Forest Storm Disasters: Hurricanes, Tornadoes and Ice

Salvage Response by Forestry Associations & Industry

“Lessons learned from Hugo in 1989-90”

Mac Lupold, Lupold Consulting, Inc, Camden, SC
Also Exec Sec, Hugo Salvage Council
Planning Session, Myrtle Beach, SC, 4/15/2008
“Seeking Unprecedented Solutions To Unprecedented Challenges”

Storm damage wood is perishable, the clock is clicking
Key Points:
- September 22, 1989, category 4
- Damage: 84 million tons, $1.54 billion
- Highest volume/acre FIA Unit in South
- No rain, then 15” inches next 5 weeks
- Governor creates Salvage Council
- Four Working Committees created
- Salvage Goal set at 25% volume
- Logging capacity doubled
- 46 wet storage sites, 1+ million tons
- Pine salvage 25%, hardwood 5%
- Landowners recovered 10% loss value
- Loss, at 2006 values, $3.4 billion
- Today, $51 Billion Loss, SC Economy
Timely Damage Assessment

Recommendations:
- FIA plot location modeling
- Verify severity zones on ground
- Salvage planning needs sound initial estimate, don’t rush
- Coordinated damage assessment plan methodology in place
- Salvage structure based on degree of damages
Private verses Public Salvage

- **Private (88% SC)**
  - Cash losses, few tax deducts
  - Landscape, public input not an issue
  - Owners next to public, USFS land
  - Tree farmers need guidance, flyers, web site on all aspects of salvage, tax consequences
  - Forestry Assoc direct any major salvage effort

- **Public (12% SC)**
  - USFS Nat Forest on coast major impact
  - Public comment, Hugo delay 6-8 month
  - USFS, preapproved harvest plans in place, blank contracts, preapproved vendors
  - RCW’s, etc
  - Beneficial to expand longleaf habitat
  - Other than State Forestry Com, not Assoc players
Databases By State, Web Site, Contact Info, Capabilities:

- Wood Using Mills (including energy)
- Independent Wet Log Storage Operators
- Loggers (logger associations)
- Wood buyers/dealers
- Independent Truckers (residues, logs)
- Foresters to Contact: Consultants, Public, Industry
- Equipment Suppliers
- Forest Landowners
- Silvicultural services
- Debris removal services
- Export alternatives (if applicable)
- Salvage Coordination Center
Web Site Articles (in place, update, plenty past examples):

- Contact a Forester!
- Summary Storm Damage, Locations, Volumes, Values
- Harvest Treatments Based on Damage
- What Can Mills Use
- Salvage Scoreboard, Results Per Goal, Want Ads
- Why Unit Values Are Less
  - Increased logging cost, lower productivity
  - Could be longer distance to haul
  - Portion usable as sawlogs goes for pulpwood
  - Increased mill manufacturing cost, lower productivity, defects
Web Site Articles (in place, update, plenty past examples) continued:

- Why Salvage Timeframes Are Limited
- Fire Protection Activities
- Wet Storage Site Design and Operation
- Wood, Not Wood & Dirt
- What Is Bluestain
- Tax Consequences
- Value Forestry and Forest Products to State
- Problems, Concerns As They Develop
- Reforestation Alternatives
HUGO, Pre-Internet:
• 30 weekly info updates to over 500 groups
• Several special topic mailings
• Over 400 different buy-sell-want items
• Estimated $20,000 mailing cost by SCFC

Salvage Status:
• Set goal, Tons, Pine & Hardwood
• Weekly Update, PS, PP, HS, HP, Tons
• Wet Sites, new locations, number, capacity, actual volume stored

Want Ad Web Page:
• For sale, need, available, problems, ideas
Innovation

- Industry companies/loggers will find the latest alternatives or adaptations
- Markets must cover as a minimum logging and hauling cost
- Energy options across South still scattered, hard to increase current users unless existing shortage
- Next time, chipping and energy consumption alternatives will require chippers in place, freight logic markets and capability to dump vans
Hugo: **Not Enough Landowner Meetings**
Ivan, Alabama: Advised To Have More

Should be able to have several canned powerpoint talks about all aspects of salvage.

Modified to the new event. Focus on small private landowner. Cover topics previously mentioned to be included in web page documents.
Salvage Publicity Will Dwindle Down To the “Unusual” By Week 4, Few Papers Want to See More Salvage Results
Wet Storage Plan on web site:

• Copy wet site plan criteria preapproved by state environmental
• Application to operate site per preapproved criteria
• FEMA preapproved plan to automatically provide contract roundwood wet storage sites for up to 20% of damaged volume, pay for timber, maintain storage for up to three years, operate site and liquidate per product cost incurred
• US Government in 1938 in New England had 63 leased log ponds with over 3 million tons logs
• Could apply to chips or grinder fuel
There Will Be Brighter Days:
“After Salvage, Increased Fire Protection, Aggressive Tree Planting”

- SC forest landowners: 84 million tons damaged trees, $1.54 billion stumpage value then; $3.4 today, $51 billion loss to SC Economy

- Salvaged: 15 million tons, 18%; 10% of before storm value

- SC In 1986: 576 mm tons standing, 23 mm growth, 21 mm removal
- SC In 2006: 652 mm tons standing, 38 mm growth, 26 mm removal
John Muir in 1874 stated he observed 6 foot diameter trees in the Sierra Nevada’s swaying as if they were like grass.

Sketch by John Muir