Alabama Forest Recovery The IVAN Experience



Woody Bug April 2008

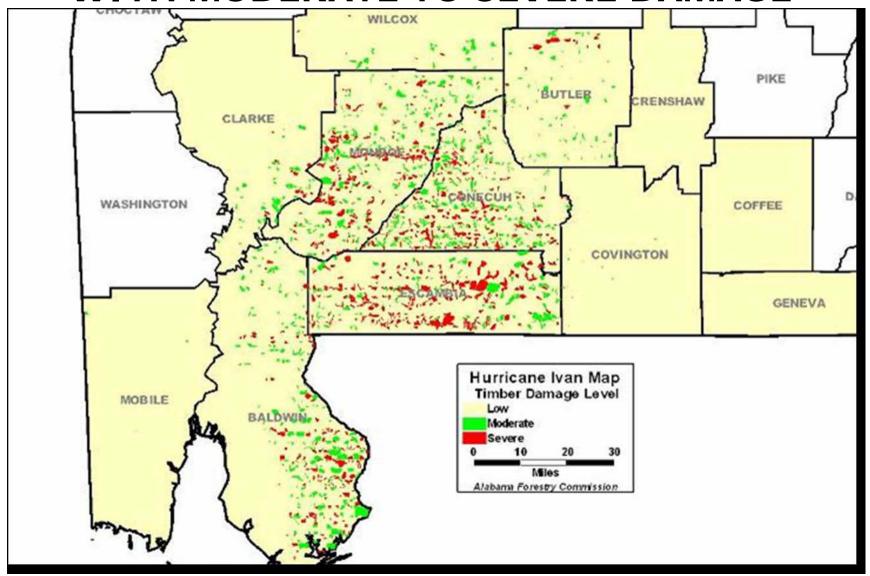
Hurricane Ivan

- Struck 2:30 AM September 16, 2004
- 130 MPH winds
- Tremendous wind and water damage
- Timber impact most significant in 12 counties in SW Alabama

Hurricane Ivan – Storm Track



DAMAGED FORESTS WITH MODERATE TO SEVERE DAMAGE





Governor Bob Riley appointed the Task Force on October 4, 2004

Mission

To facilitate salvage efforts to maximize the recovery of timber damaged by Hurricane Ivan and limit the loss of timber volume and value to forest landowners

Alabama Forest Recovery Task Force - Membership

- ADEM
- ALABAMA CATTLEMEN'S ASS'N
- ALABAMA FOREST OWNERS ASSOCIATION
- ALABAMA FORESTRY ASSOCIATION
- ALABAMA FORESTY COMMISSION
- ALABAMA HOUSE AND SENATE
- ALABAMA TREASURE FORESTS
- ALFA
- ASS'N OF COUNTY COMMISSIONS

- ASS'N OF COUNTY ENGINEERS
- AU SF&WS
- DEPARTMENT OF PUBLIC SAFETY
- DEPARTMENT OF TRANSPORTATION
- DEPT OF AGRICULTURE AND INDUSTRIES
- FORESTRY CONSULTANTS
- FARM SERVICE AGENCY
- GOVERNOR'S OFFICE
- INDUSTRY
- LANDOWNERS

Committees and Committee Chairs

- Timber Utilization
 - Joe Twardy, Weyerhaeuser Company
- Governmental Affairs
 - Rep. Greg Albritton
- Information and Statistics
 - Walter Cartwright, AFC
- Communications
 - Sam Duvall, AFA
- Harvesting and Transportation
 - Frank Walburn, Amsouth Bank
- Forest Health and Reforestation
 - Bruce Springer, AFC

Objectives

- Move damaged timber as quickly as possible to wood using or storage facilities
- Expand the market for damaged timber beyond wood using facilities in South Alabama
- Promote the development of long-term wood storage facilities

Objectives

- Decrease barriers to safely, effectively and economically harvest and transport damaged timber
- Effectively communicate the challenges and successes of the timber salvage effort to landowners, wood using facilities, professional loggers and the public

Objectives

- 6. Monitor and record salvage efforts
- 7. Promote forest health through prompt reforestation and proactive forest protection
- 8. Ensure compliance with antitrust laws

TASK FORCE ACTIVITIES

- TRUCK WEIGHT VARIANCE
- RECIPROCAL AGREEMENTS WITH ADJOINING STATES
- LANDOWNER LOGGER CONTACTS
- ADEM WET STORAGE
- LANDOWNER COMMUNICATIONS
 - •WEB PAGES
 - •NEWSLETTERS
 - •PRESS RELEASES
 - LANDOWNER MEETINGS
 - •TIMBER TAX SEMINARS

