The Devastating Tornadoes of April 15 & 27, 2011

Alabama Forest Recovery Task Force

Final Report on the Timber Recovery Effort from the Storms of April 2011

OFFICE OF THE GOVERNOR

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STATE OF ALABAMA

January 13, 2012

To: The Alabama Forest Recovery Task Force
Members of the Forest Products Industry
Alabama Logging Contractors

Re: April 2011 Tornadoes Recovery Effort

I want to issue a heartfelt "thank you" to members of the Alabama Forest Recovery Task Force for your efforts in salvaging timber damaged by the terrible tornadoes of April 15 and 27, 2011. These were tragic storms that killed more than 200 of our citizens and damaged or destroyed approximately 9.5 million tons of trees.

I want to especially thank Tommy Thompson of Louisiana Pacific for agreeing to serve as task force chairman. Tommy did a great job getting things organized. He took the lead in setting up eight meetings in the storm-damage area to take vital information to landowners about how to proceed with the cleanup and rehabilitation of their lands. Due to the nature of the April storms, much of the timber was either completely destroyed or reduced to a tangled mess, making recovery extremely dangerous and difficult.

In addition to Tommy and members of the AFRTF, I want to also thank the forest products industry for working hard to utilize as much storm-damaged wood as possible. Alabama Mills reported taking in almost 1 million tons of salvage wood during a time when they already had a substantial supply of wood on hand.

Last, but not least, I want to thank Alabama's professional loggers who were able to get tornado-damaged wood off of the ground safely and efficiently and transported to mills where it could be utilized. This helped landowners realize as much value from their damaged timber as the markets would allow.

I want to again thank all of you for your dedication and hard work in making this effort a success. You are a shinning example of what can be accomplished when we organize and pull together for the common good.

Sincerely,

Robert Bentley

Robert Bentley
Governor of Alabama

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Photo courtesy AFC

Cover weather photo courtesy NOAA/National Climatic Data Center, tornado photo courtesy T*uscaloosa News*

Forest Debris, automobiles, home appliances and other storm detritus all mixed together in this AFC photo of a scene in Hale County.

Chairman's Report

Pulling Together for the Com

By Tommy Thompson, CF

Photo by Sam Duvall

AFRTF Chairman Tommy Thompson

We immediately started working to salvage the maximum amount of trees possible from that scarred landscape.

The vicious tornadoes of April 15 and 27, 2011 caused tremendous damage to the landscape of Alabama over a vast area that involved 42 counties.

On April 27, 2011 alone, one of the worst days in Alabama history, 62 tornadoes struck the state, killing 250 individuals, injuring nearly 2,800, and damaging or destroying 23,500 homes. All along the paths of destruction of these storms was a landscape littered with destroyed or damaged timber, some in urban areas, but the vast majority in the rural parts of the storm's paths.

After the storms hit and casualties had been cared for, Governor Robert Bentley formed the Alabama Forest Recovery Task Force (AFRTF) on May 5th, 2011 and I was appointed chairman. We immediately started working to salvage the maximum amount of trees possible from that scarred landscape, forming committees for the various aspects of the recovery effort, and establishing a website (www.alabamaforestrecovery.com) to provide information to storm victims and the general public.

To date, almost 1 million tons of downed timber has been recovered and taken to mills for salvage. This amount was reported by the participating mills and may not include all of the salvage. This would certainly constitute the lion's share of the wood that was taken out of storm areas and put to productive use.

Obviously, because of the nature and destructive force of the storms that struck our state in April, a majority of the wood was damaged beyond commercial use, except possibly as chips or fuel wood. In many places, because of economic constraints, there is still enough downed wood to cause concerns as we head into the fire season of the next several years.

Unlike Hurricane Ivan in 2004, which was concentrated primarily in 12 counties of southwest Alabama, the spread-out nature of the damage from the April 2011 tornadoes made it very difficult to identify the victims of timber loss. Getting boots on the ground and providing accurate maps from the Alabama Forestry Commission was the only way. A graphic in this report shows what looks like the scratches of these storms that covered relatively narrow but extremely long strips of destruction (see page 7).

After forming, the AFRTF went into the storm-damaged area with a series of meetings to bring Task Force members and other experts to the local areas, providing information and assistance to the landowners who saw their timber damaged or destroyed. These meetings

mon Good

Photo courtesy Alabama Forestry Commission

ranged from over 100 people showing up in Tuscaloosa, to just a handful in some of the other meetings. Average attendance for all of the meetings was about 30 landowners. The idea was to bring experts to citizens who might need help or have questions, using the local media and several allied groups to contact landowners who were impacted by the storms.

In addition to the public meetings, the AFRTF partnered with the Alabama Cooperative Extension and Alabama Forestry Commission to develop a Webinar that captured the presentations. This webinar is available for viewing at http://www.aces.edu/forestry/tornado damage/webinar.php.

This AFRTF final report is an attempt to give a broad overview of the weather disaster of 2011. We intend it to be as accurate and comprehensive as possible about the two terrible days in April 2011 when Mother Nature wreaked havoc on the land.

As chairman of the AFRTF, I wish to thank the governor for establishing the Task Force and each member of the Task Force for serving. A list of the members can be found on page 8 of this report.

Thanks are also due the Departments of Transportation and Public Safety for working with our industry to increase the haul weight on trucks transporting storm-damaged wood soon after the storms struck. This helped move more wood per load, greatly increasing the efficiency of the recovery effort. Thanks are also due to the Department of Revenue and other state agencies that made our work a lot easier.

Of course, the Alabama Forestry Commission is also to be commended for their quick response in helping search and rescue squads find and recover victims, clear access roads, assess the damage, help with law enforcement at the scene and work with other agencies to protect the public health.

The value of timber salvage to landowners from the April storms is approximately $28 million (see figures top of page 21). That's about 11% of the value of the downed timber. We wish more had been salvaged, but the storms were so violent that most of the timber was simply obliterated or strewn across the landscape.

Still, the 2011 timber recovery effort was a great example of everybody concerned doing his best to mitigate the incredible damage of the terrible storms of April 2011. Thanks to all of you who pitched in to help!

Sincerely,

Tommy Thompson

Tommy Thompson, AFRTF Chairman

Photo courtesy Alabama Forestry Commission

The Devastating Tornadoes of April 2011

By Sam Duvall

April 2011 was anything but typical

The storms of April 2011 started off like so many springtime storms, with the thunderstorm warnings and tornado warnings and watches Alabamians have come to expect as spring sets the stage for summer.

Before the month was over, however, it would be clear that April 2011 was anything but typical as the largest tornado outbreak ever recorded, and popularly known as the 2011 Super Outbreak, occurred from April 25–28, 2011, affecting the Southern, Midwestern, and Northeastern United States. These storms followed an already dangerous and destructive series of tornadoes that had hit the state on April 15. But the storms of April 27 were by far one the worst natural disasters in Alabama history.

In total, 346 people were killed (250 in Alabama alone) as a result of the outbreak. April 27 became the deadliest tornado day in the Untied States since the 1925 "Tri-State" outbreak and is recorded as the 5th deadliest tornado day in United States history.

April 27, 2011 in Alabama will ever after be remembered as a "day in infamy" when 62 confirmed tornadoes left 250 people dead, nearly 2,800

injured, and 23,500 homes damaged or destroyed. Added to those terrible statistics was the destruction of approximately 12 million tons of wood strewn over 200,000 acres as the storms rambled through towns and communities and into the surrounding forests of central and north Alabama.

It will take several years for Alabama to completely recover from these storms, which were the costliest tornado outbreak and one of the costliest natural disasters in United States history (even after adjustments for inflation), with total damages nationally of nearly $11 billion.

