

*Restoration after Recent Hurricanes and Other Natural Disasters:  
Federal Role in Recovery after Catastrophic Events Affecting Forest Lands*

Oversight Hearing  
Subcommittee on Forests and Forest Health  
Committee on Resources  
U.S. House of Representatives

Representative Greg Walden  
Chairman

Testimony Presented By  
Bruce C. Alt  
Executive Vice President  
Mississippi Forestry Association  
Jackson, Mississippi

October 7, 2005  
Longworth House Office Building  
Washington, DC

Mr. Chairman, honorable Members of the Committee, Committee Staff, and distinguished witnesses, thank you for this opportunity to appear before you today, and to present you with information that will assist you in your efforts to shape and guide the public policies designed to help recover and restore the forest based communities, economies, and societies of the Gulf region ravaged by Hurricanes Katrina and Rita.

#### Introduction

This testimony will focus on the role that forestry and forest products have in this region. The landowners, the loggers, the forest products mills, and the forestry profession are all in this together – all have been severely crippled, and all have suffered huge economic and personal losses. Our overall success as we now move and work forward through the phases of salvage, recovery, and renewal will be based largely on how well we join forces and unite to get the job done, done right, and for the betterment of all participants in our forestry community. Fundamentally, our unity and perseverance in the face of great adversity will determine the future of Mississippi's forests and forestry community.

My name is Bruce Alt, and I am honored to serve the forestry community in Mississippi as the Executive Vice President of the Mississippi Forestry Association. The Mississippi Forestry Association (MFA) is a statewide, not-for-profit membership organization representing private landowners, professional foresters, logging contractors, forest industry manufacturers and businesses, and federal and state agency personnel who sustainably manage our state's 19.8 million acres of forests to produce environmental benefits ranging from clean water, clean air, diverse wildlife habitat, outdoor recreational opportunities, to natural wood products for the people of the United States and the world. MFA's Vision is to serve as the "Voice of Forestry" in Mississippi. Our Mission is leading diverse groups to promote landowner rights, environmental stewardship, member prosperity, and community understanding by conducting public affairs, communication, and education programs that will foster a better understanding and appreciation of conservation, development, and use of forestland and resources.

#### Economic Impact of Sustainable Forestry in Mississippi

Sustainable forestry in Mississippi means managing our forests to meet the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable forestry means practicing a land stewardship ethic which integrates the growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, and wildlife and fish habitat.

In Mississippi, the total forest industry economic impact on the state's economy was about \$13.4 billion in 2001. The forestry and forest products sector directly employs more than 52,000 people, and indirectly accounts for 120,000 jobs, or 8.5% of all the jobs in our state. The entire sector contributes \$3.6 billion in wages annually, and represented nearly 25 percent of the manufacturing workforce at the end of 2003. With forest products mills and business facilities spread across Mississippi, the industry contributes more than \$13 billion to the state's economy every year.

Timber is a very important crop in Mississippi. The total value of the state's timber harvest was more than \$1 billion in 2004. Since 1990, timber has been the most valuable agricultural crop each year in at least 35 of Mississippi's 82 counties.

In order to place all these economic statistics in perspective, it is crucial to fully understand the ownership pattern of Mississippi's abundant and productive forestlands. Private, non-industrial landowners own and manage the majority of the state's timberlands – 69%. The forest products industry owns 20%, and the remaining 11% is owned by federal and state government, principally the USDA Forest Service. This ownership pattern, remarkably different from the western U. S., dominated by approximately 70% of the forestland in the hands of individual and family forest landowners, is typical of the entire southern U.S.

Our clear challenge now, in the aftermath of this year's catastrophic hurricanes, is recovering and sustaining Mississippi's #1 renewable natural resource, a giant economic engine for the state and region, the land use that produces more environmental benefits than any other, and the source of wealth production for tens of thousands of family and individual forest landowners, their children, and their grandchildren. In Mississippi, approximately 175,000 private landowners own, manage, and nurture 70% of our state's forestland.

***In the most fundamental sense***, forestry is not about trees, it's about PEOPLE.

#### Hurricane Katrina's Impacts to the Forests

Hurricane Katrina's impact on the forests of south and east Mississippi was catastrophic. The short-term challenge for landowners, loggers, and consuming mills is to salvage as much of the volume and value from those forests as possible. This process is difficult and complex, and raises special problems for those buying the timber and conducting the necessary operations.