TASK FORCE ACTIVITIES

- SAFETY AWARENESS
- MONITORING AND REPORTING SALVAGE PROGRESS
- FOREST PROTECTION AND REFORESTATION
- IMPLEMENTING FEDERAL ASSISTANCE FUNDS (AFC)

Forestry Association RESPONSE

- IMMEDIATE CONTACT WITH GOVERNOR'S OFFICE
- TRUCK WEIGHT VARIANCE
- RECIPROCAL AGREEMENTS WITH ADJOINING STATES
- LANDOWNER LOGGER CONTACTS
- INDUSTRY CONTACTS MOBILIZING AGENT
- ADEM WET STORAGE
- WEBPAGE FOR LANDOWNERS
- GOVERNOR'S RECOVERY TASK FORCE

Forestry Commission RESPONSE

- EMA COMMAND & PROVIDED STRIKE TEAMS
- TIMBER DAMAGE ASSESSMENT
- WEBPAGE FOR LANDOWNERS & HURRICANE HELPLINE
- INFORMATION PACKETS & LANDOWNER MEETINGS
- IMPLEMENTING FEDERAL ASSISTANCE FUNDS
- FIRELANE/INTERIOR ROAD CLEARING
- TECHNICAL ASSISTANCE (Recommendations)
- COST-SHARE PROGRAMS

The Ivan Experience - What worked, what could be improved?

WORKED WELL

- Formation of Forest Recovery Task Force
- Load Wt Variance
- Reciprocal Agreements
- Wet storage
- Blue Stain marketing
- Establishing goals
- Tracking progress
- Landowner communication
- Logger safety
- Southern Linc
- Additional crews moved in to salvage area
- Loggers able to run

OPPORTUNITIES

- FEMA connection
- Road clearing
- Fuel Availability
- Pre-move equipment
- Increase emphasis on biomass recovery
- Access to hardwood
- Southern Linc coverage
 - Radio & Cell Phone

- Damage assessment by AFC
 - \$610 Million total timber damage
 - \$296 Million in moderate to severe damage areas
- Consulted with Hugo experts
 - Landowner communication
 - Set goals and track progress
- Communication
 - Hotline
 - Landowner meetings
 - Web sites landowner info
 - Hunter safety alert
 - Landowner newsletter
 - Press briefings
 - News releases
 - Timber taxation seminars (Thanks to CPA Ass'n and Bar Ass'n)

Recovery Goals

- Salvage targets established
 - 30% of Pine Sawtimber or 133.2 MMBF
 - 74% of Pine Pulpwood or 226,000 tons
 - 12% of Hardwood Sawtimber or 69.5 MMBF
 - 17% of Hardwood Pulpwood or 19,000 tons
- Overall targets
 - 22% by volume
 - 22% by value
- Hurricane Hugo actual salvage (for comparison)
 - 14% by volume
 - 8% by value



Forest Health and Reforestation

- Identified incremental seedling needs
- Compile list of seedling suppliers
- Provide list of tree planting and site preparation suppliers to landowners
- Inform landowners of potential pest problems
- Bark beetle surveys
- Alerted nurseries of Pales weevil risk
- Secure Federal assistance for landowners

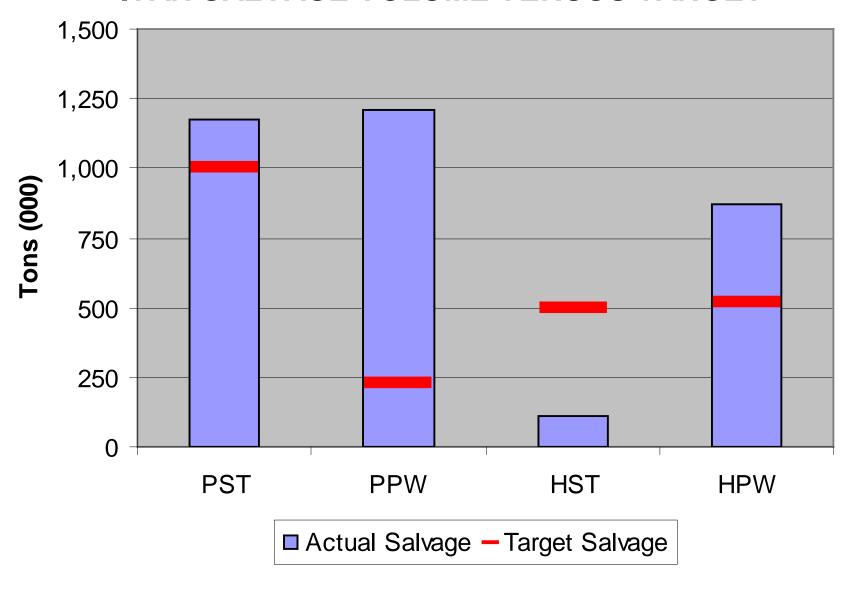
HURRICANE IVAN SALAVGE SUMMARY – September 12, 2005