How It All Started

Meteorologically speaking, the outbreak was caused by a vigorous upper-level trough that moved into the Southern Plains on April 25. An extratropical cyclone developed ahead of this upper-level trough between northeast Oklahoma and western Missouri, which moved northeast. Conditions were similar on April 26, with a predicted likelihood of severe thunderstorms including an extended threat of strong to violent long-track tornadoes during the afternoon and evening hours.

As the storm system moved eastward toward the Ohio, Mississippi, and Tennessee Valleys on April 27, a very powerful 80-100 knot mid-level jet stream moved into the Ohio and Tennessee Valleys behind the trough, creating strong wind shear with a low pressure center moving quickly northeastward across those areas on the 27th.

Early in the morning of the 27th, a squall line of severe thunderstorms packing straight-line winds and numerous embedded tornadoes impacted north and central Alabama and parts of middle and east Tennessee. These storms knocked out power and telephone lines in a few areas. But these outages became more widespread as the day progressed. This preliminary line of storms also caused some NOAA weather radio transmitter sites to stop functioning for the remainder of the outbreak. It is believed that, as a result, some people had no warning of approaching tornadoes later in the day.

A widespread complex of super cell storms overspread Mississippi and Alabama and violent tornadoes began rapidly touching down as the evening progressed. Four tornadoes were officially rated as EF-5 on the Enhanced Fujita Scale that day. These tornadoes impacted several counties in Mississippi and Alabama, especially the towns of Smithville, Mississippi; Hackleburg and Phil Campbell, Alabama; Philadelphia, Mississippi; and Rainsville, Alabama. This marks only the second day in history (the only other being the April 3, 1974 Super Outbreak) that there were three or more EF-5 or F-5 tornadoes.

The Rainsville tornado touched down in the Lakeview Community and grew from a path width of 50 yards to half a mile as it entered Rainsville and Sylvania communities. In addition to ripping homes from their foundations, this storm grabbed a pickup truck and

Remains of a tornado destroyed home in the Cedar Crest neighborhood of Tuscaloosa.
Photo: Jeffrey Henon, U.S. Army Corps of Engineers

Daphne Hart of the American Red Cross views damage in the Holt area of Tuscaloosa, Ala.
Photo: Danelle Schlegelmilck/American Red Cross

In some places it looked like the woods had been mowed by a huge aerial bush hog with a dull blade. Photo courtesy Alabama Foresty Commission

tore it into multiple pieces. It also picked up an 800-lb steel safe anchored to a foundation and threw it 600 feet, ripping the door from its hinges.

A tornado also touched down in Marion County, Alabama, about 5 miles southwest of Hamilton at around 3:00 pm, leaving massive damage along its track. The storm would eventually reach the Hackleburg area, leveling many structures including a large plant operated by Wrangler. Jeans reportedly fell from the sky in Courtland, Alabama 40 miles distant. Well-built homes were wiped cleanly from their foundations and cars were thrown hundreds of feet. The Red Cross put the destruction of Hackleburg at 75%.

Phil Campbell Also Suffers Terrible Damage!

Cars were tossed and destroyed throughout the path of the Hackleburg tornado, with one car wrapped around a debarked tree in Phil Campbell. All along the path, thousands of hardwood and softwood trees were snapped. A 25-foot section of pavement was torn from the road in this area. Hundreds of trees were also debarked and twisted, and had only stubs of the largest branches remaining.

As always occurs when a big storm blows up, power outages were widely reported with tens of thousands of Alabamians losing their electricity to the destruction. More than 300 power transmission towers, 120–150-feet tall were destroyed in the storms, some "twisted like bow ties" according to the National Weather Service. The towers supported some 90 transmission lines, a mixture of 500kV and 161kV lines.

TVA lost the ability to transmit power from both Browns Ferry Nuclear Power Plant and Windows Creek Fossil Plant after the storms on April 27, requiring both to be shut down. The nuclear plant's cold shutdown was supported by diesel generators for four days, until a second 161kV line could be restored to the plant.

A dangerous and destructive tornado also struck the city of Cullman, Alabama at around 3:00 p.m., causing extensive destruction in downtown Cullman, a city of about 20,000 people. The tornado was rated an EF4.

The final damage count was 867 residences and 94 businesses in Cullman. At 4:00 p.m. CDT, a tornado struck Lawrence County, Alabama causing severe damage and killing 14 people. At around 5:10 p.m., a very large and exceptionally destructive tornado struck Tuscaloosa, Alabama leaving a path of destruction a mile and a half wide. About 40 minutes later, the same tornado struck the northern suburbs of Birmingham. The super cell responsible for the Tuscaloosa/ Birmingham EF-4 tornado originated in Newton County, Mississippi at 2:54 pm and tracked 380 miles to Macon County, North Carolina where it dissipated at 10:18 pm.

Trees Take a Big Hit

Of course, the worst aspect of any storm is when human lives are taken by their destructive force. But in addition to the toll in human lives, millions of dollars of in property damage also takes place. Included in this second category are thousands of acres of prime timber that lay sprawled and splintered across a landscape of some 42 of Alabama's 67 counties. For those who recall Hurricane Ivan's wrath in 2004, the storms of April 2011 were completely different in terms of the pattern of their destruction.

Ivan's major destruction was concentrated where the storm came ashore on Alabama's coastline and then rode up and over the state, a path that started in southwest Alabama where the major damage was confined to a 12 county area in the southwest corner of the state along the Mississippi line. Not to say there wasn't general damage across the state, but the major damage was confined to one corner of Alabama.

However, the storms of April 15 and 27, 2011, literally clawed their way

across Alabama producing massive damage and destruction to human life, towns, cities, property, and timber in rural areas on very long but narrow tracts, versus the much wider tracks typical of a hurricane.

Also, the more obvious predictability of a hurricane track meant in 2004 that the AFC and some logging contractors were able to preposition equipment in order to have it in the impact area to immediately begin clearing roads and cleaning up the mess as soon as the storm had passed.

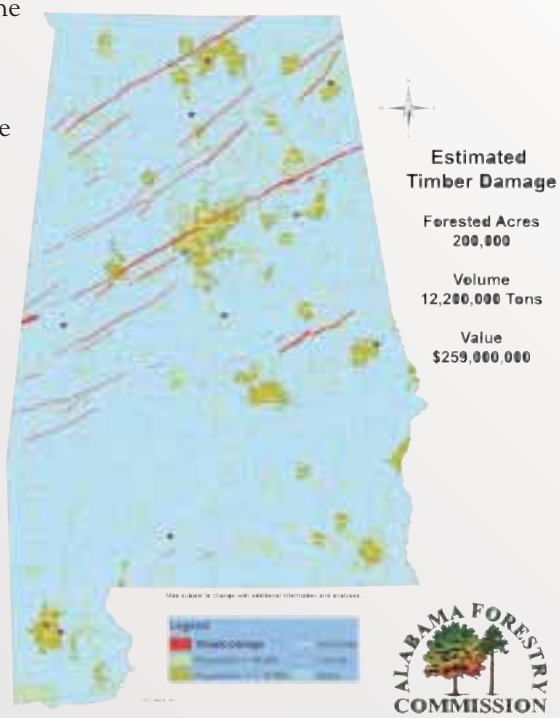
Tornadoes, on the other hand, offer very little opportunity for planning. They simply hit when and where a storm system's internal conditions dictate. Even then, weather forecasters can only issue warnings as the storm system shows the right profile on the Doppler radar screen indicating that ideal conditions for tornadoes are present. The only way to be sure a tornado is on the ground is through the observation of human eyes.

Nature of Storms Makes Recovery More Difficult

The nature of the storms of 2011 made it harder both to quantify the extent of the timber damage and to pinpoint the affected landowners because the storm-damage area was so widely disbursed. In looking at a map of the state (see figure on this page), it becomes clear that the damage was extensive but largely confined by the size of the tornadoes and their respective storm tracks—relatively narrow strips—but with some stretching all the way across the state from border to border.

