local wealth and doing so in a sustainable manner. One way in doing has been to measure the number of acres managed sustainably while measuring the sales volume of participating firms.

Another mechanism that has been used for this same cause has been the Appalachian Carbon Partnership spearheaded by MACED. In this partnership, landowners sustainably manage their land to store additional carbon and improve water and forest resources. MACED works to document carbon used annually on forestland using international protocols as a measure. After the predicted carbon offsets are verified by an outside auditor, MACED officially registers these offsets. Businesses and enterprises make tax deductible donations through MACED’s website to retire these offsets. The donations are made at $15 per metric ton, while the proceeds from the offsets are given to landowners who store these offsets in their forest. (Appalachian Carbon Partnership 2011)
CHAPTER 4

wealth creation opportunities in value chain
BOTTLENECKS IN THE VALUE CHAIN

As with many supply chains, bottlenecks exist that stall processes, and in value chains, these bottlenecks can be amplified upon each level. In attempting to integrate the Appalachian community in a manner that would allow them to best utilize their natural resources for local wealth in an environmentally sustainable manner, a reconsideration of these bottlenecks could aid the process of mitigating them and creating better wealth creation models to directly address problems. In Figure 3 we refer to the various bottlenecks in forestry as Wealth Creation Opportunities. As we can see, there are several of these opportunities that overlap on various levels of the supply chain which in turn correlate to the corresponding value each tree receives as it moves up the value chain. At the same time, there are opportunities and problems that are specific to the players in the supply chain.

Landowners
The landowners have the most direct interaction with the natural resources as they are typically in charge of managing the forest, with the exception of absentee owners. It may seem that to address sustainable forestry and local wealth creation, it would be most beneficial to work with this group primarily. However, there is a myriad of problems that accompany this level of the chain as well. Firstly, an incentive to invest in sustainable stewardship is lacking. Managing a forest in a sustainable manner is a considerable financial and time investment. For landowners who may not have the financial means, this extra management that is entailed for sustainability is simply not feasible nor worth it. It is seen as a sunk cost because they do not reap the benefits of sustainably managing the forest.

The problems and opportunities go beyond just the expenses in sustainable stewardship, however. For example, there are few mechanisms in place for generational property transfer. This has further complex implications because it can indicate two things. One, that if the property is transferred within the family to the owner's children, the land becomes fragmented, ultimately making it more difficult to recruit landowners into better forestry management as the number of property owners and absentee owners increase. Two, if the landowner opts to sell his timber to loggers at any given price as a means of retirement, most often they are not receiving what the harvest is valued at. This exchange can, and usually does, occur without a contract and with whomever the landowner has agreed to save their timber for years before. Not only is there a lack of incentive to sustainably manage the forest, but the lack of an actual contract prevents the landowner from receiving what the harvest is valued at. In addition, there are no agreements that would require the loggers to leave the land in the best possible physical condition.

Perhaps it is unreasonable to even expect complete sustainable management from landowners given that there are a significant number of them that are not actual foresters. These landowners have day jobs, or are absentee owners because they have had their land passed down to them generationally or simply because they want to just own land. Either way, in targeting them, it is assumed that they should undertake a number of responsibilities that may not be within their scope. What concerns many of the landowners is simply the ability to pay the property tax on their land. This leads to a greater issue that exists among the landowners which is the general lack of information of larger collaborative program options. The various communities along the Appalachian region is tight knit, and relationships are generally built upon years of interaction and mutual trust. It is difficult to reach every community or family to inform them of these opportunities, and even upon making contact, collaboration may not readily be accepted or even considered.

To address many of these issues and potential for opportunities, there must be a sustained level of trust and relationship among Rural Action and partners and the landowners. Currently, through various outreach activities, Rural Action maintains some strong relationships with individuals and smaller firms that reach as far down as the level
Fig. 3

**SUPPLY CHAIN**

1. **LANDOWNERS**
2. **LOGGERS**
3. **SAWMILLS**
4. **PRIMARY MANUFACTURERS**
5. **SECONDARY MANUFACTURERS**
6. **BROKER**
7. **RETAILER**
8. **ARCHITECT**
9. **CUSTOMER (FINAL BUILDING)**

**VALUE CHAIN**

1. **TREE**
2. **ROUNDED LOGS**
3. **BOARD LUMBER**
4. **UNFINISHED LUMBER**
5. **ARCHITECTURE PRODUCT**
6. **ARCHITECTURAL FURNISHINGS**
7. **INSTALLED FURNISHING**

**WEALTH CREATION OPPORTUNITIES**

- **TREE**
  - No incentive to invest in sustainable stewardship
  - Few mechanisms in place for generational property transfer
  - Forestry not a main occupation
  - Not widely informed of larger or collaborative program options
  - Lack of binding contract that ensures fair value of their land

- **ROUNDED LOGS**
  - Heavy equipment employee
  - Financial incentive to clear cut
  - Often 1-2 employees

- **BOARD LUMBER**
  - "A "woodshed" defines the area of business
  - Point of contact to reach dispersed loggers & landowners
  - Typically family-owned

- **UNFINISHED LUMBER**
  - Typically small business
  - Situated in Appalachia

- **ARCHITECTURE PRODUCT**
  - Typically small business
  - Situated in Appalachia

- **ARCHITECTURAL FURNISHINGS**
  - Connects the buyers with the sellers
  - Frontline to see shifts in the market demands

- **INSTALLED FURNISHING**
  - Can be a wholesaler
  - Enhanced customer service to aid customers in selecting a product

- **CUSTOMER (FINAL BUILDING)**
  - Pushing the demand for green and sustainable wood products
  - Niche market will care about the origins of product location
of the landowners. Through the Carbon Credit program, MACED has some direct relationships with landowners, as well.

**Loggers**
As the tree is cut and becomes a rounded log, the natural asset then increases its value as it turns into a potential product physically transferred to companies who also then add value to it as it turns into a marketable product. It is also important to realize that at this stage and every subsequent stage in the value chain, some of the product is physically lost. As it is cut, some of the tree is lost in this cutting process, indicating that as the product moves along the chain it is increasing in value for less physical material.

The types of opportunities and problems that exist on the level of the loggers are very distinct from any other level in the chain. Aside from the fact that loggers have a financial incentive to clear cut, they operate heavy machinery. If loggers are not consistently clear cutting, they not only have a lack of a steady stream of income, but their equipment is also depreciating in value as it sits in storage. Logging companies can be 1-2 employees indicating that this particular segment of the industry is especially fragmented, but also that it may not necessarily offer its employees any benefits that contributes to their individual wealth. It is safe to assume that many logging employees are local, meaning that any intervention that would increase their wealth is inherently locally beneficial.

**Sawmills**
Sawmills are typically family-owned businesses, and an area as simple as a woodshed could define the physical space the business occupies. Sawmills play an interesting and integral role in the attempts at reaching landowners and loggers as they are essentially the point of contact in reaching these players. Though these mills in Appalachia are typically small businesses, they can still vary in composition. As the rounded logs subsequently become board lumber, the value of the product is increased even as the actual physical product decreases. The mills do present wealth creation opportunities through their very role in the supply and value chain and because they are local businesses.

**Primary and Secondary Manufacturers**
Primary and Secondary Manufacturers are similar in character in that they are typically small businesses and are both physically situated in Appalachia. Some Primary Manufacturers take on the role of Secondary Manufacturers in the process in order to capture the increase in value themselves instead of handing this additional value to a separate organization of Secondary Manufacturers.

Methods of wealth creation exist upon both these levels primarily because they are both situated locally so that any captured wealth or incentives to help employees would benefit the communities within Appalachia itself. Thus, in building its brokering enterprise by helping these producers access the green market, Rural Action is establishing solid relationships in parallel. These relationships are invaluable as wealth creation models are easier implemented and explained when mutual trust and understanding has been previously established.