Damage Estimates	Pine ST	Pine PW	Total Pine	Hwd ST	Hwd PW	Total Hwd	Total
Tons (000)	3,332	305	3,637	4,169	113	4,282	7,919
Value (\$000)	\$163,814	\$1,557	\$165,371	\$130,293	\$732	\$131,025	\$296,396
Recovery Targets							
Tons (000)	999	226	1,225	500	19	519	1,745
Value (\$000)	\$49,144	\$1,153	\$50,297	\$15,635	\$124	\$15,760	\$66 ,05 6
Percent of Volume	30%	74%	34%	12%	17%	12%	22%
Percent of Value	30%	74%	30%	12%	17%	12%	22%
))
Recovery Progress							
Tons (000)	1,174	1,212	2,386	113	759	872	3,258
Value (\$000)	\$57,705	\$6,187	\$63,892	\$3,531	\$4,933	\$8,463	\$72,355
Percent of Volume	35%	397%	66%	3%	674%	20%	41%
Percent of Value	35%	397%	39%	3%	674%	6%	24%

Recovered 65% of Pine Volume And 38% of Pine Value Recovered 41% of Total Volume And 24% of Total Value

GOAL HAS BEEN MET AND EXCEEDED BY THE ALABAMA LOGGING INDUSTRY

IVAN SALVAGE VOLUME VERSUS TARGET



IVAN VALUE RECOVERY PROGRESS



FEDERAL ASSISTANCE

- Divided between Florida and Alabama.
- USDA (FSA, Forest Service) & state
- Alabama receiving ~\$19 million through fire, forest health, urban, stewardship grants, and traditional cost-share supplemental appropriations to NRCS, FSA, and AFC.
- Includes ~\$11 million in direct landowner financial assistance and services.
- Assistance over a three-year period.

WHERE DO WE GO FROM HERE?

- Salvage operations essentially complete
- Reforestation
- Forest protection
- Better Utilization of Biomass
- More Training for Loggers

WHAT HAVE WE LEARNED?

- FEMA training & certification for logging companies
- Increased emphasis on biomass recovery and usage
- Contact system for loggers and industry personnel
- Pre-move equipment
- Publicize forest owner insurance
- Alabama now has a good model for the Forest Industry to address hurricane recovery
 - Has been shared with MS and LA

Up front issues

- Communication: Southern Linc Radio holes in coverage
- Fuel availability
- Biomass utilization available to pulp mills with boilers
- Equipment location
- Road clearing
- Crew safety
- Down power lines Seek Power Co. guidance!!!
- Will the roads/bridges that you depend on still be there?
- Can your people get to work?

Salvage Planning

- Set priorities based on your situation
- Down and broken first
- Leaners will wait
- Old growth pine (50-60 yrs+) seems to last much longer than 30-35 year sawtimber.
 Maybe 50 percent longer life after blowdown
- Salvage window for sawtimber varies tremendously

Fiber Quality

- Blue Stain shows up within 6 8 weeks
- Rule of thumb 5' trim from break for saw log
- Rule of thumb 15 to 30 percent of trees may have significant fiber damage that is not visible
- Hardwood recovery very problematic. Wet areas, smaller margin for error on degrade

Logging

- Top priority crew safety
- After acclimation to salvage operation, expect 60 80 percent normal production
- Salvage operations burn more fuel per ton
- Insurance cost may be higher
- Wear on sawhead teeth tripled
- Grapple saws: one solution to cutting down trees and leaners
- Logging rates: strive to maintain gross margins with less production

Markets

- Must take all feasible steps to ensure wood continues to move
- Know unloading capacity limits
- Facilitate movement of wood to non-local markets avoid market saturation point. This is critical speed recovery and minimize landowner value loss due to degrade
- Wet storage startups and expansions key to success. Will contribute to loggers ability to run unrestricted, moving the maximum amount of volume for landowners

Markets

- Moving wood out of damage zone prevent market from blocking out - trucking with backhaul, rail, barge
- Backhauls can help move wood long distances
- Starved papermills at beginning of salvage operations
- Lumber mills and sales departments have to figure out how to deal with blue stain
- Small log mills must learn to handle larger diameters or run out!