While most of the tornado tracks were relatively narrow, there were several in the EF-4 and EF-5 categories. Some of these created severe devastation more than a mile wide. One of the biggest hit Tuscaloosa, Alabama.

The only ways to get information to the affected landowners early in the recover process was through personal contact via the Alabama Forestry Commission and other state and federal agencies with boots on the ground in the affected area and also through the private forestry companies operating in those areas. By and large, these "first responders" did a splendid job helping locate individuals killed or injured by the storms, and after the initial contact, continued helping with things like road clearing and clean up in the affected area.



Anywhere the storms hit, the woods took a beating! Photo courtesy of Westervelt

Alabama Forest Recovery Task Force Members

Tommy Thompson, Chairman *Louisiana Pacific Corp.*
Ray Clifton, Executive Director *Alabama Loggers Council*

Committee Members
Senator Scott Beason, *Alabama Senate*
Senator Roger Bedford, *Alabama Senate*
Harry Bledsoe, *Smurfit-Stone Corp.*
Rep. Mac Buttram, *Alabama House of Rep.*
Linda Casey, *Alabama Forestry Commission*
John R. Cooper, *Ala. Dept. of Transportation*
N. Gunter Guy, Jr., *Ala. Dept. of Conservation*
Steve Guy, *Alabama Farmers Federation*
Don Heath, *Natural Resources and Real Estate Regions Bank*
David Helm, *International Paper*
Honorable Mike Hubbard, *Speaker Alabama House of Representatives*
Chris Isaacson, *Alabama Forestry Association*
Steve Jenkins, *Ala. Depart. of Environmental Management*
James K. King, *The Westervelt Company*
Lee Laechelt, *Alabama Forest Owners' Assn.*
Daryl S. Lawson, *Alabama A&M University*
Steve Lohr, *Forest Supervisor National Forests in Alabama*
Julie P. Magee, *Commissioner Ala. Depart. of Revenue*
John McMillan *Ala. Dept. of Agriculture & Industries*
Bobby Miller, *Tuscaloosa County Commission*
Robert X. Pirando, *PE Marshall County*
Dr. Billy Powell, *Alabama Cattlemen's Assn.*
Bob Price, *West Fraser*
Jeff Pruitt, *Ala. Regional Council of Governments (TARCOG)*
Captain Tim Pullin, *Ala. Dept. of Public Safety*
David Schille, *Georgia–Pacific LLC*
Bob Sharp, *Cooper Marine & Timberlands*
Dr. James Shepard, *Auburn University School of Forestry & Wildlife Sciences*
Kathy Steadmon, *USDA Farm Services Agency*
Freddy Thompson, *Jasper Lumber Co.*
Stephan Tomlinson, *Growing Assets, LLC*
Rep. Mark Tuggle, *Alabama House of Rep.*

Committee Chairs
Sam Duvall, *Alabama Forestry Assoc. Communication*
Bruce Springer, *Alabama Forestry Commission Forest Health*
Rep. Mark Tuggle, *Alabama House of Representatives Governmental Affairs*
Walter Cartwright, *Alabama Forestry Commission Information & Reporting*
David Schille, *Georgia-Pacific LLC Harvesting & Transportation, & Utilization*

Forest Recovery Task Force Formed to Deal with Disaster

Soon after April 27, the Alabama Forestry Association, the Alabama Forestry Commission, and others started lobbying Gov. Robert Bentley to establish the Alabama Forest Recovery Task Force to oversee the timber recovery effort. This was also one of the first things done in 2004 in the aftermath of Hurricane Ivan.

Photo by Sam Duvall

State Forester Linda Casey addresses members of the Alabama Forest Recovery Task Force at organizational meeting. At left is AFRTF Chairman Tommy Thompson.

As Governor Riley had done during the earlier disaster, Gov. Robert Bentley on May 5, 2011, signed Executive Order #12 creating the Alabama Forest Recovery Task Force. The opening paragraph setting the basis for the order stated: "The state of Alabama was hit by recent thunderstorms, straight-line winds, and tornadoes on April 15, 2011 and again on April 27, 2011… ." The reason for establishing the Task Force was to "facilitate salvage efforts to maximize the recovery of timber damaged by these storms and limit the loss of timber volume and value to forest landowners… ."

Veteran forester and forest industry employee, Tommy Thompson, who works for Louisiana Pacific, was appointed chairman of the AFRTF. Tommy immediately set to work, calling a meeting of the AFRTF right after it was formed by Gov. Bentley and establishing the list of participants and activities designed to get things moving on the recovery.

As with all such events, the time is short between the downing of the timber and the onset of degradation caused by insects, wildfires, and things like "blue stain," which causes a discoloration of the wood making it less attractive as a finished building material.

IP's David Helm (left), who chaired the Hurricane Ivan recovery effort in 2004, and the 2011 AFRTF Chairman Tommy Thompson, converse with Task Force member Stephan Tomlinson at the Task Force organizational meeting at the Alabama Cattleman's Association building in Montgomery. Photo by Sam Duvall

AFRTF Chairman Tommy Thompson (left), Alabama Loggers Council and AFRTF Executive Director Ray Clifton (center) and David Schille, chairman of the AFRTF's Harvesting, Utilization and Transportation Committee, look over maps of the storm-damage area. Photo by Sam Duvall, photo below courtesy Alabama Foresty Commission

To get more wood to the mills,

You've Got to Move It, Move It...

Photo by Sam Duvall

Discussions were opened to increase weight limits as soon as possible

One of the first things that needed to be done after Gov. Bentley created the AFRTF was to have the state raise the weight limits on hauling storm-damaged wood.

There is always a tension between public safety interests and the needs of the affected industry when a disaster leads to considerations such as raising weight limits on the state's highways. But right after the Task Force was created, discussions were opened between the Alabama Department of Transportation, the Alabama Department of Public Safety and the Alabama Forestry Association about the need to increase the weight limits as soon as possible because of the speed with which downed timber degrades.

Executive Vice President Chris Isaacson and Alabama Loggers Council Executive Director Ray Clifton took the lead in these talks and worked with the appropriate state officials to reach a decision that would be suitable to both the industry and the state.

After a number of meetings over a period of several weeks, the weight limit for hauling storm-damaged wood was raised to 95,000 lbs for a 57-foot truck, 44,000 lbs for two axles, and 48,000 lbs for a truck with three axles.

The routes that were to be followed by truckers hauling storm wood were designated by the Alabama Department of Transportation (ALDOT). These routes were designated after a review of the storm tracks across the state and the location of the mills which were likely to receive the damaged timber.

To facilitate the waiver process, DOT designated Alabama Loggers Council Executive Director Ray Clifton as the contact for loggers to apply for the weight waiver. In doing so, loggers had to register the name of the logging crew and provide the professional logging manager (PLM) certification number for the company.

Clifton emailed or faxed the 1-page document describing the maximum allowable weight for each axle configuration to loggers requesting the waiver. A 2-page map showing the approved state highways included in the waiver was also provided to the loggers who applied.

