

# Forest Landowner Natural Disaster Desk Guide & Toolkit



This guide, *Forest Landowner Natural Disaster Desk Guide & Tool Kit*, is designed to be used by forest landowners. Its purpose is to provide information and resource material to help forest landowners develop disaster plans for reducing the amount of salvage timber products and biomass generated by a natural disaster. It also addresses ways to reduce the response and recovery time and expense generated from a natural disaster. It is one in a series of three guides that deals with natural disasters, woody debris and biomass. The guide, *Community Wildfire Desk Guide & Toolkit*, is designed to be used by local resource leaders who serve as the link between the local, state and federal agencies and organizations and those actually impacted. While directed at wildfire, the basic theme and principles could be applied to any natural disaster. The other guide in the series, *Woody Biomass Desk Guide & Toolkit*, is designed to be used by conservation district leaders, development districts and others working with their communities to utilize woody biomass as energy feed stock and other uses.

The *Community Wildfire Desk Guide & Toolkit* and the *Woody Biomass Desk Guide & Toolkit* are valuable sources of information for the resource professional and the clientele they serve. From timberlands to urban communities they are the essential next steps up the ladder in providing the information and tools necessary when dealing with woody debris and natural disaster, and for the utilization of woody biomass. Both guides are available on line and can be found on our website at [www.forestlandguide.com](http://www.forestlandguide.com)



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# Natural Disaster Desk Guide

## WHY prepare and plan?

Natural disaster in a community reliant on forest products is not over when the danger passes. After the devastating initial blow the forest landowner is faced with the costs of recovery, the lost value of residual timber and debris not salvaged, as well as the emotional strain of lost time and effort. Add the prolonged losses of future harvests and you have a devastating toll on the resources and economy of a community.

The long term results are lost jobs, closed businesses, lost markets for products, and possibly lost forested acres.

The goal of this guide is to provide the landowner and the forest reliant community with basic steps to help reduce the long term impacts of a natural disaster. The guide provides planning options that can help reduce timber losses from a storm and increase the potential to respond in a timely manner following a natural disaster.

We hope this guide and the corresponding website [www.forestlandguide.com](http://www.forestlandguide.com) is helpful with your forest disaster preparation efforts. Resource links at the website allow access to the most current and up-to-date information.



### *This guide, THE FOREST LANDOWNER NATURAL DISASTER DESK GUIDE*

*is a step by step reference.  
It provides the basic tools  
needed to make preparations  
and develop plans to reduce the  
volume of damaged and  
destroyed timber.*

*The idea is that advanced  
planning will reduce timber  
losses, shorten response time,  
and minimize expenses for  
salvage and recovery,  
not eliminate them.*

## Introduction: Forest Landowner Natural Disaster Guide

A case in point is South Mississippi. After Hurricane Katrina one in three forest landowners managed to salvage 10% or less of their downed and damaged timber and two in three salvaged less than 50%. The total dollar value of timber damage in Mississippi was over \$1.25 billion dollars with the vast majority of that occurring in just 10 counties.

A modest 8% reduction of the total volume of timber impacted by Hurricane Katrina would have saved the forest community of South Mississippi as much as \$100 million dollars. It would also have reduced the amount of debris generated by hundreds of thousands of tons.

Stopping natural disasters like Hurricane Katrina from doing timber damage is not an option and some timberlands will be destroyed and the asset lost. This guide is intended to assist in preparing for what *can* be prevented and planning for what *cannot* be prevented.

Following the steps through the guide will introduce you to basic ideas that will help you as you build a plan to better weather, respond to, and recover from a natural disaster.

When you find an issue or idea of relevance go to our website at [www.forestlandguide.com](http://www.forestlandguide.com) where you will find documents and resources about specific issues. The website follows the same format as this guide and you can easily navigate to items of interest.

Relatives, friends, neighbors, as well as county and state extension services, county and state forestry associations, state forestry commissions, logger associations, Farm Service Agency (FSA), Natural Resource Conservation Service (NRCS), Conservation Districts and Resource Conservation and Development Council (RC&D) offices should also be able to help you obtain the information you need if you do not have internet access. Most of the information can easily be printed out and taken home.

If you are not familiar with the term biomass generally it means any living or once living (organic) material that is renewable. In terms of timberland disaster it generally means all the material from a tree that cannot be salvaged as another specific product. Biomass is itself a forest product.