The trees and forests of the area impacted by Hurricane Katrina, like the people, communities, and wildlife and fisheries resources, have all been dramatically affected by the storm. Some effects were catastrophic, with large areas of broken or uprooted timber and over 50% of the trees damaged. Other areas suffered moderate damage, often with 30 to 50% of the trees broken or windthrown. And still other areas experienced light to minimal damage with wind stress, broken limbs, and lost foliage. The catastrophic loss is immediately evident even to the most casual observer; the more subtle effects may take months or years to manifest themselves in reduced tree growth, post-storm mortality, increased susceptibility to insect and disease attacks, and splits and shake defects that ultimately reduce the value of the tree for solid wood products. In addition, it is critical to note that these forestlands are now swamped with a historically unprecedented fuel load of dead and dying woody debris, and the risk of catastrophic forest fires is also historically unprecedented.

#### Hurricane Katrina's Impacts to the People of Mississippi

The forest resources of Mississippi constitute a considerable share of the wealth of the region. Many Mississippians, those individual and family forest landowners referred to previously who own and manage 70% of the state's timberland, have looked to an investment in land and timber as a very significant means of support for their retirement, for college funds, for savings accounts for medical emergencies, or simply as "rainy day" reserves. Others have used the value of their lands and forests as collateral when borrowing money for other purposes. The reasons for ownership and investment in timber and timberland are many; the strategies for managing that investment complex, and the expectations for that investment have been realistic under normal circumstances. Hurricane Katrina changed all of this.

Salvaging hurricane-damaged timber to capture any remaining wealth for the owners and returning the affected forest areas to productivity and sustainable management as quickly as possible are necessary and formidable tasks.

#### Timber Damage Estimates from Hurricane Katrina

Scientists from the U.S. Department of Agriculture Forest Service have found that approximately 19 billion board feet of timber spread over five million acres in Mississippi, Louisiana and Alabama have been destroyed as a result of Hurricane Katrina. "While this early assessment suggests a potential significant loss of timber, the next step will be to determine what is salvageable," said Forest Service chief Dale Bosworth. "Recovering the useable timber will help to diminish

the economic loss as well as to prevent damage from insects and disease and to reduce the risk of fires."

The initial assessment indicates that the damaged timber is on both public and private land. However, the majority of the affected forestland is under private ownership, with one-third of the damaged timber concentrated in eight South Mississippi counties. Nearly 90% of affected forestland is within 60 miles of the Gulf Coast, predominantly in Mississippi. Nearly 60% of the damage occurred to softwoods, predominately pines, with the remainder occurring to hardwoods

### Hurricane Katrina's Impacts to 16 th Section Public School Trust Lands

Mississippi's Secretary of State, acting as the State Land Commissioner, is responsible for managing 16 th Section Public School Trust Lands. According to Secretary Eric Clark, "funds derived from the leasing of these trust lands, and the growing of timber on those lands, are a critical part of school district funding. According to preliminary partial estimates from the Mississippi Forestry Commission, approximately 26,801 acres of timber located on 16 th Section Public School Trust Lands have been damaged or destroyed, and this loss is in excess of \$23 million". The Mississippi Forestry Commission has also estimated that 42,313 acres of these public school trust timberlands now require salvage harvesting. This total represents 17% of the 249,340 acres of 16 th section timberland ownership just in the 38 hurricane impacted counties in Mississippi. In fiscal year 2004, 16 th Section lands generated \$14.5 million in surface rent and an additional \$16 million in timber sales. For the last few years timber related revenue is comparable to income from surface rent. So, in theory, public schools in the storm-damaged area lost at least 50% of their 16 th Section income stream. Secretary of State Clark's letter to Members of Congress describing these losses is attached in the Appendix.

### Characteristics of Private Nonindustrial Family Forestlands

One factor that complicates the process of salvaging damaged timber in Mississippi is the number and size of individual forested ownerships. Timber salvage on these smaller ownerships requires a different protocol than would be used on large private or industrial ownerships. Each parcel must be dealt with separately. Tasks that would be simple and routine in normal times become complex and time consuming following a natural disaster. The magnitude of the salvage operation and subsequent reforestation effort that will be required to recover from Katrina is truly daunting. The sheer number of private landowners involved greatly complicates the challenge.