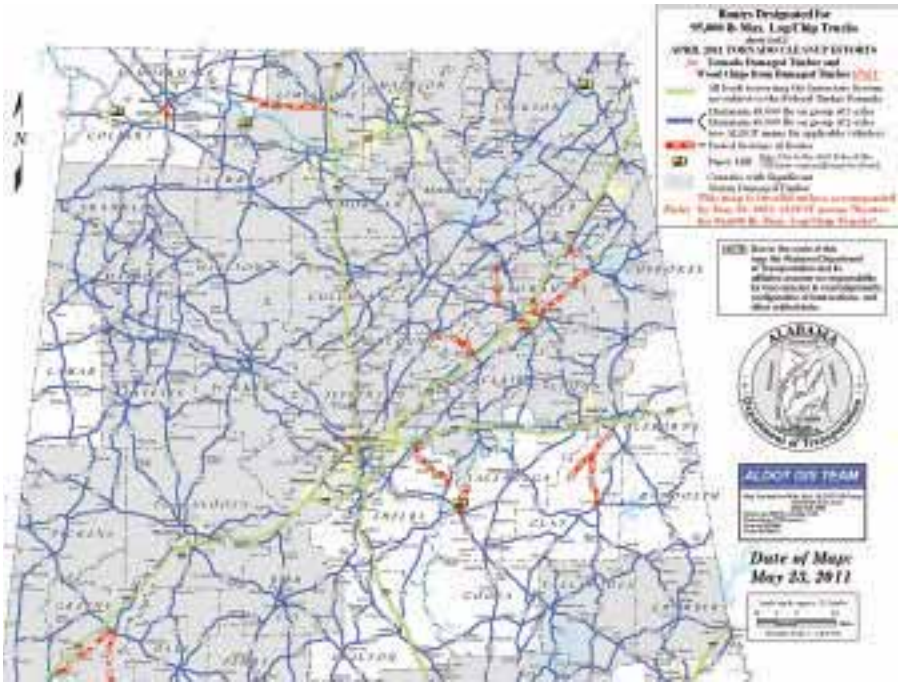
Haulers Must Keep Copies in Their Trucks

The documents (waivers and map) then had to be copied and kept in each truck that was being used to haul storm-damaged wood.

To keep the system up to date, Clifton had to forward a list each day of those crews who had registered and received a copy of the waiver from him to the Alabama Department of Transportation. State troopers and weight crews used the list to verify the waiver was in the proper hands. Anyone not registered was subject to the normal legal weight limits. A reciprocal agreement was reached between the states of Alabama and Mississippi to allow for the increased weight limit of up to 95,000 lbs to be valid in Mississippi for Alabama haulers and vice versa. Because many of the tornadoes that started in Mississippi crossed over in into Alabama, this proved to be very helpful. Essentially, Mississippi troopers recognized the same paperwork as was required in Alabama.

Reciprocals were sought with other states, particularly with Georgia, but could not be worked out.

One hitch in the waiver procedure in Alabama was that it was sometimes a problem when a contract trucker was hauling wood and his waiver had the name of another company on it. Clifton tried to work this out by getting the word out that contract haulers should also get a copy of a mill scale, card, scale ticket, or some other form of identification to prove that the load actually came from the logger who is named on the waiver.



Other than the above, the system worked well enough to allow for a substantial amount of the damaged timber to be brought to mills and put to productive use. In all, some 155 waivers were issued to loggers and truckers in Alabama and Mississippi.

Editors Note: The following is a copy of the waiver process that was worked out between the industry and the state and given to logging contractors and others to follow for the 2011 storm-salvage effort.

WEIGHT-WAIVER PROCESS

FOR HAULING STORM-DAMAGED WOOD

Photo by Sam Duvall

Due to the severe weather of April 15th and 27th, the Alabama Department of Transportation, in order to assist forest landowners and loggers in the removal of storm-damaged timber, has agreed to provide a limited waiver on weight limits through July 22, 2011. Following are the weights that will be allowed:

A. **Vehicles with 5 or 6 axles and Outer Bridge Spans between 40 ft. (inclusive) and 51 ft.**
The maximum Gross Vehicle Weight for vehicles equipped with five (5) or six (6) weight-bearing axles with outer bridge spans of not less than forty (40) feet, but less than fifty-one (51) feet, shall not exceed ninety thousand (90,000) pounds. No single axle shall exceed twenty thousand (20,000) pounds in weight plus scale tolerance. No group of two (2) axles shall exceed forty thousand (40,000) pounds in weight plus scale tolerance. No group of three (3) axles shall exceed forty-eight thousand (48,000) pounds in weight plus scale tolerance.

B. **Vehicles with 5 or 6 axles and Outer Bridge Spans of 51 ft. or more.** The maximum Gross Vehicle Weight for vehicles equipped with five (5) or six (6) weight-bearing axles with outer bridge spans of not less than fifty-one (51) feet shall not exceed ninety-five thousand (95,000) pounds. No single axle shall exceed twenty thousand (20,000) pounds in weight plus scale tolerance. No group of two (2) axles shall exceed forty thousand (40,000) pounds in weight plus scale tolerance. No group of three (3) axles shall exceed forty-eight thousand (48,000) pounds in weight plus scale tolerance.

C. **Vehicles with 4 axles.** The maximum Gross Vehicle Weight for vehicles equipped with four (4) weight-bearing axles with outer bridge spans of not less than forty-three (43) feet shall not exceed eighty thousand (80,000) pounds. No single axle shall exceed twenty thousand (20,000) pounds in weight plus scale tolerance. No group of two (2) axles shall exceed forty thousand (40,000) pounds in weight plus scale tolerance. No group of three (3) axles shall exceed forty-eight thousand (48,000) pounds in weight plus scale tolerance.

PROCESS FOR OBTAINING WAIVER

1. **CALL** Call Ray Clifton at (334) 481-2130 and provide your company name, contact numbers, and PLM # (or equivalent logger certification/registration number from Georgia, Mississippi or Tennessee). EVERY logger harvesting and hauling storm-damaged wood must call. A list of loggers who have registered will be provided to AL DOT on a daily basis.
2. **COPY** A copy of the waiver documents (including maps showing approved routes) will be emailed or faxed to you. Your company name and PLM # will be included on these waiver documents.
3. **SHOW** Drivers must keep a copy of the waiver documents with them at all times and must show them to Alabama Department of Public Safety (DPS) personnel or any other law enforcement personnel on request. The company name and PLM # that is written on the waiver documents will uniquely identify that load as coming from a logger that has registered to haul storm-damaged wood.
4. **REMEMBER** The waiver is valid until July 22, 2011 and is only valid ON DESIGNATED ROUTES IDENTIFIED ON THE MAPS IN THE WAIVER DOCUMENTS. [See maps on preceding page]

TO OBTAIN THIS WAIVER, YOU MUST CALL RAY CLIFTON AT (334) 481-2130

Chris Potts presented the check to Green at the crew's logging job near Centerville. Green expressed his heartfelt thanks and appreciation to his fellow loggers for their help. Photo by Sam Duvall

Idaho and Alabama Loggers Unite to Assist Tornado Survivor

By Ray Clifton

Robert Green is a survivor.

Robert operates a skidder for Farley Forest Products in west Alabama. Before the tornado outbreak of April 27, 2011, he came home at the end of a long day in the woods to his wife in the Alberta City neighborhood in Tuscaloosa, Ala.

All of that changed in an instant.

The tornado, estimated to be a mile and a half wide when it raced through Tuscaloosa, destroyed Green's home, three vehicles, and wiped out all of his family's belongings. His wife was seriously injured by debris, but has since recovered after a long stay in the hospital. All that Green was able to recover was a few items of clothing.

The Idaho Associated Logging Contractors contacted Alabama Logging Council Chairman Chris Potts a couple of days after the storm to offer a contribution of $400 to an Alabama logger affected by the storm. Potts called ALC Director Ray Clifton, who conferred with Vulcan District Director Tom Reed and Mountain District Director Richard Pope to locate a worthy recipient. Green quickly emerged as a worthy candidate.

Additional contributions by the ALC and the Piedmont and Warrior Districts brought the total contribution up to $1000.