**Broker**
The broker connects the buyers with the sellers and is witness to shifts in market demand for the industry product. The role that Rural Action and its partners have assumed in the Sustainable Forestry program has been the role of the broker, allowing retailers, architects, and ultimately customers who have an interest in the green market to access the manufacturers that produce a sustainable product. The broker witnesses the value of the product increase as it moves up the chain.

**Retailer**
As the product moves up the final tiers of the supply chain, it is now drastically increased in value in comparison to where it began at the level of the landowner. The retailer can either be a small business who has purchased the final product from the manufacturer, or it could be a wholesaler. At this point in the chain, the product has most typically moved out of Appalachia. To insert wealth creation opportunities at this level, it is important to focus on methods that would
allow wealth to travel back down the supply chain to those on lower levels located in Appalachia. One way in doing so is through branding methods which are useful in indicating that the product was “Produced/Made in Appalachia” accessing a niche market that demands this type of product. The retailer also has the distinct advantage of having direct contact with the customer who makes this final purchase; there is an opportunity there to persuade, though this persuasion does not necessarily benefit the Appalachian communities themselves.

**Architect**
The architect has a great influence over the demand of the product such as when they are aiming for LEED certification for their design and in desiring so, specifying a sustainable product. The product is considered sustainable if it is certified as such either through FSC or through other certification mechanisms such as new ones formulated through the University of Kentucky. The architect has the added benefit of being able to request additional and new products from the manufacturer. In addition, they have an incentive for purchasing sustainable products as they receive additional recognition and awards for designing buildings that use sustainable materials. Rural Actions efforts as a broker is invaluable at this level because the connections between the architect and manufacturer produces the opportunity to specify the certified sustainable material to begin with. In doing so, the architect is now directly contributing to not only the local wealth in Appalachia, but also to sustainable forestry.

**Customer**
The customer will push the demand for green and sustainable wood products. In addition, there is a niche market that will value the origins of a product. So, mechanisms of branding can appeal to this final level of the chain. At this point, the value of the tree as a product has increased dramatically from the time it was with the landowner. It is difficult to influence this part of the chain, as it is essentially the market that is being influenced. There are various market conditions that would be receptive to sustainable products, namely its popularity spread by word of mouth and constant exposure. This would require a great deal of advertising and a sizable customer base that would be interested in buying such a product and subsequently telling everyone about it.
CHAPTER 5
wealth creation interventions
This Chapter presents four different types of wealth creation models (also diagrammed in Figure 4) that help redirect the flow of wealth to 'keep wealth local' and align with Rural Action’s mission of environmental sustainability. Each wealth creation concept - employee ownership, the land trust model, employee savings and benefits, and logging contracts - will be associated with and placed along Rural Action’s value chain. An overview of the structure of the model, as well as its implementation will be covered with each given model.

MODEL I: EMPLOYEE STOCK OWNERSHIP PLAN (ESOP)

The first wealth creation model that will be explored is the ESOP model, a cooperative ownership of a business and qualified benefit plan. The shared ownership model would be applied to help maximize local wealth creation under Rural Action’s leadership and sustainable forestry program. The central idea is that the ESOP model would be built upon Rural Action’s value chain, and in so doing would further support the environmental sustainability goals of Rural Action. In other words, the way in which the ESOP model is 'transposed' on the value chain is that it would be introduced by Rural Action as a pre-condition for businesses near the middle and end of the value chain (from sawmills, to primary and secondary manufacturers) to participate in the Rural Action’s new local and sustainable wood products business. With respect to the value chain, the ESOP model would be introduced within each of the businesses independently (e.g., employees of a sawmill company or architectural product manufacturer would own stocks within the company they worked for). Rural Action’s role would be to provide an incentive for those companies to introduce the ESOP model within their organizations in the form of a benefits package, and as a way to further improve the productivity and growth of the organization itself while providing a pension plan for its employees.

Overview

ESOP is one of the most tax-advantaged mechanisms for companies to share ownership, as well as a form for low cost financing. Unlike other pension plans, an ESOP can borrow money to purchase a company and has the ability to borrow money for the company’s expansion or improvement. As illustrated in Figure 5, the money that buys stock for the ESOP is borrowed or leveraged (i.e., a loan is used to acquire stock by the ESOP). Hence ESOPs can borrow money to purchase company stock. According to Kent State University, 10% of Ohio ESOP firms used an ESOP loan as a principal means to finance company expansion. The simplified transaction (Figure 5) highlights the four steps of purchasing: first, the bank makes a loan to the company that is secured by the company assets. Second, the company strikes an agreement with the bank to make a ‘mirror loan’ to the ESOP; finally the ESOP trust pays the owners (or employees) and in return is given their stock. (Ohio Employee Ownership Center 2011)

To repay loans (Figure 6) the company pays back a portion of the principal of the ESOP loan; the company submits its payment through the ESOP that is then given to the bank. Even if stock is allocated to a given

![Fig. 4: Loan purchase through the ESOP](image)
individual account - as with regular retirement plans - employees have to be fully vested in the plan to be able to claim the stock. Typically, employee stockholders cash out or receive stock upon retirement but may also do so when exiting the firm. Given that the ESOP is also a system of tax deferred income, employees only pay tax on their stock upon leaving the company. Depending on the ESOP plan of the given company, participants will either receive their individual account in stock or cash. If the stock in question is not traded publicly, stockholders have the ‘put option’ that enables them to sell their shares back to the company, the company in turn is obliged to purchase the shares. The Ohio Employee Ownership Center succinctly summarizes the advantages of the ESOP plans as a “competitiveness strategy, a business succession plan” as well as “a strategy for tax advantaged corporate financing.”

The Ohio Employee Ownership Center (OEOC), based out of Kent State University, is a strong example of a research branch, technical assistance, training and outreach non-profit that supports organizations interested in establishing, or further strengthening employee ownership. According to research projects conducted by Dr. Logue of Kent State University between 1984 and 1986, the impact of employee ownership on Ohio’s local economy was positive. A 2000 Rutgers University study directed by Douglas Kruse and Joseph Blasi provides impressive findings on the effect that ESOPs make to corporate performance. The Rutgers study showed that firms with an ESOP plan grew 2.3% to 2.4% faster after establishing their ESOP plan than they would have otherwise. The shortfall of this study was that it did not explain what characteristics the firms had or what methods they might have used to allow for such an increase. A study conducted by the National Center for Employee Ownership (NCEO) in 1987 complements the Rutgers findings and helps fill in this aforementioned gap. The NCEO research compared traditional companies with employee owned ones and proved that participative ESOP firms (i.e., those that provided a voice and platform for participation by their employees) expanded by 8-11% more and faster with their plans than they would have without them. (The National Center for Employee Ownership n.d.)

The OEOC clearly states that ownership is insufficient by itself to improve company performance. It therefore provides training to employees of ESOP firms to help them understand the new structures of employee participation and helps newly established ESOP firms implement open communication between top management and their employees. The trend of employee participation in Ohio-based firms is on the rise. The OEOC completed a study on Ohio based firms in 1993 highlighting that employee participation rates (e.g., in governance, decision-making) had nearly doubled after the induction of an ownership, or ESOP plan. Although the ESOP plan is central in providing an ownership culture, according to the OEOC it is essential to build upon this ownership culture through a participatory one as well.

An additional pre-requisite for successful implementation of an ESOP plan is a minimum of $1 million in revenue or a minimum of $500,000 in payroll due to the administrative costs associated with the Plan.