Scientists at Mississippi State University have developed maps of forestland ownerships that reveal that the ownership pattern is both fragmented and dispersed across the landscape. This is the result of two hundred years of land use in agriculture and forestry, the concentration of agriculture on the areas of the most fertile and productive soils, infrastructure development, and the subdivision of land over time and with population growth.

In one research study, parcel sizes of uncultivated land for 11 counties in the area affected by Hurricane Katrina (Clarke, Covington, Forrest, George, Greene, Harrison, Jones, Lamar, Marion, Simpson, and Stone) were summarized to develop an estimate of the number of parcels and the total acreage by parcel size involved ( Hurricane Katrina And Private Forest Ownerships). These counties contain 72,271 individual parcels of uncultivated land ranging in size from one to 640 acres. About 25,000 of these parcels are less than five acres in size, and account for only 3.3% of the total uncultivated land area. These tracts are really too small for commercial logging, but of major interest and concern to their owners. Whether characterized as storm cleanup or timber salvage, tracts of this size can be worked by smaller, manual or partially mechanized contractors. Qualified contractors are experienced, properly insured, and bonded if the job requires work around people and buildings. Labor and insurance costs will be a considerable part of getting the work done, and will further depress any value returned to the landowner.

Forty-one percent is in parcels of less than 40 acres. Tracts between five and 40 acres are large enough to allow salvage operations by conventional mechanized logging methods. Smaller tracts in a community may have to be aggregated to minimize the time normally required to move between jobs. Salvage may be complicated by access; many of these tracts are located on county and state roads that likely suffered hurricane damage. The maximum weight a log truck, engaged in storm salvage, can carry on state and federal roads has been temporarily increased to 95,000 pounds. Weight limits on county roads may be less due to construction method and the load bearing capacity of small bridges. The counties have a historic legal right to set weight limits they consider safe on roads and bridges for which they are responsible. No one wants to further endanger people or property, public and private, in the recovery but a contractor faced with reducing the volume per truck load by up to one half will favor those tracts where he is permitted to move a full load.

The magnitude of the salvage operation and subsequent reforestation effort that will be required to recover from Hurricane Katrina is truly daunting. The sheer number of private landowners involved greatly complicates the situation. We estimate that only 10 to 15% of the total damaged timber will be recovered through conventional salvage operations. Judging from past hurricane-related salvage operations, small individual and family forest landowners will be the last to contract with a salvage contractor,

and the last to receive any benefit from their lost timber.

## Energy and Chemicals From Wood Biomass – An Industry of the Future for Mississippi

Woody biomass offers a tremendous source of renewable energy. Biomass is defined as plant material, vegetation or agricultural waste that can be used as a fuel or energy source. Scientists from the U.S. Department of Agriculture Forest Service have found that approximately 19 billion board feet of timber spread over five million acres in Mississippi, Louisiana and Alabama have been destroyed as a result of Hurricane Katrina. Based on prior hurricane-related salvage efforts, the majority of this damaged timber will not be recovered using conventional salvage methods.

As a source of energy, biomass is the largest domestic source of renewable energy providing over 3% of total U.S. energy consumption, and surpassing hydropower. The U.S. Department of Energy and U.S. Department of Agriculture support biomass fuels and products as a way to reduce oil and gas imports and support the growth of agriculture, forestry, and rural economies. Woody biomass includes forest residues remaining after harvesting operations, pre-commercial stems remaining after thinning operations, logging residues, and industrial process residues from primary processors, such as sawmills and secondary processors such as furniture manufacturers. This woody biomass represents a significant volume of feedstock which could be converted into energy and high value add chemicals.

### *Can We Afford Not to Utilize Mississippi's Plentiful Forests for Energy Biomass ?*

A major barrier to the sustainable development of wood based energy is often stated as its cost vs. fossil fuels. Comments have been made that if the environmental and social benefits of wood energy are accounted for, then the utilization of forest biomass for the production of energy becomes environmentally, economically and socially justifiable. When we consider the nature of the forest-based industry in Mississippi, we would suggest that if the environmental and social benefits of wood energy are *not* accounted for, then the *lack of* utilization of forest biomass for the production of energy *will* become environmentally, economically and socially *unacceptable*. The time is right to reconfigure the forest products industry in Mississippi. Such a reconfiguration would involve the development of an industry, based upon the utilization of forest biomass for the production of energy and chemicals. Please see the Appendix for additional information.

