

Mississippi Post-Hurricane Katrina Biomass Summit

Presentation to the
5th Annual Southern Bioproducts Conference
April 3rd and 4th, 2006
Philadelphia, MS

Multiple Stakeholders

- MS Forestry Commission
- US Environmental Protection Agency (EPA)
- MS Dept of Environmental Quality (MDEQ)
- Mississippi Department of Agriculture and Commerce (MDAC)
- USDA/Forest Service
- MS Development Authority
- U.S. Department of Interior (DOI),
- MS Technology Alliance
- MS State University
- America's Fund for Communities
- Federal Emergency Management Agency (FEMA)
- U.S. Army Corps of Engineers (USACE)
- Gulf Coast Community Fund,
- LA State University /Agricultural Center
- Florida Department of Environmental Protection (FLDEP)
- Primary Power
- Vinoski & Associates
- Garick

Summit Main Goals

- Goal 1 Reduce the threat of catastrophic wildfires and help forest recover from the storm
- Goal 2 Identify a plan for long-term recovery of forest economics in MS, including developing diverse markets for woody biomass
- Goal 3 Divert woody biomass from landfills

Four Break-out Groups

- **Removal of Biomass and Recovery of the Forest** – including logistics, planning, contracts, harvesting, transportation, storage.
- **Market Development for Biomass** – including all potential uses (for both forest products and source separated wood waste), short term, long term, new and existing technologies
- **Economics & Incentives** – including financial assistance, land owner assistance, regulatory, storage
- **Long-term recovery** – including economics, infrastructure, sustainable technology, social aspects, biologic considerations

Goal 1: Reduce the Threat of Catastrophic Wildfires and Forest Recovery

- **~ 19 billion board feet on the forest floor as a result of Hurricane Katrina;**
- **3.2 billion board feet is salvageable for lumber; ring shock and decomposition precludes lumber value for the rest**
- **Additional 20 million cubic yards of vegetative debris**
- **Macro and micro climate of the forest changed; more sunlight, wind and subsequent drying of the wood significantly increasing the threat of wildfires**

Key Solutions for Goal 1

- Reduce the threat of catastrophic wildfires and help forest recover from the storm
 - **Strategically Manage Forest and Woody Biomass**
 - **Expediently Remove Woody Biomass**

Challenges for Action

- **75% of downed wood on privately owned land**
 - Owners may not have means, motivation, or information for removing the wood
- **Infrastructures for access and hauling may not exist**
 - Proximity of debris to existing rail, road and barge infrastructures dictate the costs of hauling
 - \$25/ton to remove the wood while current end-market value is only about \$3/ton.
- **Need for increased trained personnel and equipment**

Broad Identified Actions

- Inventory/assess vegetative debris and forest areas for volumes, types, and conditions of debris materials; develop strategies to reduce forest forests
- Develop fire prevention strategy and program
- Provide coordination for removal of woody biomass
- Improve infrastructure for biomass removal and resource recovery, transportation, and recovery
- Develop incentives and financial assistance for expedient removal of woody biomass
- Comprehensive Education and Communication Campaign aimed at landowners, contractors, and the public

Goals 2 & 3: Economic Recovery, Diverse Markets, Landfill Diversion

- Build on existing value of Forest Products industry
- Inland, 90% of material is vegetative debris and woody biomass and 10% structural debris
- Optimizing woody biomass utilization presents viable future economic opportunities for the state of Mississippi
 - reuse/recycling and use as an energy source
- Existing biomass will not sustain new markets alone, but establishing infrastructures can be the foundation of future biobased business opportunities, increasing state revenue and job opportunities.

Key Solutions for Goals 2&3

- Plan for long-term recovery of forest economics in MS, including developing diverse markets for woody biomass
- Diversion of biomass from landfills
 - **Enhance & Create Markets for Woody Biomass Material (i.e., Wood Products)**
 - **Develop Energy Markets for Biomass**
 - **Create New Land Use Opportunities while conserving and improving habitat**

Challenges for Action for Recycling and Reuse

- Economic disincentives for contractors to seek recycling and reuse opportunities; paid high rates to haul this material to landfills as compared to the value of this material being used for other end-use
- Currently, no inventory of end-users for recycling/reuse of the material
- Regional market for lumber and pulp is glutted

Broad Identified Actions for Optimal Reuse/Recycling

- Develop long-term markets for organic materials recycling
- Communication Campaign on Alternative Uses of Wood Debris and Benefits
- Incentivize recycling and reuse and create/find financial assistance sources
- Create Compost Sites

Challenges for Action as an Energy Source

- **Biomass can be used as a supplemental fuel for power, or can be converted to biofuel but**
 - **many local coal fired boilers cannot accept biomass as fuel, either because of technical or permitting constraint**
 - **hauling wood to long-distance markets could be costly compared to other fuel choices**
- **Very few commercially available technologies and facilities anywhere in the U.S. capable of converting large quantities of biomass into fuels and none in MS**

Broad Identified Actions for Energy Markets

- Explore sustainable Biomass supplies in MS
- Demonstrate feasibility of and develop new technologies
- Develop long-term biomass energy markets within the state of MS
- Develop Incentives for Biomass Energy Infrastructure & Technologies and find financial assistance sources
- Develop Infrastructure for Biomass Energy within MS, including distributed power
- Promote better public understanding of technologies and economic opportunities

Possible Next Steps

- Brief MS officials on options for action
- Inventory which broad and specific actions are already underway
- Identify MS priorities for implementing any other short term actions and what's needed to make that happen; develop an implementation plan
- Strategize priorities for the longer-term