**Relationships and Implementation**

We suggest that after Rural Action completes its branding process of its certified wood products
and establishes a strong demand for these goods by their end-consumers and customers, that Rural Action establishes an incentive scheme by which local Appalachian-based firms (from sawmills to secondary manufacturers) are required to establish an ESOP plan for their firm in order to be a part of Rural Action’s supply chain. The reason why the latter half of the value chain is selected, and that the beginning of the value chain is excluded is that land is typically family-owned and incentives to further divide and sell out land to employees would likely not occur; in addition loggers were excluded from this model due to the fact that they work independently and the employee size is too small (with an average of one to two employees). To examine potential eligibility criteria the type of data Rural Action would need to initially would be the size of the partners and businesses involved in their value chain together with an analysis of these businesses pension schemes and retirement plans.

We recommend utilizing the local expertise of the OEOC to advise the latter section of the supply chain - from the sawmills through the secondary manufacturers- to determine if an ESOP is viable for their company (e.g., revenue, employee size). The next step the companies should take would be internal workforce education to ensure maximum ESOP participation by addressing employee vesting, eligibility, and allocation among other employee-concerned topics. As previously mentioned the companies involved should also ensure that voting and issues of governance and participation are also covered in the transition from their traditional business model to that of an ESOP. This could include having the employees themselves create a communication program so as to build and maintain the ‘ownership culture’.

In summary, due to significant advantages the ESOP plan provides (e.g., generating growth for a firm, enabling it to access low-cost corporate financing, and create an incredibly tax-advantaged pension plan for the firm’s employees) the ESOP proves itself to be a compelling rural wealth creation model that can help serve employees of local firms. Moreover, due to the unique challenges faced in the forestry industry in Appalachian Ohio – the dearth of retirement packages and security those in the industry face, the ESOP model could allow for this additional security, and would help retain wealth locally.

MODEL II: LAND TRUST

Overview
A land trust is an agreement where one party holds ownership to a piece of property for the benefit of another. Conservation land trusts in particular work to preserve natural assets. There are a variety of ways land can be placed into a trust. One way is through the acquisition of the property, or in other cases, the land will remain in private hands and the trust will purchase a conservation easement that will prevent development or damage to the natural asset of the land. Land trusts are generally non-profit organizations that rely on a variety of donations to purchase land or offer conservation easements, and are run primarily by volunteers. (Land Trust Alliance n.d.)

Through a conservation easement, the landowner gives up a number of their rights to the land such as developing some of the land. The easement is not restricted only to the landowner’s tenure on the land, but also to any future landowners. Easements are not a one-size-fits-all mechanism, however, and can be formulated in a way that meets the individual needs of the landowner. Conservation communities, are whole communities that live on land and share the collective goal of preserving the land (Land Trust Alliance n.d.). These communities in particular allow for sustainable resource extraction and sustainable job opportunities locally, but may not be appropriate for the Appalachian community at this point in time.

It is proposed that landowners be presented with the option to sell their land to a land trust at a market rate price. In doing so, the land is held in the community land trust, and the landowner receives a life-long lease to the land which may be passed on generationally. The landowner will no longer be responsible for property taxes on the land, and in return must preserve the land. The ownership and lease provides a means for long-term local ownership and control to foster/ensure sustainable forest management practices.

This model directly affects the landowners. Creating this link allows for wealth to be generated on a very basic level through the sale of land, and at the same time ensures that the land is sustainably managed. The importance of creating wealth through the landowners directly must be underscored, because not only are they the group of people most tied to the land and
forests, but their economic well-being will have a multiplier effect throughout regions surrounding Appalachia.

Relationships and Implementation
The relationships with landowners established by MACED, for example, through the carbon exchange program can be utilized. Similarly, the relationships Rural Action have established through the Wealth From Forests initiative when they are linking producers of sustainable wood products to processors and mills or other players in the value chain who demand this type of product can be utilized as well. In having a base of landowners who have already shown an interest in sustainable practices, an established starting point, the potential for a land trust model to be carried is favorable.

This model is especially tricky as it can be seen as big government interjecting on private property rights; therefore, a clear explanation of the stipulations and intentions of the land by the non-profit organization should be explicitly clear. As a land trust model may be considered as something incredibly foreign to landowners who have owned property in their families for generations, it is advised that an outright acquisition of land is not conducted like in some land trust cases. The strategy is not to strip landowners of their land, but to have them tend to their land in a sustainable manner and in a way that might financially benefit them. This model most likely cannot be carried out on a wide-scale, but landowners should know that this opportunity exists for them. An education segment is necessary before the actual implementation of the model. Issues such as an initial resistance to this model must be taken into consideration and accounted for in implementation. A small scale approach may be beneficial to initial implementation, and can be built upon as MACED, Rural Action and ASD further establish their partnerships with landowners through their other programs. The leaders in this initiative should maintain a follow up so that landowners have a resource when questions arise.

Conservation land trusts have appeared successfully in many different forms and with aims of conserving various types of natural assets. It is not a new concept, and one that can be considered for creating local wealth while establishing sustainable harvesting and management practices.

MODEL III: EMPLOYEE SAVINGS AND BENEFITS

A third way to enable wealth creation in rural or disparate communities is through individual savings. Credit unions are excellent financial institutions which offer both savings account options and development finance programs that focus on extending financial security to low- and moderate-income persons. This model proposes that Rural Action partner with a local credit union to establish an IDA program to their connections in the Appalachian wood products industry.

Overview
The greatest mechanism for creating wealth from savings is to establish a local community development credit union (CDCU). A CDCU is a credit union, or a cooperative financial institution which members own and control with the mission to serve low-income individuals and neighborhoods. As a membership organization, CDCUs are required to provide banking services and credit to their members, and are generally more focused on providing credit for housing, auto, and the consumer needs of low-income households than financing small businesses or real estate projects. An auto loan, for example, can provide an individual with greater mobility and access to jobs. It has been observed that “personal credit services are an important economic development tool for low-income persons, especially when they are tied to increasing economic self-sufficiency and asset accumulation” (Seidman 2005). CDCUs serve as an economic lifeline to low-income communities that cannot be served by commercial banks and are frequently victims of high-priced check crashers and predatory lenders. They keep wealth local by building up the communities’ assets through investments in a local entity, and they can expand their ability to provide savings and benefits to low-income populations since they can participate in both government programs and private-sector community revitalization partnerships. One such government program that can tailor to the needs of the Central Appalachian wood products industry is the Individual Development Account.

An Individual Development Account (IDA) is a special savings account that matches the deposits of low- and
medium-income individuals. While every IDA varies, participants must be within 200% of poverty; no earning more than $17,720 per year as an individual or $36,200 per year as the head of a household (World Institute on Disability n.d.). For every dollar a person puts into savings, they receive a corresponding match that serves both as a reward and an incentive to continue saving. Savings are typically matched at a 1:1 or 1:2 ratio. The CDCU will partner with government agencies, a local nonprofit organization, or private companies to manage and financially support the IDA. These partnering entities provide the donations that serve as the match. An IDA is typically held for 2-4 years but can last as long at 7 years. In return for the program match, individuals must complete financial education classes and use their accrued savings for asset-building purposes – typically purchasing a home, capitalizing a small business, or investing in post-secondary education or job training. Before withdrawing from their IDA savings account, individuals must first reach their savings goal and receive permission from their sponsors. (CFED n.d.)

Establishing and employing the services of an IDA through a CDCU could have a great impact hedging financial risk and generating greater self-sufficiency for individual or family owned firms in Appalachia. Financial illiteracy can severely hinder the security and quality of life of individuals who are not aware of the economic options available to them. Also, the culture of rural Appalachia is typically cautious of government entities and big enterprises. As a result, local firms, entrepreneurs, and landowners may not be actively engaged in optimal ways of protecting their savings. However, savings through credit unions and enrollment in an IDA program has a greater potential of being successful in Appalachia since (1) communities are tight knit and are more likely to support local institutions if they are community run, and (2) various incentives such as linking auto loans or home ownership loans to savings accounts can enhance financial security on possessions that are truly needed in this community.