## Recovery and Renewal of the Forests and Communities

There is no single federal or state program that can address all of the recovery and renewal needs of the forestry community – private landowners, loggers, foresters, and the forest products manufacturing industry. MFA's goal is to support a wide variety of programs that will encourage forest landowners to reforest these devastated lands promptly to remain in the business and practice of growing trees and helping to produce the environmental benefits and natural wood products we depend on every day.

The following policy recommendations have been formulated by members of the Mississippi Forest Recovery Task Force, in consultation with representatives of the entire forestry community, including private forest landowners, and representatives of the Mississippi Forestry Commission, Mississippi State University, Mississippi Loggers Association, the Mississippi Institute for Forest Inventory, and the American Forest and Paper Association.

These policy recommendations only begin to address the needs of Mississippi's citizens and forest-based communities, individual and family forest landowners, wood fiber suppliers and loggers, and the forest products manufacturing community. They have been developed to focus on immediate, mid-term, and long-term recovery from Hurricane Katrina. Recommendations have also been developed for consideration and action at the local and state level.

Issue: The initial priority is recovery and salvage of damaged and downed timber. Much of this timber could be used to manufacture products, but unless it is done in a timely manner, the wood will quickly become unusable due to the natural processes of rot and decay. There are many logistical barriers to salvaging and transporting the timber to storage facilities or manufacturing facilities that can utilize this raw material.

#### Recommendations:

- Allow timberland owners to make claims for expedited payments of federal assistance for debris removal on private or public land.
- Provide additional funding under the Cooperative Forestry Program and waive the cost share requirement.
- Address the problems of loggers such as the high costs of fuel, increased workers compensation expenses, and the lower productivity of salvage harvesting. The high cost of diesel fuel and the lack of available logging crews are significantly limiting salvage logging operations.
- Provide emergency disaster relief financing for the purchase or lease of portable sawmills, chippers, tub grinders, woodyard and related logging equipment through the SBA, USDA or other agency.
- The lack of rail transportation and available railcars are major impediments to salvaging and transporting the hurricane damaged timber. Encourage rail carriers to transport hurricane damaged timber to utilization and storage facilities within the disaster relief zone and neighboring states.
- Coordinate railcar utilization and rail service in cooperation with the Department of Commerce. Request the assignment of a high ranking Department of Commerce official in the effort to obtain railcars and rail service to transport hurricane damaged timber.

Issue: Salvaged wood can be preserved for later manufacturing through a process known as “wet storage.” The forest products industry and small wood dealer businesses have acted quickly to expand the capacity of wet storage woodyards to keep salvaged timber viable for utilization for as long as two years and increase the value recovered in salvage operations for landowners.

#### Recommendations:

- Provide funding for the Forest Health Protection provision of the Cooperative Forestry Program (16 USCS § 2104) to expand the wet storage capacity in the Hurricane Recovery Zone.
- Provide emergency disaster relief financing for the construction and operation of additional wet storage woodyards, purchase and long-term inventory of timber in these woodyards, and purchase/lease of additional woodyard equipment, logging equipment and/or log trucking equipment through the SBA, USDA or other agency.

Issue: Some of the woody debris and damaged timber that is unusable for manufacturing forest products could be used to produce electricity and steam at forest products manufacturing facilities in the region. Using this otherwise wasted material for energy could have multiple benefits including creating value for landowners and reduced fossil fuel consumption for manufacturing facilities. Current laws and regulatory limitations prevent additional biomass utilization.

#### Recommendations:

- Provide temporary regulatory flexibility for air quality permitting to allow forest products mills, power generating facilities, and manufacturing facilities to burn hurricane-damaged woody biomass from recovery and salvage efforts in boilers to produce process steam or electricity.
- Allow on-site consumption of electricity generated from hurricane related biomass to qualify for the current Section 45 biomass tax credit.

Issue: There is a great concern that the tens of thousands of private, individual and family forestland owners severely affected may decide to get out of the business of growing trees since there is a very limited ability for these individuals to recover their lost investment and no ability to insure their investment. Reforestation of this region will be absolutely necessary in order to restore the rural economy and renew the natural resources. Incentive programs to assist these landowners reforest their lands will also generate environmental benefits that our forests normally provide.