## STEP ONE:

### Preparing Yourself & Your Timberland

#### Planning:

Start your disaster preparations by developing a simple plan for how you can prepare to deal with the drastic issues a disaster will present. Determine what you will need if a disaster strikes your timberlands. Decide how you might adapt your property and timber management activities regarding access, assessment, and salvage that will come with a disaster.

The following areas in this step will help you in organizing and developing your plan. A sample of plans and forest management planning guides can be found on the website under this heading.

#### Use Checklists:

Preparing for a possible natural disaster is part of owning timberland in the southern and eastern parts of the United States. Proactive planning can save vital time after a disaster strikes. Checklists are an excellent method of beginning and staying on task while dealing with a disaster.

The list should include emergency contact information, needs for equipment, and paperwork (land deed and timber records including “basis”). When used along with a plan and a map, checklists are a very good way to keep track of your preparedness and timber management needs.

Locating a forester, logging contractor, fuel, fluids or parts in a timely manner after a timberland natural disaster can be difficult to nearly impossible. Checklists can help to ensure you have what you will need.

We have developed a checklist which is included with this guide and on the website.

#### Emphasis On Access:

After a natural disaster, having good access to your timberlands will allow you to act quickly and is important when ASAP assessment & salvage operations are needed.

Improvements such as wider roads and trails, routine road and water crossings maintenance, strategically placed food plots, permanent fire lanes and removal of potential problem causing large trees can make accessing, assessing, and salvaging your timber easier, quicker and more attractive to a logger or buyer.

Bear in mind that newly created access issues are commonplace in timberlands after natural disasters. It may be prudent to investigate informal and formal reciprocal access agreements (easements) with neighboring landowners and clearly agreeing upon property boundaries with your neighbors.

Specifics about these simple actions that can improve access and your ability to act quickly after a disaster are covered under this item on the website.

*Preparing yourself and your timberlands for a potential natural disaster is the first step toward being able to deal with a disaster. You are basically planning how you can best respond to and recover from disaster. So you should design a timberland disaster plan to fit your particular circumstances. Nothing fancy but, a flexible plan you feel comfortable with and can follow.*

#### Timber Management:

There are timber management measures you can take that have been shown to help forest stands weather a natural disaster.

Reforestation with native species proven to better withstand natural disaster forces, such as Longleaf Pine planted on their historically natural sites, is a good way to start.

In existing pine stands, maintaining higher basal areas, eliminating heavy late first thins, reducing size of thinning/harvest areas, maintaining several age classes within a forest area, and harvesting

when economic maturity is reached are all options shown to reduce the potential for timber losses from a natural disaster.

There are similar management actions that can help reduce losses in various natural disaster situations such as ice storms and wildfires.

A simple management plan that incorporates elements of timber management for disaster and emphasizes access can be put together using these basic ideas. Additional information can be found under this step on the website.





# Natural Disaster Desk Guide

## STEP TWO: *Dealing With Disasters in Forest Lands*

Generally, the first forestry actions taken requiring assistance after a disaster will involve gaining access into the property, doing timber damage assessment and salvaging damaged timber. Even with advanced planning these operations will often require logging contractors, timber buyers and foresters.

The importance of the checklists mentioned in Step One now comes into play.

Contact lists can be invaluable after a disaster and might be the difference between an ASAP assessment and salvage, and little or no assessment and salvage.

Using recommendations from relatives, friends, neighbors, forestry commission vendor lists, and other sources can help you develop these contact lists *before they are needed*. The more contact numbers you have of loggers, timber buyers and foresters, the better your chances of locating the assistance you may need.

Sources for professional logger and forester contacts can be found on the website.



### *Timber Assessment After A Disaster*

The assessment of timber damage is the vital first step in determining what to salvage after a natural disaster.

Assessing damaged and downed timber can be difficult and dangerous work and is best done by a professional forester. Again, good contact lists will help. However, the extent of the disaster can create time issues. A lack of available qualified individuals makes professional assessment impossible before storm timber begins to spoil and prices drastically fall.

Timberland owners in natural disaster impact zones would be well served to educate themselves about safety in disaster woods, storm damage timber assessment and salvage procedures. Assessing your own timber damage and values may not be the best option, but realistically it could be your only option.

Multiple resources can be found on the website to help you with assessment decisions.