West Coast Aids Southeast

Sgt. Eric T. Fox (left) stands with fellow Los Angeles County Deputies James Sexton, Ruben Olmos, and Veronica Chau at the devastated Forest Lake subdivision in Tuscaloosa. The Los Angeles contingent came in and helped the local law enforcement and emergency responders deal with the aftermath of the tornadoes of April 27. Photo provided by Sgt. Fox

Big Guy Meets Little Guy

Javier Arenas, University of Alabama alumnus and NFL Kansas City Chiefs defensive back, signs a small boy's shirt when he visited the Red Cross Shelter at Belk Activity Center in Tuscaloosa, on May 6, 2011.

Photo: Donna Martinez, American Red Cross

LANDOWNER MEETINGS

It was clear from the get go that communicating with the victims of the April 15 and 27, 2011 storms would be difficult because of the widely disbursed nature of the storms. Whereas with Hurricane Ivan in 2004 most of the damage was confined to 12 counties in the southwestern corner of the state where most of the damage was concentrated, the tornado events of 2012 included long but narrow corridors of damage spread over 42 counties.

By holding the public meetings we put faces to the programs.

This made identifying landowners who had suffered damage to their timber stands all the more difficult to find because they were so widely disbursed.

It was decided that, in addition to the boots on the ground from the various state and federal agencies and forestry companies which had a human presence out in the storm areas, a series of meetings would also be held to take, in essence, the combined abilities of these agencies and forestry companies to locations within the hard hit areas. The meetings were publicized to draw victims to a central location where they could hear from state, federal and local officials and get their questions answered.

The meetings were scattered through the worse part of the damage zone as follows:

Monday, July 18, Tuscaloosa
Tuesday, July 19, Cullman
Thursday, July 21, Gardendale
Monday, July 25, Pell City
Tuesday. July 26, Dadeville
Thursday, July 28, Livingston
Monday, August 8, Moulton
Tuesday, August 9, Fort Payne

AFRTF Chairman Tommy Thompson described the purpose of the meetings as an attempt to give landowners access to professional advice and help them work through the often bewildering process of recovery.

"The meetings were attended by a mix of landowners and resource professionals from federal and state agencies including the Alabama Forestry Commission, Natural Resources Conservation Service, United States Department of Agriculture Farm Service Agency, Alabama Cooperative Extension Service, Alabama Forestry Association, representatives of the for-

est industry, and a number of university professors," Thompson noted.

Asked why the meetings were important, Thompson added: "One of the objectives of the Alabama Forest Recovery Task Force is to provide information to the impacted forest landowners. By holding the public meetings we put faces to the programs. Additionally, this gave landowners the opportunity to have a personal discussion with resource professionals who are experts in the field. We had a good interchange of questions and answers."

In addition to the public meetings, presentations were recorded and made available for those who did not attend the meetings on www.alabamaforestrecovery.com. In addition, the Alabama Cooperative Extension System website at www.aces.edu/forestry/tornadodamage/webinar.php created and posted a webinar in cooperation with Mike Kyser of the Alabama Forestry Commission.

By and large these meetings were successful. The first one in Tuscaloosa was attended by about 85 individuals. Some of the other meetings had very low attendance. But the eight meetings that were held averaged about 30 attendees per meeting.

AFRTF Chairman Thompson took the lead setting the tone, at the meetings telling attendees: "We are holding these meetings to provide you with what we hope will be valuable information to help you start getting your forestland back into a healthy state."

Rick Johnson, a forestry consultant, spoke to attendees about how important it was to act quickly to get their damaged wood off of the ground and to a mill where it could be utilized before blue stain, insects or fire further degraded its value. He discussed the need to carefully manufacture the logs to remove the split ends and damaged sections. Samples of structural lumber were used to clearly show the tornado damage.

Ken McNabb of the Alabama Cooperative Extension System and Auburn University's School of Forestry & Wildlife Sciences also made a presentation showing the extent of the damage and challenges for reforestation.

Auburn Professor Robert Tufts spoke to attendees about the complicated process of dealing with the tax consequences of storm damaged wood, choosing either to file for casualty loss deductions, or simply as a basic business loss from the tornadoes.

Dan Lassetter, the AFC Field Representative for the Tuscaloosa area, spoke of the horror of the storms as early responders had to deal with victims who were killed or injured by the devastating tornadoes.

Ray Clifton, Executive Director of the Alabama Loggers Council, discussed how to find a qualified logging professional in their area. He also spoke of the need for landowners to be very safety conscious as they went about the business of having their lands cleared, particularly if they were doing work themselves.

"Because of the way they are blown down, a lot of these trees are still very dangerous. They are under tension and when they are cut that tension has to go somewhere! So, you've got to be very careful dealing with this downed wood," Clifton noted.

All photos this chapter by Sam Duvall

Top: Brad Lang, Alabama Forestry Commission employee at Tuscaloosa. Bottom: Auburn University Professor Robert Tuffs talking to landowners about dealing with the tax implications of their downed timber.

Other presenters included Tim Thornhill, of Louisiana Pacific; Bruce Springer AFC Staffer and chairman of the AFRTF Forest Health Committee; Neil Letson AFC Staffer who was in charge of the Urban Forestry Recovery effort; and Tim Albritton, NRCS-USDA.

North Alabama Communities Take Steps to Restore Urban Forests

By Neil Letson
Assistant Division Director
Alabama Forestry Commission

Above photo shows how the tornado laid low the trees as well as the homes and businesses in Tuscaloosa.
Photo: Sgt. Eric Fox. Los Angeles Sheriff's Department

Urban trees play an important role in helping make Alabama communities livable for people. They provide economic value, supply environmental benefits, and enhance quality of life. The April tornadoes took a terrible toll on our state's urban forest. Over 60 Alabama towns and cities were either in direct line or within one-half mile of a tornado path. As the storms made their way through the state, early assessments gave us our first sense of how badly urban forests would be damaged. From town to town, there were reports that thousands upon thousands of urban trees were snapped, twisted, debarked, or otherwise completely uprooted. Though the exact number of urban trees impacted will never be known, an idea can be determined by the sheer volume of storm debris collected and disposed through municipal and county federal public assistance.

The U.S. Army Corps of Engineers (Mobile District) uses a debris model based on data from recent hurricanes. The model estimates 30% of storm debris is clean woody material, such as limbs, branches, and stumps. FEMA reports 10 million cubic yards of tornado debris were removed from North Alabama towns and cities. That means an estimated 3 million cubic yards of storm debris removed by local governments were remnants of North Alabama's urban forest, thus validating what many North Alabama citizens and local officials already knew. The destruction and damage of North Alabama's urban forest was extensive and would require a coordinated, long-term effort to help restore their urban forests through reforestation.

Public interest in replanting urban trees destroyed by tornadoes was immediate and continues to grow as communities rebuild. Within a month following the storms, citizens from Tuscaloosa, Birmingham, and other communities were con-

tacting state agencies, such as the Alabama Forestry Commission and Alabama Cooperative Extension System, requesting help on how and when to replace their trees. To help coordinate and encourage local urban tree replanting efforts, urban forestry was made a component of the Reforestation Committee under the Governor's Alabama Forest Recovery Task Force. The Reforestation Committee sponsored eight workshops across North Alabama and dedicated a portion of their agenda to urban reforestation. The goal was to give guidance and encouragement to local citizens wanting to replace their community's urban trees. Since the workshops, initial urban reforestation efforts have been diverse and widespread. Individual citizens, corporations, and nonprofit organizations throughout the state have contributed funds, plant material, and volunteer time in support of local community tree planting projects. To date, no state dollars have gone into the urban reforestation activities. The only government involvement has been to provide technical and educational support to each community.