#### Recommendations:

- Expand the Tree Assistance Program to include timber landowners on the list of eligible entities that can apply for replanting assistance and waive the cost share requirement.
- Provide additional NRCS funding for the Emergency Watershed Protection Program to assist in the repair of damage to wetland management and waive the cost share requirement.

- Reinstating the eligibility for tree planting (repealed in 1985) and eliminating the cost share requirement in the Cooperative Forestry Program.
- Reinstating the federal Reforestation Tax Credit for all forest landowners affected by Hurricane Katrina
- Creating a Forest Disaster Recovery and Reforestation Empowerment Zone for the purpose of providing hurricane damage relief payments to forest landowners who have suffered storm-related timber damage and direct financial loss. Provide forest landowners with critically necessary “disaster relief payments” to allow them to recover some financial loss from their uninsured investment and to provide a strong incentive for landowners to remain in the business of forest management. Utilize a simple formula for calculating such direct damage disaster relief payments and manage through the appropriate agency, i.e. Mississippi Forestry Commission (MFC) and NRCS. Incorporate an accurate market-based valuation for pre-hurricane stumpage valuation based on credible price reporting information provided in the Forest2Market Mississippi Timber Report, as adopted and recognized by the Mississippi State University Extension Service, and where necessary, field evaluations conducted by MFC foresters or Mississippi Registered Foresters. A further explanation and two proposed methodologies are included in the Appendix.
- Providing favorable tax treatment for timber losses to encourage private reinvestment in these forestlands. This tax relief could be provided by excluding timber gains from income or by providing a greater deduction for timber casualty losses.

Thank you for the opportunity to testify and to present you with information that will assist you in your efforts to shape and guide the public policies designed to help recover and restore the forest based communities, economies, and societies of the Gulf region ravaged by Hurricanes Katrina and Rita. Our clear challenge now, in the aftermath of this year’s catastrophic hurricanes, is recovering and sustaining Mississippi’s #1 renewable natural resource, a giant economic engine for the state and region, the land use that produces more environmental benefits than any other, and the source of wealth production for tens of thousands of family and individual forest landowners, their children, and their grandchildren. In Mississippi, approximately 175,000 private landowners own, manage, and nurture 70% of our state’s forestland.

***In the most fundamental sense, as we all rise to meet the challenges posed by Hurricane Katrina in Mississippi, forestry is not about trees, it’s about PEOPLE.***

#### References

Stuart, Bill, PhD., and Dr. Laura Grace. “Tips for Landowners Attempting to Salvage Hurricane Damaged Timber.” General Forestry Information. Mississippi State University, September 2005.

Stuart, Bill, PhD., Dr. Laura Grace, Dr. Ian Munn, and Mr. Jeff Smith. “Hurricane Katrina And Private Forest Ownerships.” General Forestry Information. Mississippi State University, September 2005.

Munn, Ian A. PhD., and Bart K. Tilley. Forestry and Forest Products. Forest and Wildlife Research Center, Mississippi State University. 2005.

Daniels, Bob, PhD., and Dr. Ian A. Munn. Mississippi Forest Facts. Department of Forestry, Mississippi State University. 2005

Leightley, Liam E. Energy and Chemicals from Wood Biomass – an Industry of the Future for Mississippi. Forest and Wildlife Research Center, Mississippi State University. 2005.

American Forest and Paper Association. Memo: Forest Products Industry Hurricane Relief Legislative Options. August 2005.

#### Appendix

Mississippi Forestry Association. PowerPoint presentation: Oversight Hearing,

Subcommittee on Forests and Forest Health, Committee on Resources, U.S. House of Representatives. October 7, 2005

Secretary of State, State of Mississippi. Letter: Hurricane Damage to 16 th Section Public School Trust Lands. October 4, 2005

Leightley, Liam E. Energy and Chemicals from Wood Biomass – an Industry of the Future for Mississippi. Forest and Wildlife Research Center, Mississippi State University. 2005.

Toombs, Robby C. Draft Hurricane Katrina Forest Landowner Relief Act. September 15, 2005.

Toombs, Robby C. Possible Methodologies to Calculate Total Costs. September 15, 2005.