Participation in an IDA or CDCU savings account is applicable to a variety of levels in the supply chain. Individuals who are self-employed, such as the landowners, some loggers, and perhaps some of the sawmills, will most benefit from establishing their savings in a CDCU in order to receive competitive interest rates on a savings account. Family-owned or small firms, such as some logging operations and sawmills, and the primary and secondary manufacturers, will most benefit from enrolling in an IDA program. Employers can match a certain percentage of savings made by employees into the local credit union. For individuals who are self-employed and serve as their own employees, the IDA can still be an option if a 3rd party organization, such as Rural Action, were to sponsor their contributions by proving the match for savings account. Refer to Figure 4 to see where in the chain this model most appropriately can apply.

**Relationships and Implementation**

Rural Action has strong relationships with small firms and self-employed individuals situated in Appalachia who occupy the first few levels of the supply chain from landowners to secondary manufacturers in Central Appalachia. MACED’s carbon credit system puts them in touch most strongly with landowners and the loggers who connect them to the landowners. Currently there are three institutions that administer the IDA program within a 70 mile radius, but they are all located in Columbus, OH: Economic and Community Development Institute, Ohio Community Development Corporation Association, and OSU Extension/University District (CFED n.d.). The level of involvement these financial institutions hold in the area of Appalachia that Rural Action has relationships is unknown. But to maximize the impact of this wealth creation model, these CDCUs and CDFIs will need to expand their institutional services and knowledge into this area, leveraging the local relationships that Rural Action has established off of trust and reliability.

Rural Action would partner with the CDCU on the IDA program. While the CDCU would provide all of the training and education in financial literacy, Rural Action would leverage their local connections by helping recruit participants, and serve as sponsor the match savings of the participants. Rural Action could sequester some of the funding they receive from Wealth From Forests and their other lenders to provide the financial match of the IDA participants that they’ve recruited to the program. The recruitment process is usually undertaken by the CDCU. However, in this forestry environment, the pre-established relationships that Rural Action has with these players have been building over several years and will likely yield more successful participation rates than if the CDCU were to recruit themselves.
In order for this model to be implemented, an existing financial institution will have to expand its services into Central Appalachian territory if not already there. Once established in the same territory that Rural Action implements its sustainable forestry program, the institution will need to adopt the management of the IDA program and accrue nonprofit, private, and government partners — such as Rural Action. Rural Action will need to strategize who of their existing relationships is suitable to participate in the IDA program. This strategy will likely include a large education and outreach component. Additional to the recruitment, Rural Action will need to redirect some of their program funding towards sponsoring their selected participants by contributing to their match savings account.

MODEL IV: LOGGING CONTRACTS

A fourth proposed method to enable wealth creation in Appalachia in a sustainable manner is through logging contracts. Naturally, loggers must ensure that there is wood to cut ahead of time. They approach landowners and offer them money for their timber; and if the landowner agrees, there is a “handshake deal” that the landowner will not enter into an agreement or deal with any other logger. A great number of these loggers are ethical, however, there are those that are not; and may be just offering just half of what the timber is actually valued at. In addition, the land is left in a decrepit condition. Due to the lack of information on the part of the landowner and also because of the lack of a physical and legally binding contract, landowners often times do not derive an adequate amount of money from their harvest and are left with an aesthetically displeasing owners. This model proposes to mitigate some of those affects while capturing some of the natural asset wealth for the landowners themselves.

Overview

This simple model attempts to capture wealth locally and at the bottom of the value chain by having a contract drafted beforehand that can be distributed to every landowner. In doing so, when the landowner is approached by a logger, they have in possession a document that would uphold the logger to certain stipulations. The Wisconsin Department of Natural Resources (WDNR) provides a sample timber sale contract that is available for download on their website (Appendix A) to private landowners. Though sometimes even loggers have their own drafted contracts, those usually serve the protection of the loggers instead of the landowners. Involving a professional forester allows the landowner to make the best decision on which trees are to be harvested and to estimate the volume of trees to be cut beforehand. Once this information is known, the landowner’s drafted contract will be direct and can explicitly protect landowner rights. The following are a few terms of harvest the contract is suggested to cover:

- Location of timber being sold
- Time period in which cutting can be done and when contract expires
- Species and volume of timber being sold
- Purchase price and payment procedures
- Utilization requirements
- Damages to be paid for improper cutting or damage to property
- Erosion control precautions or site restoration requirements
- Disposal or reduction of logging slash
- Compliance with cutting notice laws or other logging ordinances
- Supervision of sale

It is also advised that multiple loggers should bid on the harvest so that a fair competition between the loggers is established and the landowner receives the best price for the quality and the quantity of the timber they are selling. In covering the purchase price and payment procedures, the contract will determine whether the owner will be paid upfront for all the timber or through scaled sales. Scaled sales are described as

1. Scaled sales are where logs are measured in each load, and the payments are given when these logs reach the mills.
much riskier and WDNR advises against this method of payment unless the logger is reputable or a private forester is working with the landowner. Furthermore, landowners can contact Consumer Protection Hotline run by the Wisconsin Department of Agriculture, Trade, and Consumer Protection to determine whether any complaints have been filed about a logger they are considering. (Wisconsin Department of Natural Resources n.d.)

Logging contracts between landowners and loggers and sawmills can have a big societal impact and shift protection to landowner rights. Logging contracts and stipulations will provide landowners the fair value of their harvest while multiple bids results in competition amongst loggers allowing landowners to derive wealth from their natural asset. This model is most closely associated with the landowners, loggers, and sawmills section of the value chain as logging contracts are typically most absent between these involved parties.

**Relationships and Implementation**

As mentioned previously, the extent of the relationships between Rural Action and its partners and the landowners and loggers are not clearly defined. It is known that MACED has some level of connections through their Carbon Credit program, however, for such a model to be successfully implemented, a more widescale outreach effort must be in place. In order for this to be implemented, it would be necessary to designate a point of contact that would provide the wealth of information required to run such a program. A sample selling contract must be drafted specific to the region, and having professional foresters on hand to appraise the land or advise on which trees to be harvested would protect landowners from predatory logging.

Education, as with all models, is necessary. Providing information to landowners such as the fact that high-grading\(^2\) is incredibly destructive to the entire forest, can sustain both the forest and landowner wealth. Landowners should know that harvesting damage may occur, but that the contract should contain provisions of proper restitution, and that though all cutting is aesthetically displeasing even when done correctly, the way it looks is temporary and normally not detrimental to the environment. (Wisconsin Department of Natural Resources n.d.)

\(^2\) Selling only the most valuable trees
<table>
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<td><strong>LOGGERS</strong></td>
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<td>• few mechanisms in place for generational property transfer</td>
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<td></td>
<td>• lack of binding contract that ensures fair value of their land</td>
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<tr>
<td><strong>BROKER</strong></td>
<td><strong>UNFINISHED LUMBER</strong></td>
<td>• a “woodshed” defines the area of business</td>
<td></td>
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<tr>
<td><strong>RETAILER</strong></td>
<td><strong>ARCHITECTURE PRODUCT</strong></td>
<td>• point of contact to reach dispersed loggers &amp; landowners</td>
<td></td>
</tr>
<tr>
<td><strong>ARCHITECT</strong></td>
<td><strong>ARCHITECTURAL FURNISHINGS</strong></td>
<td>• typically small business</td>
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<tr>
<td><strong>CUSTOMER</strong></td>
<td><strong>INSTALLED FURNISHING</strong></td>
<td>• situated in Appalachia</td>
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</table>

- **ARCHITECTURAL FURNISHINGS**
  - can be a wholesaler
  - enhanced customer service to aid customers in selecting a product
  - specifies the brand and supplier of building materials to be used
  - can request new products directly from manufacturer
  - pushing the demand for green and sustainable wood products
  - niche market will care about the origins of product location
Throughout our research it has become increasingly clear what the unique situation the Appalachian forestry industry is operating in. While many of our wealth creation models have proven successful in several scenarios, the local culture in Appalachia challenges their applicability to the wood products industry, as the inherent culture lends itself to more caution with regards to institutional, governmental, or censoring interventions. The adoption of mechanisms such as a land trust, logging contracts, or even certification mechanisms finds this caution difficult when attempts at implementation or general information gathering is being made.