The *Alabama* Tree Recovery Program

A centerpiece of North Alabama's urban reforestation effort is the Alabama Tree Recovery Program. This three-year initiative represents a partnership between the Alabama Forestry Commission and the Nebraska-based Arbor Day Foundation. The program is designed to raise private funds in support of North Alabama's urban reforestation. People across the globe can make online donations by visiting the Alabama Tree Recovery Program web page on the Arbor Day Foundation's national website. All funds will be used to purchase tree seedlings for North Alabama communities. The Alabama Forestry Commission's role is to identify communities ready to receive and distribute tree seedlings to their citizens. As of December 31, 2011, $60,000 was collected from individuals and corporations with some contributions coming from as far away as Australia. Sixteen North Alabama communities have received the program's first allotment of tree seedlings for public distribution in February, 2012. A minimum of 30,000 trees will be distributed to eligible communities each year through 2014.

In support of the Reforestation Committee's efforts, the Alabama Cooperative Extension System

U.S. Army Corps of Engineers' (USACE) contractors stack urban tree debris at the Kicker Street Temporary Disposal and Reduction Site (TDRS) in Tuscaloosa on May 14, 2011.
Photo: U.S. Army Corps of Engineers

Trucks from neighborhoods in Tuscaloosa bringing their tree debris to the U.S. Army Corps of Engineers disposal site.

obtained a Smith-Lever grant to increase tree planting opportunities for local citizen volunteers. The target area for this grant focuses on five heavily hit North Alabama Counties (Limestone, Madison, Marshall, DeKalb, and Cullman). Master Gardeners in each county will be trained to become community mentors. They will then recruit and train additional community volunteers to assist in urban reforestation activities. A total of 314 trees were donated by the Auburn University Horticultural Department to support this project.

Donated Trees Are a Big Help in Filling the Need

There have been other ambitious efforts to coordinate urban reforestation at the local level. In Tuscaloosa, the University of Alabama arboretum set aside a holding station to collect donated large trees from multiple sources. Jacksonville (Florida) Electric Authority was one of first organizations to donate trees by transporting 137 containerized trees over 500 miles. These, along with other donated trees, will be planted in Tuscaloosa and the surrounding area. On January 7, an additional 1,000 large containerized trees were distributed by Forest Lake Baptist Church to residents wanting to replace destroyed trees. The trees were donated by several South Alabama nurseries through the Alabama Baptist Convention.

Individual urban reforestation projects have also been carried out by numerous communities, local groups, and citizens. These range from single tree plantings to projects involving hundreds of urban trees. Though these projects might be considered small scale, they were no less important to

local citizens in the healing and recovery of their town or community.

The Birmingham Association of Realtors organized resident volunteers to plant 100 trees in the North Smithfield community of Birmingham. The Association followed this with additional volunteer tree plantings in Cahaba Heights, Concord, and Fultondale.

In several cases, trees were planted to memorialize people who lost their lives due to the tornadoes. In Phil Campbell, four trees were planted in a memorial park across Alabama Highway 13 from the High School to honor tornado victims and veterans. The Jefferson County Board of Education planted a flowering dogwood at their main office building in memory of an employee who lost her life during the storms.

Educational institutions have been active in replanting trees on their campuses. In Rainesville, students and faculty at Northeast Community College planted five Cherrybark oak trees to honor the school's history and to replace trees lost to the April tornadoes. In Hanceville, nearly 200 Wallace State Community College students participated in a tree planting project to replace 23 trees damaged or destroyed by the April tornadoes. The college's Green Team Committee collected donations to purchase 23 trees for the project.

Numerous other urban reforestation activities are ongoing and will continue to occur for the foreseeable future. The support of the Governor's Forest Recovery Task Force to promote the urban tree planting has and will continue to be an important reason for this success.

The tornado that destroyed Hackelburg mixed trees with homes and home furnishings in a big tangled mess. Photo: AFC

The last place you want to see prime timber; on your front lawn! This was one of the hardest hit areas in Tuscaloosa where mostly University of Alabama students lived.
Photo: American Red Cross

EDITORS NOTE: Neil Letson retired from his job at AFC in March.

Photo courtesy Alabama Forestry Commission

Salvage Report

Toward the middle of July the problem became rotting, splitting, and shattered wood.

Walter Cartwright and the Information and Statistics Committee which Walter chairs were tasked with getting salvage wood utilization information from the mills that were taking storm wood. David Schille of Georgia-Pacific chaired the Harvesting, Transportation, and Utilization Committee, which also did a fantastic job of coordinating and working with the mills to get as much of the downed wood utilized as the market would bear. Mills were asked to report timber salvage beginning in April 2011. They were asked to comment on problems they encountered and probability of continued usage of wood from the storm.

Most mills continued to salvage and utilize the wood as long as the volume was high and the condition of the wood remained salvageable. Most companies reported April through July. Toward the end of May and into June, 2011, some of the mills stopped taking deliveries.

The majority of the difficulty and problems came around the end of May, first of June. Mills began to see splitting, blue stain, and low moisture content. Toward the middle of July the problem became rotting, splitting, and shattered wood. There were even reports of metal in wood. By the end of October our reports had stopped coming in. We also received reports totaling 23,396 tons of hog fuel from April to September 2011, which was not included in the regular salvage reports.

Hog fuel is bark, limbs, and other woody byproducts that are ground up and burned at mills to produce electricity to power the facilities.

The total tonnage reported by the mills for salvage wood was approximately 955,091 tons. That's about 8% of the total estimated tonnage that was either destroyed or damaged by the tornadoes and flat line winds. The estimated value of the salvaged wood was approximately $28 million. That brings the value of the salvaged wood in the range of about 11% of the value of the downed timber.

Inset: A harvest site on a storm-damage tract in Bibb County.
Photo by Sam Duvall

Tornado Salvage Value

Salvage report 4-15 thru 12-31-2011

Delivered Price $/ton (North Alabama)

Product	Tons	4qtr		Yearly	
PST	172,046	$41.42	$7,126,145.32	$40.57	$6,979,906.22
PPW	460,169	$25.40	$11,668,292.60	$26.33	$12,116,249.77
PChips	—	—	—	—	—
HST	20,655	$48.55	$1,002,800.25	$50.56	$1,044,316.80
HPW	302,221	$25.89	$7,824,501.69	$26.09	$7,884,945.89
HChips	—	—	—	—	—
Total	**955,091**		**$27,641,739.86**		**$28,025,418.68**

