

MEETING NOTES

PLANNING WORKSHOP TIMBER RECOVERY AND WOOD UTILIZATION RESPONSE TO WIND EVENTS AND DISTURBANCES April 15, 2008, Myrtle Beach, SC

Discussions and Highlights of Federal and State Actions

- Public assistance (vs individual assistance of FEMA) and engineering to State/local govts on cost share basis of 75/25% (generally)
- Direct federal assistance (USACE); on public property (private owners could bring debris to public property); to go onto to private property needs written permission from each owner
- Need to communicate to public about segregating the woody debris from demolition debris if we intend to utilize (phasing the operation)
- Market issues on flooding market with certain sectors (mulch example); need to set up transportation corridors?
- Haul materials to disposal or utilization sites within 15 mile transportation zones
- FEMA's Public Assistance Program (Morse):
Mission: To provide supplemental financial assistance to state, local and tribal governments, and certain private non-profit organizations for response and recovery activities required as the result of a declared disaster.
 - ✓ Funding is cost shared at a federal share of no less than 75% of eligible costs.
 - ✓ Eligible Applicants:
 - Native American Tribal Governments and Tribal Organizations
 - State
 - County
 - City / Town / Village
 - Other political subdivision of the State
 - Certain Private Non-Profit Organizations
 - A **grantee** is a State or tribal government that is responsible for administering Public Assistance grants.
 - A **subgrantee** is an eligible applicant that receives a Public Assistance grant as reimbursement for performing eligible disaster work.
 - ✓ **Grant Program:**
 - Applicant performs the work and is reimbursed by FEMA
 - Applicant can self perform or use contractors
 - Subject to cost share

- Debris must be eligible (eliminates an immediate threat to life, health, and safety; or of significant damage to improved property; or ensures economic recovery of the community and provides a benefit for the community-at-large)
 - ✓ **Direct Federal Assistance:**
 - Work performed by USACE
 - Subject to cost share
 - ✓ **Technical Assistance:**
 - 100% funded, no cost share
 - Help applicants by providing expert advice
 - ✓ Debris removal is generally the responsibility of the property owner. However, if debris is so widespread that public health, safety, or economic recovery of the community is threatened, the actual removal of debris from private property may be eligible.
 - ✓
- US Army Corps Of Engineers - Debris Operation (Morse):
 - ✓ Special Teams
 - ✓ Contracts in Place
 - ✓ Debris paid for by the cubic yard
 - ✓ Debris must be eligible
 - ✓ Curbside segregation is key to success
 - ✓ Clean woody debris is reduced by Grinding/incineration
 - ✓ Mulch is used for landfill cover, agricultural, and energy; must balance use with supply.
- Communication: “segregate and don’t contaminate” sawtimber and potential value-added feedstocks (don’t pile soil on logs or mix with other debris such as demolition or material that otherwise reduce the value or utilization potential); “don’t buck and lose your luck” (decrease the value by bucking into short logs lengths); USDA programs under “disaster assistance”; information needs and communication tools are in stages and are parsed out as anticipated problems or timing is appropriate (deterioration, fire threats, road system development, etc)
- Connect federal assistance programs in a seamless way; pre-plan to optimize program efficiencies and the capability to demonstrate the long-term recovery potential (ESF14 and more)
- NIMO debris team (Deneke); regional team organized by the States, but needs a Mission Assignment under FEMA (ESF3, ESF11, ESF14); maybe under the ESF4 technical advisor role on the Federal side, but needs State and local technical experts; State must request the assistance (must know of, and support the “strategy”); example of WBUG strategy for Katrina presented to the POTUS by DOI and USDA