If these mechanisms are to be implemented, their success will heavily rely on local facilitation. The implementation of any wealth creation models will have a higher likelihood of success if facilitated by a local entity, such as Rural Action, that has no government affiliation. Because of this, we believe the best means of wealth creation while sustaining Appalachian natural resources, is to turn the interest shown by industry firms into action. The key strategy here will be in how to disperse information about these options and make them available to those who wish to participate, especially among relationships that have already been built between Rural Action and their partners and industry firms, rather than through recruiting new participants.

Finally, the overlay of the value chain and supply chain with wealth creation models indicates how these models are not necessarily specific to any one level of the supply chain, and can effect the issues of many players in the industry. We believe that though widespread implementation is difficult, if many players in the industry can be provided a financial incentive to sustainably manage their forest and harvest, goals of sustainable forestry can be reached quicker. The objective is not an imposition of models and policies, but a grander recognition of the value of natural assets, allowing those along the value chain to benefit from them in a sustainable manner.
SAMPLE TIMBER SALE CONTRACT

This Contract is entered into by and between ________________________________ (Seller), and
_______________________________________________________ (Purchaser). Contact information is listed in par. 53 of this agreement.

The Seller hereby authorizes the Purchaser to enter upon the following described lands (the Premises) for purposes of cutting and removing timber marked or otherwise designated by the Seller:

County: __________________________________ Town Name: __________________________________

Town: __ N; Range __ ; Section _________; Legal Description(s) __________________________

Town: __ N; Range __ ; Section _________; Legal Description(s) __________________________

Those Premises are further described on the map(s) or diagram(s) attached to and made a part of this Contract.

FOR AND IN CONSIDERATION of the following terms and conditions the Seller and the Purchaser mutually agree:

CONTRACTING PARTIES

1. CONTRACTING PARTIES
   a. Seller and Purchaser. In this Contract, the Seller and the Purchaser include their respective officers, employees, agents, directors, partners, representatives, successors, heirs and members.
   b. Purchaser Ceases to Exist. If the Purchaser ceases to exist, in fact or by law, the Seller may terminate this Contract without waiving any remedies available to it and take all action necessary to assure its performance.
   c. Subcontracting. This Contract or work under it may not be assigned or subcontracted in part or in whole without prior written approval from the Seller and may be changed or amended only in writing. The Purchaser agrees to notify the surety, if any, of any such change or amendment.

ENTIRE CONTRACT

2. ENTIRE CONTRACT. This Contract, together with specifications in the request for bids as well as reference to parts and attachments, shall constitute the entire agreement and any previous communications or agreements pertaining to this Contract are hereby superseded. Any amendments to this Contract shall be in writing, signed and dated by both parties.

3. ATTACHMENTS. Any and all attachments to this Contract shall be made a part of this Contract and be fully complied with, including:
   a. Map(s) or Diagram(s) of Sale Area;
   b. Payment Schedule and Conditions of Payment;
   c. Other: ___________________________________________________________________________________________

CONTRACT PERFORMANCE, PERIOD, EXTENSIONS AND TERMINATION

4. PERFORMANCE
   a. Commencement. Cutting and removal of timber in conformance with this Contract may commence and continue only after the signing of this Contract by both parties and only after submission and maintenance of all bonds, certificates or statements required under it.
   b. Contract Oversight. Cutting and removal of timber purchased under this Contract shall be conducted in conformance with this Contract and in a good and workmanlike manner with reasonable diligence to assure completion of all performance within the Contract period specified in par. 5. The Purchaser shall notify the Seller or the Seller’s Agent 36-48 hours prior to commencing harvest of the timber designated herein and upon completion of the cutting. In the event that the harvest is temporarily discontinued for more than one week, the Purchaser agrees to notify the Seller or the Seller’s Agent _________________ (Agent's name) both upon discontinuance and resumption of harvest. Notification under this paragraph may be made by telephone to _____________ (phone number). The Seller or the Seller’s Agent may require an onsite meeting before commencement of harvesting.
   c. Inspection. The Seller retains the right of ingress and egress to and on the sale area and may inspect the sale area and trucks hauling forest products from or traveling on the sale area at any time. If the inspection reveals any violations of this Contract the Seller shall promptly notice the Purchaser. Upon notice from the Seller, the Purchaser shall promptly take measures to remedy the violation.
   d. Access. The Purchaser has no access or privilege to go upon the Seller's property other than to comply with this Contract and may not authorize access or use to others except for the sole purpose of performing this Contract.

Where options are listed with “OR”, strike the option(s) that does not apply.

Developed by the Wisconsin Dept. of Natural Resources, Wisconsin Woodland Owners Assoc. and Univ. of Wisconsin-Extension
5. CONTRACT PERIOD
   a. All work under this Contract shall be completed between the signing of the Contract by both Parties and 
   (Contract ending date), FOR TIME IS OF THE ESSENCE. Contract amendments or extensions may not be relied upon by 
   the Purchaser for the purpose of completing performance under this Contract.
   b. The Seller may temporarily suspend operations under this Contract due to excessive property damage, wet conditions or at 
   other reasonable times upon notice to the Purchaser or other persons operating on the sale area under this Contract with 
   subsequent equitable adjustment of this Contract as mutually agreed upon by the parties.

6. CONTRACT EXTENSIONS. If extensions of this Contract are deemed reasonable by the Seller, the stumpage price agreed upon 
   herein shall be adjusted as follows:
   a. First six-month extension: 0% increase
   b. Second six-month extension: 5% increase
   c. Additional six-month extensions: 10% increase
   d. Other applicable charges or fees: ______________________

7. TERMINATION. The Seller may terminate this Contract by oral or written notice to the Purchaser upon its breach. Upon such 
   notice, the Purchaser shall cease all operations on and immediately leave, and not return to, the Seller's property unless otherwise 
   provided by the Seller.

DOWNPAYMENT, BOND, REMEDIES AND DAMAGES
8. DOWNPAYMENT. The Purchaser has given the Seller a down payment in the form of cash, a certified check, or other form 
   acceptable to the Seller in the amount of $_________________ [if none, enter "zero"] to commit to completion of the timber sale in a 
   timely manner as specified in the Contract.

9. BOND.
   a. A performance bond in the Seller’s favor in the amount of $________________ , in cash, by surety bond, or in any other 
      form accepted by the Seller, shall be submitted by the Purchaser no later than _________ to be retained by the Seller to 
      assure full and complete performance of the Contract by the Purchaser to the Seller's satisfaction. Failure to submit the bond 
      shall be considered a breach of this Contract and subject the Purchaser to liability for damages. The Purchaser agrees that the 
      bond shall be forfeited to the Seller as liquidated damages upon the Seller's determination that a condition or term of this 
      Contract has been breached by the Purchaser, unless the Seller chooses and can reasonably determine the actual damages 
      suffered as a result of the breach of the Contract. Damages assessed under this Contract are the responsibility of the 
      Purchaser and may be deducted from this performance bond and otherwise collected by the Seller.
   b. The Purchaser agrees that the performance bond may be retained by the Seller until all performance under this Contract has 
      been completed to the Seller's satisfaction and the Seller determines the performance has been so completed. If the Seller 
      determines the performance has not been completed satisfactorily and in conformance with this Contract, the performance 
      bond may be retained by the Seller until the Seller can determine damages caused by the lack of performance. Only in the 
      event the Purchaser provides written notice of sale completion to the Seller shall the Seller have sixty (60) days to determine 
      that performance has been completed as required under this Contract.