Pricing from Timber Mart South and may not reflect actual individual mill prices

Timber Salvage by County Report

Percentage Harvest From April 15, 2011 thru December 31, 2011

	PST (tons)	PPW (tons)	PChips (tons)	HST (tons)	HPW (tons)	HChips (tons)	Private Individual	Forest Industry	Govern-ments
Autauga	1,510	0	0	0	0	0	17	67	16
Bibb	5,109	0	0	0	0	0	28	61	11
Blount	823	4,062	0	0	234	0	75	25	0
Butler		1,080					0	100	0
Calhoun	0	8,959	0	5,000	2,428	0	100	0	0
Chambers	0	3,740	0	0	332	0	100	0	0
Cherokee	0	505	0	136	243	0	100	0	0
Choctaw	0	54,768	0	0	44,870	0	86	14	0
Clarke, MS	0	87	0	0	54	0	84	16	0
Cullman	9,556	10,514	0	289	955	0	64	27	9
Dekalb	0	281	0	0	0	0	100	0	0
Elmore	3,191	83,888	0	0	20,100	0	68	28	4
Etowah	0	496	0	13	0	0	100	0	0
Fayette	6,588	15,931	0	616	2,777	0	62	38	0
Greene	3,704	31,301	0	0	32,187	0	86	14	0
Hale	8,609	40,208	0	0	60,721	0	84	14	2
Itawamba, MS	2,500	0	0	0	0	0	50	50	0
Jackson	4,676	301	0	15	0	0	75	0	25
Jefferson	3,486	5,446	0	0	708	0	73	27	0
Kemper, MS	644	0	0	0	0	0	100	0	0
Lamar	595	0	0	0	0	0	100	0	0
Lowndes,MS	33	0	0	0	0	0	100	0	0
Marengo	1,388	40,858	0	0	31,621	0	85	15	0
Marion	7,415	3,264	0	0	17	0	71	29	0
Marshall	61,183	10,141	0	4,024	0	0	75	0	25
Monroe, MS	107	0	0	0	0	0	100	0	0
Morgan	0	216	0	75	0	0	100	0	0
Other	0	0	0	264	0	0	100	0	0
Perry	318	950	0	0	2,355	0	76	19	5
Pickens	30,641	13,660	0	4,653	20,117	0	91	9	0
St. Clair	289	9,389	0	730	2,185	0	92	8	0
Sumter	2,393	46,180	0	0	41,895	0	91	9	0
Talladega	0	2,148	0	0	0	0	100	0	0
Tallapoosa	5,656	34,994	0	0	5,400	0	67	30	3
Tuscaloosa	7,936	18,329	0	4,840	30,318	0	86	14	0
Walker	3,696	3,513	0	0	537	0	57	43	0
Wilcox	0	14,960	0	0	2,167	0	100	0	0
Winston							100	0	0
Total Salvaged:	172,046	460,169	0	20,655	302,221	0			

Total Tons Salvaged: 955,091

The Effect of a Disaster on Stumpage Prices

By Tom Gallagher

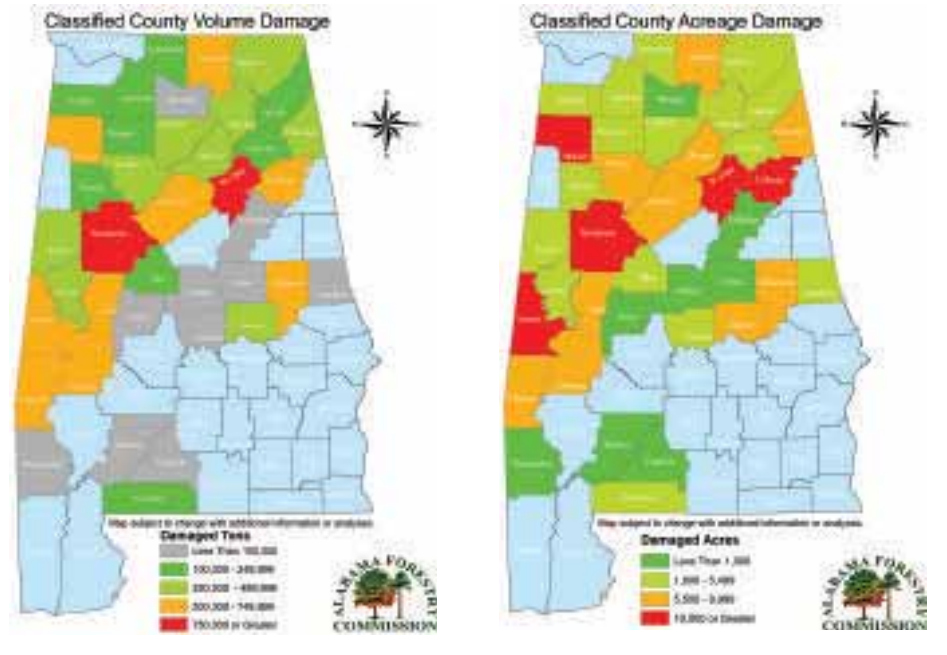
We have all seen the effect a disaster has on trees, whether it is fire, hurricanes or most recently, tornados. Acres and acres of trees bent over, broken or uprooted can leave a landowner in tears. What was once a thriving investment is now a tangled mess. As landowners try to recover what they can from the destruction, they are disappointed about the lower stumpage rates that companies will pay for the material. Many feel they are being taken advantage of. An explanation for the reduced stumpage rates might help relieve some of the angst.

The forest products industry is facing tough economic times. Competition from overseas paper companies and a poor housing market is leaving very little for a profit margin. The same is true for the logger. High diesel prices have eroded what little profit there was in logging. Many loggers have become more efficient to stay competitive. They have invested in highly productive machines that fell, bunch, skid, process and load more timber in less time. But those systems are designed to work with standing timber.

Timber already on the ground, spewed about the site, reduces the efficiency of the system. In many cases, manual logging with chainsaws has to be considered because of the tangled trees. The experience and physical conditioning needed to safely and efficiently run a chainsaw all day has disappeared. So production is compromised. The logger that was producing 10 loads per day will see production levels drop to 6-8 loads and less. Timber Mart South (TMS) is an organization that tracks stumpage and delivered prices and logging rates across the South. The average 4th Quarter 2010 (most recent available) logging rate was $11.73/ton for the piedmont region. With the increase in fuel prices, this number is well over $12.00 now, but I will be conservative and use $12.00/ton for the example. A thirty percent reduction in production (10 loads down to 7) raises the rate $5.14/ton (12.00 to 17.14) that a logger should be paid just to break even. The current tight forest products market does not allow companies to pay that additional cost, so it must come from stumpage. 4th Quarter TMS has pulpwood at $9.00/ton across the region. That is actually a bit high from what it was trading for last month. But take the $5.14/ton from that pulpwood price and you cannot afford to pay more than $4.00/ton. Sawtimber will have a similar reduction, though it is not felt as extreme because it comes off a $20/ton prices (TMS, combined sawtimber and CNS price).

The second example is even worse. In the above scenario, the assumption is the wood is going directly to the mill to be used in the manufacturing process. Unfortunately, there is more wood on the ground than can be consumed in a short period of time. This requires the companies to consider putting some of the wood in a wet yard to prevent decay in the material. Wet yards are expensive to run, as much as $8.00/ton of wood. Plus the wood has to be re-hauled into the mill, at an additional trucking cost of $4.00/ton. This could add another $12.00/ton to the material to the mill, something the forest products companies cannot afford to overlook. Take that from the pulpwood and sawtimber stumpage prices, and there is very little value left for the landowner. It is an unfortunate occurrence from a bad situation.

Please keep in mind that all is not lost. There are various ways to recoup some of these losses by writing them off in your taxes. This would be a good time to get with an accountant who knows more about those opportunities than I can explain. The sooner the timber recovery starts will mean more value to you—more of the timber will still make sawtimber and if you do not pick up the timber, there will be additional site preparation costs with having the stand regenerated. So find someone in the industry and get them on your timber.



FIRE

Always a Danger After the Storm

With just a fraction of the downed timber salvaged from the 2011 tornadoes, fire remains a very strong concern as we enter the fire season in 2012 and and beyond.

The tornadoes of April, 2011 were followed by a fairly severe drought that raised concerns that the mass of blown down timber was just a disaster waiting for a spark. Catastrophic wildfires throughout the storm-damage area were a constant concern for several months after the storms. This led to a statewide "No Burn Order" on June 9 issued by the Governor and signed by Gov. Bentley and State Forester Linda Casey.

This order prohibited all outdoor burning and made it illegal for any person to start a fire in any forest, grass, woods, wild lands or marshes; to build a campfire or bonfire, or to burn trash or other material that may cause a forest, grass or woods fire. If convicted, the penalty for violating the No Burn Order is a fine of up to $500 and/or up to six months in jail.

In Jefferson County a wildfire in the debris field where a big F-4 tornado skirted the northern suburbs of Birmingham burned off almost 3,000 acres before firefighters could get the blaze under control. Another fire down in Baldwin County at about the same time was more drought-related and burned 1,300-acres after lightening struck the ground.