- USDA Forest Service Assistance (Velde):
 - ✓ Biomass and Bioenergy – Woody Biomass Utilization
 - ✓ State & Cooperative Forestry
 - ✓ Assistance for landowner
 - ✓ Grants to States/Locals
 - ✓ Watershed Protection
 - ✓ Forest Legacy Program
 - ✓ Forest Stewardship Program
 - ✓ Forestland Enhancement Program
 - ✓ Forest Health Protection – sustainable practices
- USDA Natural Resource Conservation Service Assistance (Velde):
 - ✓ Emergency Watershed Protection Program (**EWP**) and Downed Timber/Debris Removal Program (NRCS, AL – Tim Albritton)
 - ✓ Emergency Conservation Program
 - ✓ Environmental Quality Incentives Program
 - ✓ Conservation Reserve Programs
 - ✓ Wetlands
 - ✓ Grasslands
 - ✓ Farm and Ranch
 - ✓ Resource Conservation & Development (501c3's)
 - ✓ NOT the same as RCDs
- USDA Farm Service Agency Assistance (Velde):
 - ✓ Emergency Conservation Program
 - ✓ Emergency Forestry Conservation Reserve Program
 - ✓ Crop Disaster (insured)
 - ✓ Non-insured Crop Disaster (non-tree)
- USDA Rural Development Assistance (Velde):
 - ✓ Renewable Energy and Energy Improvement
 - ✓ Business Programs
 - ✓ Electric and Utility Programs
 - ✓ Community Facilities
 - ✓ Water and Environment Programs
- USDA Cooperative State Research & Education Extension Service (Velde):
 - ✓ University/State Research Grants
 - ✓ Bio-based products and fuels
- Include EPA GHG emissions and offsets (not just afforestation)
- Preventative Watershed Protection Measures (Albritton)
 - ✓ Encourage Longleaf Pine Restoration
 - ✓ Assist with forest roads and stream crossings

- Workman Compensation Insurance rates increased, can the Federal Gov. create an umbrella coverage plan? (Albritton)
- Timber ownership (title) hard to distinguish due to obliterated property lines (Albritton)
- EPA's Role in Resource Conservation and Recovery Act (Simonson):
 - ✓ Provide assistance to state solid waste management programs in regard to preparedness for large-scale disaster debris management:
 - ✓ Models/templates for pre-incident draft document preparation (e.g., guidance and policy; permits and/or temporary authorizations)
 - ✓ Dissemination of valuable information (e.g., Region 4 *Disaster Debris Resource Guide*: organizations and associations, salvaged material and recycling databases, exchanges and directories, available guidance documents, landfill databases)
 - ✓ Case studies, issues and past experiences of other states (FL, MS, LA, NC, SC, *et.al.*)
- EPA's GreenScapes (Simonson):
 - ✓ EPA Partnership program to implement and promote "green" landscaping practices
 - ✓ Partners & Allies
 - ✓ Provides state-of-the-art recommendations
 - ✓ Web-based cost calculators & resources
 - ✓ Multi-media ... Continually Updated
 - ✓ Large & Small Scale
 - ✓ National Recognition Program & Case Studies
 - ✓ A growing group of organizations, large and small, coming together to promote green land care practices.
 - ✓ Currently 195+ participants including:
 - US Green Building Council
 - American Society of Landscape Architects
 - American Nursery & Landscape Association
 - Home Depot
- EPA's Agriculture Program (Simonson):
 - ✓ Support afforestation efforts - Increase carbon sequestration, reduce GHG emissions, and restore ecological health
 - ✓ Conserve/utilize resources – Organics for bedding and erosion control purposes at farming operations
 - ✓ Expand markets for organic materials – commercial sales, government agencies (DOTs), beneficial land applications
 - ✓ Demonstrate and develop new technologies for processing woody biomass into clean energy

- EPA's Region 4 Landfill Specialty Team (Simonson):

Function: Provide assistance to state and local governments to assure proper management and disposition of disaster debris, with focus on proper segregation and land disposal practices

Pre-Incident:

- ✓ Training
- ✓ Evaluation of R4 states' needs to determine and prioritize assistance in planning and preparedness
- ✓ Share/disseminate pertinent information on planning and preparing for disaster debris management

Post-Incident:

- ✓ Reconnaissance; establish communications; evaluate needs of state and local governments
- ✓ Assist with hydrogeologic assessments of proposed land disposal sites
- ✓ Establish monitoring protocol with state solid waste permitting/compliance program(s)
- ✓ Monitor debris disposal sites for proper management practices and presence of prohibited materials
- ✓ Perform specific duties including documentation and reporting responsibilities