10. REMEDIES.
    a. If timber or other forest products not specifically described in this Contract or designated by the Seller for cutting are cut, 
       unreasonably damaged or removed by the Purchaser, the Seller may pursue any and all remedies for the unlawful use of the 
       Seller’s property and the cutting, unreasonable damage or removal of property without consent, including the seeking of 
       criminal or civil charges for theft, timber theft or criminal damage to property, in addition to any Contract remedies for 
       breach.
    b. If the Seller or Purchaser seeks damages for breach of this Contract through court proceedings, and if either party prevails in 
       such proceedings, in whole or in part, then the non-prevailing party agrees to pay all of the prevailing party’s actual and 
       reasonable expenses, including attorneys and expert witness fees.
    c. The Seller agrees to mitigate the damages for breach by offering the timber for resale if it determines the timber is saleable 
       based upon its volume or quality.
    d. The Seller may, when it deems it reasonable and in the best interest of the Seller, allow the Purchaser to continue 
       performance under the Contract and the Purchaser shall pay as liquidated damages double the mill value as determined by 
       the Seller for the timber or other forest products cut, removed or damaged without authorization under or in violation of this 
       Contract. The Seller's permission to continue cutting shall not be considered a waiver of breach nor prevent it from 
       considering such breach for purposes of asserting any other remedies available to it. It is agreed that the double mill scale 
       sum is a reasonable estimate of the probable damages suffered by the Seller and shall not be construed as or held to be in the 
       nature of a penalty.

2 "Reasonable" in this contract is defined as fair, proper, just, moderate, and suitable under the circumstances, not arbitrary or capricious.
11. **DAMAGES.** The damages to be paid to the Seller upon the Purchaser’s failure to perform this Contract include, but are not limited to:
   a. The difference between the Purchaser's bid value of timber not cut and removed under this Contract and the value returned to the Purchaser. The Seller agrees to mitigate the damages for breach by offering the timber for resale within 12 months if the Seller determines the timber is salable based upon its volume or quality.
   b. Triple average stumpage rate established in NR 46.30, Wisconsin Administrative Rules, for timber cut, removed or unreasonably damaged without authorization under or in violation of this Contract. The Seller’s decision to assess triple damages as provided here and to allow the Purchaser to continue performance under this contract shall not be construed as a waiver of other contract performance requirements.
   c. All costs of sale area cleanup or completion of performance not completed by the Purchaser.
   d. All costs of resale of timber not cut and removed as required under this Contract.
   e. The Purchaser agrees that if the timber identified in this Contract for cutting is to be resold due to a breach of this Contract, the Seller is not obligated to give oral or written notice to the Purchaser of the resale.
   f. Additional damage provisions:

12. **PRODUCTS TO BE REMOVED**

   No forest products may be removed from the Premises until the Purchaser pays for the products or guarantees payment for the products to the satisfaction of the Seller.

13. Title to stumpage and any forest products cut under this Contract shall remain with the Seller until payment is received. Title to stumpage and cut products that are not cut and removed before the end of the Contract period, even though paid for, shall revert to the Seller, and the Seller shall be under no obligation to return payments to the Purchaser.

14. During the period of this Contract, the Purchaser is authorized and shall cut, remove and pay for the timber or forest products marked or designated as follows:

15. **SALE TYPE, SCALING, HAULING AND PAYMENTS**

   **SALE TYPE**

   [select one of the following three choices and strike the others]

   **LUMP SUM SALE:**
   The Purchaser agrees to pay Seller an amount of $_____________, to be paid in full prior to the commencement of timber cutting, based on the volume estimates and unit values in Par. 17 Timber Products Table. The Seller is not obligated to return the payment or any portion of it in the event the Purchaser fails to remove all timber or forest products authorized for removal.

   **SCALED PRODUCTS SALE:**
   **FLAT RATE METHOD.** The payment as established by the Price per Unit in Par. 17 shall be based on sawtimber, cordwood, or piece product volume as measured by product dimensions. The price paid per board foot, cord or piece is a flat rate regardless of the quality, final destination or use of the cut product. Hardwood less than 10.6 inches in diameter at the small end of the log, inside the bark (d.i.b.), shall be measured as cordwood and 10.6 inches or greater d.i.b. as sawtimber. For conifers, the division between cordwood and sawtimber is 9.6 inches d.i.b. Sawtimber with 50% or more cull shall be measured as cordwood. The volume shall be measured by __________________________ (name), an agent of the Seller / the Purchaser / the primary processing facility (the Mill or its agent) to whom the Purchaser delivers the product and to whom the cut product is sold [strike the choices that do not apply].

   **GRADED PRODUCT METHOD.** The payment as established by the Price per Unit in Par. 17 shall be based on the volume of graded products including fuel wood, pulpwood, sawbolts, sawtimber by grade, veneer by grade and piece products (such as posts and utility poles) by grade. In addition to product dimension, the price paid depends upon the quality or intended use of the cut product or type of processing facility the cut product is destined. The volume and grade shall be determined by __________________________ (name), an agent of the Seller / the Purchaser / the primary processing facility (the Mill or its agent) to whom the Purchaser delivers the product and to whom the cut product is sold [strike the choices that do not apply].

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3 **Lump sum** and **scaled products-flat rate** methods are the most commonly accepted sale types. Landowners may have difficulty in finding purchasers willing to enter into graded product method sales, which are more difficult to administer.

4 For example, cordwood delivered to a paper mill would be paid for as pulpwood. Cordwood delivered to a sawmill would be paid for as sawbolts or sawlogs.
16. **HAULING PROCEDURE**\(^5\) AND PAYMENT SCHEDULE FOR SCALED SALES [select one of the following two choices and strike the other]

**ON SITE SCALE.** No products may be hauled from the Seller’s property until scaled and paid for or payment has been arranged to the Seller’s satisfaction in writing. Removing products otherwise shall be a violation of this Contract and considered theft.

**MILL SCALE.** The Purchaser shall keep a record of each load removed and its destination. Addresses of the Mills where wood products are to be delivered shall be given to the Seller before cutting begins. The Purchaser shall provide Mills with the Seller’s name and address for each load and request Mills to provide copies of the mill scale slips to the Seller within ___ days of receipt of the wood products. Failure to keep a record of any load and its destination shall be a violation of this Contract and considered theft. Payments shall be made according to the following schedule [pick one of the following three choices and strike the others]:

The Purchaser shall pay the Seller for the products delivered to the Mill, as measured on the mill scale slip, within ____ days of delivery. The Purchaser shall include copies of the mill scale slips with payments.

Payment to the Seller shall be made in advance of hauling, with the value of the measured volume on the mill scale slips deducted from the Purchasers stumpage payment balance. The Seller agrees that advance stumpage payments shall not be used for any purpose other than the stumpage account and that any excess payments shall be returned to the Purchaser within 60 days after the last load is hauled from the Seller’s property.

The Mill shall make payments for delivered products directly to the Seller within ____ days of delivery by the Purchaser. Copies of the mill scale slips shall be included with payments to the Seller.

17. **TIMBER PRODUCTS TABLE**

The Purchaser agrees to pay the Seller the unit price for the volume of product by species that is harvested. In the case of lump sum sales, the unit prices shall be used for sale add-ons or calculation of damages.

<table>
<thead>
<tr>
<th>Species to be Harvested</th>
<th>Product (Sawtimber, Cordwood, Posts, Poles, Biomass, etc.)</th>
<th>Estimated Volume</th>
<th>Price per Unit (MBF(^6), Cord, Piece, ton, etc.)</th>
<th>Total Value of Estimated Volume</th>
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</table>

**Total Estimated Value:**

18. Sawtimber volumes shall be determined by the Scribner Decimal C system (required for land enrolled under the Managed Forest Law or Forest Crop Law programs in Wisconsin).