In the case of the Jefferson County fire, which burned extremely hot (see above photo) and was very hard to get under control, a man was arrested for allowing a debris fire he had set get into the debris field and start the wildfire.

As fate would have it, the most severe part of the drought was in the mid-to-southern part of the state, and most of the severe storm damage was in the mid-to-upper counties of the state. So there was no "perfect storm" of circumstances that could have produced many more dangerous wildfires right after the storms ended.

But landowners should know that the danger is still there for a bad fire season in 2012 and beyond, particularly in those areas where landowners were unable to salvage or remove much of the storm damaged wood. It is recommended that all landowners continue to exercise caution and check with the Alabama Forestry Commission for a burn permit and to see if any burn estrictions are in effect as we enter the hot months of the year.

Parched moonscape created by a very hot Jefferson County wildfire in the storm debris field.

Epilogue

Lessons Learned

If Hurricane Ivan in September of 2004 taught us how to get organized quickly to deal with a huge forestry-related disaster, the tornadoes of April 2011 taught us that the template for one type of disaster does not necessarily work well for successive disasters.

One thing that did work well however, was formation of the Alabama Forest Recovery Task Force to give form and structure to the recovery effort and thanks are due to Governor Robert Bentley for acting quickly to do that. Something else that helped the recovery effort was increasing the haul weight for log trucks to allow for the movement of more wood to mills where it could be used before significant degradation reduced it to virtual worthlessness.

Both of these protocols were instances in which the forest industry worked well with the government to form the proper structure and make decisions that greatly enhanced the recovery effort.

On the other hand, problems associated with the spread-out nature of the damage zones from the April storms rendered the kind of concentrated attention brought to bear on the mostly 12-county damage zone in Southwest Alabama after Hurricane Ivan, impossible to replicate. The 2011 AFRTF had to deal with relative small areas of damage spread across very wide areas, in some cases border to border, affecting 42 Alabama counties.

First and last, Hurricane Ivan in 2004 and the tornadoes of April 2011 were human tragedies. It is important to note that, although there was not a single human fatality in Alabama associated with Hurricane Ivan (which destroyed three times as much timber as the 2011 tornadoes); the 2011 event killed almost 250 people in Alabama alone! This made the human tragedy element the most significant aspect of the more recent event.

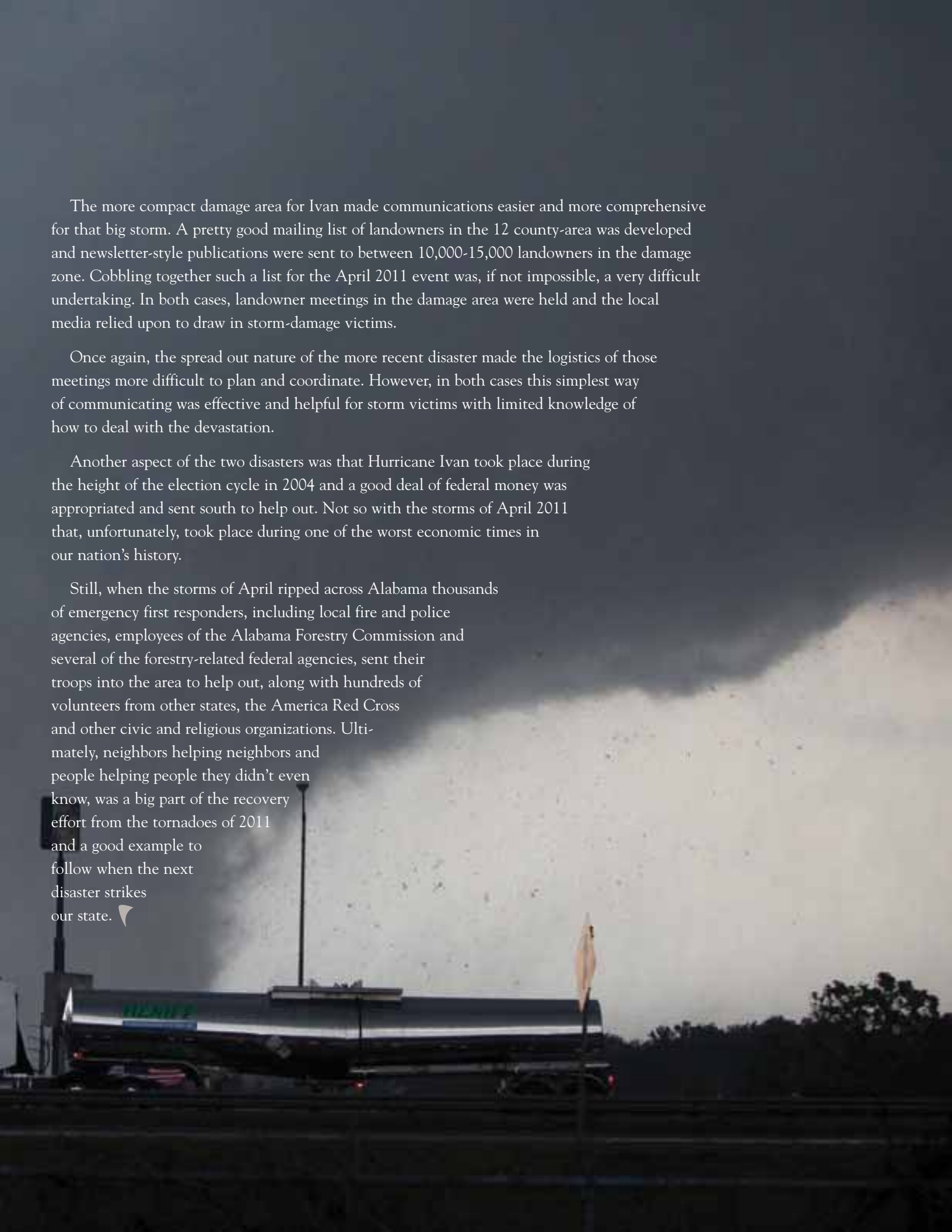
Photo courtesy *Tuscaloosa News*

The more compact damage area for Ivan made communications easier and more comprehensive for that big storm. A pretty good mailing list of landowners in the 12 county-area was developed and newsletter-style publications were sent to between 10,000-15,000 landowners in the damage zone. Cobbling together such a list for the April 2011 event was, if not impossible, a very difficult undertaking. In both cases, landowner meetings in the damage area were held and the local media relied upon to draw in storm-damage victims.

Once again, the spread out nature of the more recent disaster made the logistics of those meetings more difficult to plan and coordinate. However, in both cases this simplest way of communicating was effective and helpful for storm victims with limited knowledge of how to deal with the devastation.

Another aspect of the two disasters was that Hurricane Ivan took place during the height of the election cycle in 2004 and a good deal of federal money was appropriated and sent south to help out. Not so with the storms of April 2011 that, unfortunately, took place during one of the worst economic times in our nation's history.

Still, when the storms of April ripped across Alabama thousands of emergency first responders, including local fire and police agencies, employees of the Alabama Forestry Commission and several of the forestry-related federal agencies, sent their troops into the area to help out, along with hundreds of volunteers from other states, the America Red Cross and other civic and religious organizations. Ultimately, neighbors helping neighbors and people helping people they didn't even know, was a big part of the recovery effort from the tornadoes of 2011 and a good example to follow when the next disaster strikes our state.



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- Written by Sam Duvall, *Chairman AFRTF Communication's Committee*
- Designed by Marie Troy

A tattered American flag flies defiantly amid the wreckage of the heavily damaged Holt neighborhood in Tuscaloosa.
Photo: Dennis Drenner / American Red Cross.

The railroad bridge over Hurricane Creek near the Holt Community ended up in the creek along with power lines and a lot of downed timber.

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