- Local contractors given preference or easier access to contracts?
- Equipment and trained/certified contractors in a pre-disaster network (such as Equipment Rental Agreements under the firefighting program and the Resource Ordering and Status System)?
- Identify areas where we CAN'T store wood, as well as potential storage areas where we can store material; probably should GPS locations or use GIS based tool; sites need to be pre-approved by the LOCAL government (State doesn't have primary role here, but assists in permitting)
- Liability considerations for storage yards, mulch piles, staging areas; include public health issues (water quality, aerial borne diseases or contaminants and particulate matter)
- Debris vs. salvage (two phases with different needs, priorities, and issues)

Discussions and Highlights of Response Guidance

Lessons Learned (Hugo, Ivan, Katrina)

- Include some of the historical disasters (Hugo, Katrina) and economic losses in the justification and communications strategy [Lupold re: Hugo]

Hurricane Hugo (Lupold)

- Prepare for continued adverse or unfavorable weather conditions; example is no rain during Hurricane Hugo, then 15" inches next 5 weeks, but Ivan had so much rain they couldn't operate for weeks
- Timely Damage Assessment:
 - ✓ FIA plot location modeling
 - ✓ Verify severity zones on ground
 - ✓ Salvage planning needs a sound initial estimate, don't rush
 - ✓ Coordinated damage assessment plan methodology in place
 - ✓ Salvage structure based on degree of damages
- Private Land Impacts:
 - ✓ 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 Land Impacts:
 - ✓ Public comment period delayed Hugo salvage 6-8 months
 - ✓ USFS, preapproved harvest plans in place, blank contracts, preapproved vendors
 - ✓ Endangered Species issues, etc
 - ✓ Beneficial to expand longleaf habitat
 - ✓ Other than State Forestry Com, not Forestry 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 unusable as sawlogs goes for pulpwood*
 - ✓ *Increased mill manufacturing cost, lower productivity, defects*
 - ✓ 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
- 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
- Hold Landowner Meetings:
 - ✓ 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.
- 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

- ✓ Look at past successes: US Government in 1938 in New England had 63 leased log ponds with over 3 million tons logs
- ✓ Wet storage could apply to chips or grinder fuel

Hurricane Ivan

- Alabama Forest Recovery Task Force (Castleberry):
 - ✓ 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
 - ✓ Objectives:
 1. Move damaged timber as quickly as possible to wood using or storage facilities
 2. Expand the market for damaged timber beyond wood using facilities in South Alabama
 3. Promote the development of long-term wood storage facilities
 4. Decrease barriers to safely, effectively and economically harvest and transport damaged timber
 5. Effectively communicate the challenges and successes of the timber salvage effort to landowners, wood using facilities, professional loggers and the public
 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
 - 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
- 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
- ✓ WHAT 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 (some holes)
 - Fuel availability
 - Radio & Cell Phone
- ✓ 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*)
- ✓ 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
- ✓ Where do we go from here?
 - More training for loggers
 - 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
- ✓ 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

- 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!
- Southern Group of State Foresters (Ramsey):

Incident Preplanning Considerations:

1. Employee Considerations and Emergency Numbers
2. Building and Equipment Preparedness
3. Evacuation Planning
4. Coordination with other local, state, and federal agencies
5. Fiscal Considerations-preplanning for emergency purchases.
6. Safety and Training
7. Public Information

Incident Response Considerations:

1. Potential Response Assignments
2. Lengths of Assignment
3. Self-Sufficiency of responding resources
4. Available Methods to Acquire Resources and Benefits of Each: Wildfire Compacts
5. Emergency Management Assistance Compact (EMAC)
6. National Interagency Resource Ordering Status System(ROSS)
7. The National Response Plan(Federal Response)
8. Coordination Issues
9. Communication Issues
- 10.Critical Incident Stress; Debriefing(CISD) Procedures
- 11.Safety/Hazard Issues
- 12.Fiscal Documentation Issues

Incident Recovery Considerations:

Damage assessments and Recovery Efforts:

1. Internal agency damage assessments and communications with FEMA.
2. Assess and report agency's ability to provide assistance and capacity to function in designated emergency roles.
3. Availability of the National Communications Equipment Cache
4. Forest Damage Assessment: Initial (Quick) Assessment vs. Long Term Assessment
5. Aerial and Ground Assessment Methods
6. Urban Forest Damage Assessment

NIPF/Industry Lands:

1. Salvage Operations
2. Wet Decks
3. Permitting Procedures
4. Transportation Considerations
5. Landowner Communications
6. Market Considerations
7. Forest Industry Assistance
8. Tax Issues
9. Debris Removal
10. Issues Between States
11. Coordination with landowner Groups and Forestry Associations
12. Federal Funding Opportunities
13. Forest Restoration Efforts

State and Other Public Lands:

1. Salvage Operations
2. Summary: Checklist for Conducting Timber Salvage Sale
3. Wet Decks
4. Permitting Procedures
5. Transportation Considerations (Overweight Issues)
6. Debris Removal
7. Wildland Fire Assessment
8. Increased Danger to Communities at Risk (before and after)
9. Wildland Fire Suppression Safety Issues
10. Long Term Problems and needs
11. Prescribed Fire Issues and Debris
12. Burning Problems
13. Prevention/Education Issues
14. Federal Funding Opportunities
15. VFD Assistance

- Public land managers need to prepare, not just private or State land owners
- Expedited or streamlined timber sale contracting and timber title procedures
- SC Salvage Coordination Center is good model [Hugo]
- Need logging capacity and flexibility to deal with huge increase in demand (coordination with ALC and others)
- Small land owner assistance: IRS tax exemption for loss timber value (JB Jett); could be done with GIS and LIDAR verification (Velde: pre-damage assessments are available under ESF11)

- Free market system works: ranks by value, markets, landowner interest and size (industry, feds vs small owners), ease of logging and access, when timber titles are clear
- Late season events present a challenge with wood yards already full for winter inventory
- Recognize the value of engaging the political and economic leadership (Alt)
- Remember that someone's ox is getting gored and someone will be benefitting at the cost of someone else; must have working relationship before the disaster hits if you plan to work together after the disaster.
- Preparedness is a State and/or Federal role, response is a local government and/or landowner role (usually due to attention span and lack of funding); goals of State/federal governments are primarily to encourage local governments to prepare, and then shift from preparedness to response, and finally, to assist them in recovery.

Proposed Knowledge Base Information System

Jim Shepard

Department of Forestry

Mississippi State University

Proposal:

- To build a Knowledge Base of information to facilitate recovery of biomass value
- Facilitate communications among landowners, companies, agencies, loggers and other service providers, and biomass using facilities
- To provide a resource for restoration and management of damaged forests
- Build the system and populate it with data from two states as Proof of Concept (Mississippi and one other)
- Create templates for data entry for additional states to participate
- Web based and CD

Year 1

- ✓ Hold an information gathering meeting in the two states
- ✓ Design system architecture
- ✓ Design modular data entry (e.g. templates)

Year 2

- ✓ Populate the system with data from 2 states
- ✓ Beta test with users group from 2 states
- ✓ Deliver to Woody BUG web site

Questions:

- ✓ What to include in the knowledge base?

- ✓ Should it include an expert system?
- ✓ Which two states to use as proof of concept?
- ✓ How to information entered for other states?
- ✓ How to keep the system updated?

Web tools:

Hurricane Relief Call Center

Hurricane Forestry Salvage Operations

Basics of Timber Casualty Losses

Landowner Decision Tools: manage, rehabilitate, or start over

Disaster Recovery links

Group Discussion on Plan (Shepard)

- Preparedness
 - pre-planning
 - integration of services
 - help encourage development of markets for non-traditional products common resulting from disasters (bioenergy, engineered lumber, composting, etc that can optimize the use of disaster wood) especially markets where large volumes of debris are created in a short time (market elasticity)
- Response:
 - How to do that
 - Assessment of damage
- Debris removal and debris recovery (utilization)
 - 1.
- Long-term Recovery:
 - Land (protection from insect, disease, fire): habitat and watershed restoration
 - Economic recovery
- Communications
 - Public
 - Among agencies and partners

Process

- Take today's technology and information and plan for the future
- Provide services to land owners, loggers, mills, public and community leaders
- Connect people and contractors to facilitate recovery
- Provide training and workshop materials to assist responders
- Provide decision tools and advice for managers and landowners

- Provide expert system for FAQ and BLOG for “ask a forester” on the WBUG website (probably limit this to a specific event, rather than a continuing BLOG); provide links to ALC, California’s RPF, Association of Consulting Foresters, SAF, State Professional Forestry Associations, etc (similar system for debris contractors, energy experts, etc.)