19. Cord means 128 cubic feet\(^7\) of wood, air and bark assuming careful piling. Peeled cordwood shall be converted to standard cords using the Wisconsin DNR conversion specifications published in chapter NR 46.30 (1) (d), Wisconsin Administrative Code.

20. For Products measured by weight but paid for by cord the weights shall be converted to standard cords using one of the following\(^8\):
   a. the Wisconsin DNR conversion specifications published in chapter NR 46.30 (1) (g)
   b. the following weight conversions agreed to by the Seller and the Purchaser

<table>
<thead>
<tr>
<th>species</th>
<th>weight/cord</th>
<th>species</th>
<th>weight/cord</th>
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</table>

21. The volumes of timber indicated in this Contract or other appraisal or cruise documents of the Seller are estimates. The Seller gives no warranty or guarantee respecting the quantity, quality or volume of marked or otherwise designated timber or forest products on the sale area.

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\(^{5}\) Information about an additional “Ticket System” for log hauling is also available from DNR, but is seldom used on private lands.

\(^{6}\) “MBF” means “thousand board feet”

\(^{7}\) Mills may measure cordwood with a 4" trim allowance, resulting in 133 cubic feet.

\(^{8}\) Proposed weight conversions should be included in the timber sale prospectus.
22. **STUMP HEIGHT; TOPS.** Tree stumps shall be cut as close to the ground as practical, otherwise maximum stump height shall not exceed stump diameter; and for stumps ten or more inches in diameter, stumps shall not exceed ten inches in height. For sales including cordwood products, trees shall be utilized to a 4” minimum top diameter. Title to tops shall remain with the Seller and may not be utilized by the Purchaser, or at the Purchaser's direction, unless otherwise specified in this Contract.

23. **WASTE.** The Purchaser agrees to complete all operations and performance as described in this Contract without waste or nuisance on the sale area or any other property of the Seller or adjoining land used in conjunction with the harvest and use reasonable care not to damage trees not designated or marked for cutting. Young trees bent or held down by felled trees shall be promptly released.

24. **ZONE COMPLETION.** The Purchaser agrees to complete all operations on each portion of the sale area or each zone as designated on the sale area map, or other attachments or in the cutting requirements before beginning cutting in the next portion or zone, unless agreed to otherwise by the Seller.

25. **DIGGERS HOTLINE.** The Purchaser is responsible to contact the diggers hotline, or other informational sources performing similar services, prior to digging or conducting other activities on the property which may result in contact with utility or service lines or facilities.

26. **ROADS, LANDINGS, MILL SITES, CAMPsites, Erosion Control, Best Management Practices (BMPs).**
   a. When not otherwise designated by the Seller, the location of roads, landings, mill sites and campsites on Seller's property are subject to advance approval and under the conditions established by the Seller. All restoration, cleanup or repair of roads, bridges, fences, gates, landings, mill sites and campsites, or the cost of the cleanup, if not completed by the Purchaser to the reasonable satisfaction of the Seller, is the responsibility of the Purchaser.
   b. Logging debris accumulated at landing areas shall be scattered within the sale area to the reasonable satisfaction of the Seller.
   c. Berms constructed on the Seller's property shall be leveled to restore the area to the Seller's satisfaction unless they are constructed at the direction of the Seller under sub d.
   d. Roads and landings shall be graded or closed upon the request of and to the Seller's satisfaction upon completion or termination of this Contract.
   e. Other restoration requirements (e.g., seeding, gravel, rutting, culvert removal, etc.):
   f. The Purchaser agrees to comply with the Best Management Practices (BMP) guidelines as described in "Wisconsin’s Forestry Best Management Practices for Water Quality" published by the Wisconsin Department of Natural Resources, publication FR-093. Identify BMPs of particular concern:
   g. The Purchaser agrees to take precautions to prevent the spread of invasive species as described in Wisconsin Department of Natural Resources’ invasive species guidelines. Identify species and actions of particular concern:

27. **SOIL DISTURBANCE AND RUTTING**
   a. The Purchaser agrees to take all steps and precautions to avoid and minimize soil disturbances, such as soil compaction and rutting. If soil disturbances occur, the Purchaser agrees to work cooperatively to mitigate and repair any and all instances of soil disturbance.
   b. Excessive soil disturbance (as defined in Table 1) shall not be permitted. Purchaser agrees to contact Seller in the event of an excessive soil disturbance.
Table 1. Thresholds for soil disturbances.

<table>
<thead>
<tr>
<th>Timber Sale Infrastructure</th>
<th>Soil disturbances are excessive if:</th>
</tr>
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<tbody>
<tr>
<td>Roads, Landings, Skid Trails, and General Harvest Area</td>
<td>• A gully or rut is 6 inches deep or more and is resulting in channelized flow to a wetland, stream, or lake.</td>
</tr>
</tbody>
</table>
| Roads, Landings, and Primary Skid Trails | • In a riparian management zone (RMZ) or wetland, a gully or rut is 6 inches deep or more and 100 feet long or more.  
• In an upland area (outside of RMZ), a gully or rut is 10 inches deep or more and 66 feet long or more. |
| Secondary Skid Trails and General Harvest Area | • A gully or rut is 6 inches deep or more and 100 feet long or more. |

Note: The depth is to be measured from the original soil surface to the bottom of the depression. If individual lug depressions are visible, the depth would be measured to the lesser of the two depths (the "top" of the lug). The length is measured from the start of the "too deep" section to the end of the "too deep" section. Measurements are not cumulative.

c. Prior to sale completion the Purchaser shall mitigate and repair soil disturbances to the Seller’s satisfaction.
d. Other restoration requirements (e.g. repair of soil disturbance or rutting on recreational trails used for skidding):

(1) __________________________________________________________________________________________

(2) __________________________________________________________________________________________

28. **OTHER APPROVALS.** Logging roads that intersect town, county or state roads or highways must have the intersections approved by the proper authorities prior to construction and cleared of all unsightly debris at the time of construction. The Purchaser agrees to apply for and obtain all approvals. The Purchaser also agrees to fully comply with all terms and conditions of intersection approvals.

29. **SURVEY MONUMENTS.** The Purchaser agrees to comply with s. 59.635, Wis. Stats., regarding perpetuation of landmarks and pay for the cost of repair or replacement of property or land survey monuments or accessories which are removed, destroyed or made inaccessible.

30. **FOREST FIRE PREVENTION.** The Purchaser agrees to take reasonable precautions to prevent the starting and spreading of fires. Those precautions include, but are not limited to:

a. A minimum of one fully charged 5 pound or larger ABC fire extinguisher with a flexible spout shall be carried on each off-road logging vehicle.
b. All chainsaws and all non-turbocharged off-road logging equipment used in the operation shall be equipped with spark arrestors that have been approved by the U.S. Forest Service. Such arrestors may not be altered in any manner or removed and shall be properly maintained.
c. If a fire occurs, the Purchaser agrees to promptly report the fire and cooperate in the control and suppression of the fire.
d. The Purchaser shall comply with requests regarding forest fire prevention and suppression made by the Seller and take all reasonable precautions to prevent, suppress and report forest fires. Those requests may include ceasing or modifying operations.
e. The Purchaser shall be responsible for damage and forest fire suppression costs, including that provided in ss. 26.14 and 26.21, Wis. Stats., caused by their operation under this Contract.
f. Other: __________________________________________________________________________________________

31. **SLASH REMOVAL.** Slash as defined in s. 26.12, Wis. Stats., shall be disposed of as follows:

a. Slash falling in any lake or stream, in a right-of-way or on land of an adjoining landowner shall be immediately removed from the waters, right-of-way or adjoining land. Tops from felled trees may not be left hanging in standing trees. All trees shall be completely felled and not left leaning or hanging in other trees.
b. Other: __________________________________________________________________________________________

32. **CLEANUP AND USE OF SALE AREA.**

a. The Purchaser shall remove equipment, tools, solid waste and trash remaining on the sale area or Seller's property or adjoining land used in conjunction with the harvest upon completion of performance under this Contract, termination of this Contract due to breach by the Purchaser or when requested by the Seller.
b. No residence, dwelling, permanent structure, or improvement may be established or constructed on the sale area or other property of the Seller.