Group Discussion after Plan Brainstorm

- Rail systems may not be applicable in the future (include for now?)
- NIMS compliance (not ICS)
- Look at PSMA’s for non-emergency debris removal (USDA lead on ESF11 and ESF14, perhaps utilizing the expertise and contracting capability of USACE under ESF3); private sector is more critical than under ESF3 due to huger commercial uses for the debris

Group Discussion after Model Development Brainstorm

- Who will use the tool (how to structure and what to put into the tool)?
- Dichotomous key
- Updating; probably due to annual update on each host web site (maybe a Wikipedia approach with peer review)
- BLOG for expert advice (link thru WBUG)
- More stakeholders and more diversity (MS and one other State); have an exercise on services, info, arrangement.
- ID a user community to develop the web tools
- Utility industry uses of wood, RPS, FFA timber output model
- Updated State input plans
- Road and bridge weights in a GIS/GPS database
- Infrastructure to support responders (fuel, housing, food, security)
- Security concerns on website (some PW protected, some public info; concerns with homeland security and privacy issues); need to put Jim Shepard in touch with DHS or USDA staff to advise on internet security policies

Next Steps

- Send out the Notes and include the WBUG website for the postings of the presentations from today’s meeting (Stew)
- Set up a conference call in one month (Stew); May 12, 2-3 PM (date and time agreed to by the Team)
- People need to send contact info and websites to John Plodinec, Bryce and Stew for the Plan and Jim Shepard on the Web Tools

- DOI, USDA, EPA, USACE to approach FEMA with a proposal to integrate ESF3, 4, 11, 14, with private sector assistance (reduce costs in ESF3 and ESF 11); early engagement and advice in how to proceed
- Draft Plan by the Fall (Plodinec)
- Web tools by EOY 2009 (Shepard)

Web Sites and Source

- Web Site Articles (ML):
 - ✓ 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*
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 - ✓ What Is Bluestain
 - ✓ Tax Consequences
 - ✓ Value Forestry and Forest Products to State
 - ✓ Problems, Concerns As They Develop
 - ✓ Reforestation Alternatives
 - Web tools (JS):
 - ✓ Hurricane Relief Call Center
 - ✓ Hurricane Forestry Salvage Operations
 - ✓ Basics of Timber Casualty Losses
 - ✓ Landowner Decision Tools: manage, rehabilitate, or start over
 - ✓ Disaster Recovery links
 - Brownfields Coordinator for Department of Agriculture (BV):
<http://www.usda.gov/da/hmmd/brownfields.htm>
 - Southern State Forestry Organizations (CS):
Alabama Forestry Commission
<http://www.forestry.state.al.us/>
Alabama Forestry Association
<http://www.alaforestry.org/>
- Florida Division of Forestry
<http://www.fl-dof.com/>

Florida Forestry Association
<http://www.floridaforest.org/>

Georgia Forestry Commission
<http://www.gfc.state.ga.us/>
Georgia Forestry Association
<http://www.gfagrow.org/>

Louisiana Department of Agriculture and Forestry – Office of Forestry
<http://www.ldaf.state.la.us/portal/Offices/Forestry/tabid/63/Default.aspx>
Louisiana Forestry Association
<http://www.laforestry.com/>

Mississippi Forestry Commission
<http://www.mfc.state.ms.us/>
Mississippi Forestry Association
<http://msforestry.net/>

North Carolina Division of Forest Resources
<http://www.dfr.state.nc.us/>
North Carolina Forestry Association
<http://www.ncforestry.org/>

South Carolina Forestry Commission
<http://www.state.sc.us/forest/>
South Carolina Forestry Association
<http://www.scforestry.org/>

Texas Forest Service
<http://txforests-service.tamu.edu/main/default.aspx>
Texas Forestry Association
<http://www.texasforestry.org/>

- EPA’s *Planning for Natural Disaster Debris* guidance, March 2008 (DS)
<http://www.epa.gov/epaoswer/non-hw/debris-new/pubs/pnnd.pdf>
- EPA’s GreenScapes program (DS)
<http://www.epa.gov/GreenScapes/>
- EPA’s Resource Conservation Challenge (DS)
<http://www.epa.gov/rcc/>

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