33. **HAZARDOUS MATERIALS.** The Purchaser agrees to properly use and dispose of all petroleum and hazardous products, including but not limited to oil, oil filters, grease cartridges, hydraulic fuel and diesel fuel. Any on-site spillage must be properly reported, removed and cleaned up by the Purchaser in accordance with applicable statutes and rules of the State of Wisconsin.
ADDITIONAL UTILIZATION AND OPERATION REQUIREMENTS AND INSTRUCTIONS:

a. Between April 15 and August 15 all pine products must be removed from the site within two weeks, regardless of when they were harvested.

b. Oak wilt prevention: where oak trees are present, no cutting is allowed between _________ and ________.

c. No trees or products over 16 feet in length may be skidded within the cutting area without written permission of the Seller.

d. Other (If none, state None.)

NOTICE OF INTENT TO CUT AND COMPLIANCE WITH LAWS

SECTION 77 NOTICE AND REPORT. The Seller / Purchaser [select one] shall file required cutting notices and cutting reports to the responsible DNR forester for lands that are under the Forest Crop Law and Managed Forest Law programs.

SECTION 26 NOTICE. The Seller / Purchaser [select one] shall file a declaration annually with the county clerk in any manner acceptable to the county of his or her intentions to cut forest products pursuant to section 26.03, Statutes, and comply with all other notice requirements, laws and ordinances with respect to work under this Contract.

OTHER PERMITS. The Seller and Purchaser shall work together on acquiring other necessary permits (such as wetland or stream crossing permits).

APPLICABLE LAW. This Contract shall be governed by the laws of the State of Wisconsin. The Purchaser shall at all times comply with all federal, state, and local laws, ordinances and regulations in effect during the Contract period.

TITLE, BOUNDARY LINES AND ACCESS

TITLE. The Seller warrants that the Seller has clear and unencumbered title to the stumpage subject to this Contract.

BOUNDARY LINES. The Seller guarantees to have the boundaries marked with paint or other suitable means before any timber is harvested.

ACCESS. The Seller agrees to secure entry and right-of-way to the Purchaser on and across the area covered by this Contract, including access via land owned by a third-party if necessary.

LIABILITY AND INSURANCE

The Purchaser agrees to protect, indemnify and save harmless the Seller and the Seller’s employees and agents from and against all causes of action, claims, demands, suits, liability or expense by reason of loss or damage to any property or bodily injury to any person, including death, as a direct or indirect result of timbering operations under this Contract or in connection with any action or omission of the Purchaser, who shall defend the Seller in any cause of action or claim.

Unless the Purchaser is exempted by the Seller from this coverage requirement as an independent contractor, as defined in s. 102.07(8)(b), Stats., and as determined by the Seller based on an affidavit submitted to it, the Purchaser agrees to elect to maintain worker's compensation insurance coverage for the cutting operation under this Contract and any and all employees engaged in cutting on the Seller's land during the period of this Contract regardless of any exemptions from coverage under chapter 102, Wis. Stats. The Purchaser must provide an original certificate of insurance naming the Seller as a certificate holder so the insurance carrier can notify the Seller should the insurance expire.

The Purchaser agrees to furnish the Seller with a certificate of public liability insurance covering the period of logging operations on the Seller’s property for:

- $1,000,000 single limit liability for personal injury or $1,000,000 bodily injury per person and $1,000,000 per occurrence;
- $100,000 property damage.

The Purchaser shall notify the Seller in writing, immediately upon any change in or cancellation of insurance coverage required by this Contract.

The Purchaser is an independent contractor for all purposes including Worker’s Compensation and is not an employee or agent of the Seller. The Seller agrees that the undersigned Purchaser, except as otherwise specifically provided herein, shall have the sole control of the method, hours worked, time and manner of any timber cutting to be performed hereunder. The Seller reserves the right only to inspect the job site for the sole purpose of insuring that the cutting is progressing in compliance with the cutting practices established under this Contract. The Seller takes no responsibility for supervision or direction of the performance of any of the harvesting to be performed by the undersigned Purchaser or it’s employees. The Seller further agrees to exercise no control over the selection and dismissal of the Purchaser’s employees.

\(^9\) County cutting notices expire by law on December 31 and so must be renewed annually.
47. **OSHA COMPLIANCE, DANGER TREES.** The Purchaser is responsible to comply with, and assure compliance by all employees or subcontractors with, all Occupational Safety and Health Act (OSHA) requirements for the health and safety of Purchaser's employees, including provisions relating to danger trees. In addition, the Purchaser agrees to notify, and obtain agreement from, the Seller if the Purchaser intends to modify performance required under this Contract for the purpose of compliance with OSHA requirements. Notwithstanding OSHA regulations, the Purchaser agrees to apply appropriate safety precautions.

48. **ACTS OF GOD.** Neither party shall be liable for defaults or delays due to acts of god or the public enemy, acts or demands of any government or governmental agency, strikes, fires, flood, accidents or other unforeseeable causes beyond its control and not due to its fault or negligence. Each party shall notify the other in writing of the cause of such delay within five days after the beginning thereof. If such uncontrollable circumstances continue for 30 days and prevent either party from complying with the terms of this agreement, either party shall have the option of terminating upon ten days notice to the other.

**TRAINING (Recommended)**

49. **TRAINING REQUIREMENT.** The Purchaser is responsible for ensuring that the actual logging contractor engaged in performance of this Contract holds a current logging safety training certificate issued by the Forest Industry Safety & Training Alliance (FISTA) or equivalent safety training acceptable to the Seller. Purchaser agrees to provide documentation to Seller that training has been attained prior to initiating sale.

**FOREST CERTIFICATION** (if applicable)

50. **CERTIFICATION STANDARD AND CERTIFICATE.** The land management area encompassed by this timber sale is certified to the following forest certification standards (mark as applicable and provide valid certificate numbers):

   __ American Tree Farm System (ATFS) Certificate # __________
   __ Forest Stewardship Council (FSC) Certificate # __________
   __ Sustainable Forestry Initiative (SFI) Certificate # __________
   __ ________________________ (Other Standard) Certificate # __________

51. **CHAIN OF CUSTODY.** Forest certification chain of custody provided by the Seller under the preceding certificates ends at the stump, log landing or roadside.

52. **APPROVED CUTTING NOTICE.** In the event that land management area encompassed by this timber sale participates in the Wisconsin Managed Forest Law Certified Group, the Seller agrees to provide the Purchaser with a copy of the Wisconsin DNR approved Cutting Notice (DNR Form 2450-32).

**CONTACT INFORMATION**

53. **CONTACT INFORMATION:**

   (Note: Separate from this form, the Seller and Purchaser are encouraged to provide one another with their Social Security Number or Federal Employer ID Number, needed to file tax returns or other financial documents.)

   Seller: Purchaser:
   Name ______________________________ Name ______________________________
   Address: ______________________________ Address: ______________________________
   ______________________________ ______________________________
   Phone: ______________________________ Phone: ______________________________
   Cellular Phone: _________________________ Cellular Phone: _________________________

   We have read and understand the entire Contract comprised of ______ pages.

   SELLER
   Date _________________ by ______________________________

   PURCHASER
   Date _________________ by ______________________________


Rowe, Kevin, interview by Seema Adina, Kira Intrator and Lindsay Reul. (2011, 07-October).


Shouse, Scott, interview by Seema Adina, Kira Intrator and Lindsay Reul. (2011, 17-November).