### *Salvaging Timber After A Disaster*

Generally, you will start salvaging higher value products first. Different species, the types of damage and locations can affect salvage intensity and timing. Again, a professional should help make these decisions. If that is not possible, the website will direct you to information that will help you make these decisions.

Factors you need to consider may include liability, safety, value, time effects, weather, fire risk, beetle infestations, tax issues, etc.

If ASAP salvage operations are judged necessary, locating a logger or buyer becomes the priority. Remember, a good contact list will improve your chances of locating a buyer or logging contractor.

Great strides are currently being made in the utilization of disaster generated biomass that may provide the timber landowner with markets for this historically lost asset in the very near future. The Guide WOODY BIOMASS DESK GUIDE & TOOLKIT can provide an individual or community with specific information concerning developing markets and the potential of biomass as a viable forest product.



# Natural Disaster Desk Guide

## STEP THREE: *Recovering From Disaster*

Recovering from disaster implies getting back to normal. "Normal" changes with each natural disaster. Following a disaster, the structure and composition of the forest can be drastically changed. Recovery to the point of continuing with pre-disaster management plans and objectives may not be possible. But, a disaster does give landowners in recognized natural disaster impact areas the opportunity for some positive change. Growing and managing timber like any other business carries risks. The timberland owner working to recover from a natural disaster can take the opportunity to incorporate timberland disaster risk management into the recovery process. Step One gave some of the basic ideas and issues you can use to help manage the risk natural disaster presents to your timberland and the web site can help you with specific actions.

### *Federal Assistance*

Recently, federal emergency timberland disaster recovery assistance programs have addressed clean up and fire protection, site preparation and replanting challenges on forested lands.

After Hurricane Katrina in Mississippi, emergency assistance programs put in place by USDA through FSA and NRCS were considered effective by most of the timberland owners who utilized them. The majority of those utilizing the programs reported that they were helpful and would use them again if they were available.

A timberland owner can utilize emergency assistance programs to implement risk management changes that can help reduce timber losses, biomass generation, and the need for emergency disaster assistance in the future.

After Hurricane Katrina assistance programs were available that assisted in clearing waterways, building fire lanes, reforestation with Loblolly Pine and other actions that could increase a timberland's potential for weathering and coping with future natural disasters.

The timberland owner should keep in mind that after a natural disaster there are other monetary challenges they may face generally not covered under emergency assistance or for which they may not qualify for.

Road repairs, fence and gate repairs, property line reestablishment, and lost timber income and value are serious issues for the timberland owner generally not covered by emergency forestland assistance programs.

The reality is, we cannot know what the next disaster will be or where it will occur. We cannot know if any federal assistance will be available for a specific situation. If it becomes available it can be very helpful, but do not count on it.

Have a plan and talk with a forester before you go to your local USDA service center with questions.

The website will direct you to the federal service agencies which can give you information on current available programs and locations of local agency offices. Other sources of assistance are also listed.



*Forest landowners in MS and LA found themselves unprepared to make timber related decisions following Hurricane Katrina. We hope this guide and the corresponding website will lead you through the planning process that will reduce your losses and improve your chances for recovery following any future disaster events.*

### *State & Local Assistance*

The most effective forest land recovery assistance after a natural disaster generally will be found on the local and state level. The State Extension Service, State Forestry Commission, County & State Forestry Associations, local Conservation Districts and RC&D Council offices are your best sources of information. In some cases, they may provide on-site assistance with timberland disaster recovery.

The state and local agencies and organizations are the link between the forest community (timberland owners, loggers, forester, industry, etc) and the expert knowledge, experience and funding necessary to implement an effective response and recovery effort.

The website contains information to direct you to the state and local agencies and organizations that provide timberland disaster assistance.

### *Lessons For Future Disasters*

One in three timberland owners managed to salvage 10% or less of their downed and damaged timber that needed salvaging and two in three salvaged less than 50%. More than two thirds of land owners had timber that, for one reason or another, needed to be salvaged that was not.

Lack of available loggers, low prices, and flooded markets were the major factors identified by landowners as the reasons for not having salvaged timber that could be salvaged.

Two-thirds of timberland owners generally used friends, family, neighbors, and the vendor lists available from the Forestry Commission to find professional forestry service providers.

Income from their forested property is considered an important factor in the continued ownership of their forested property by over half of timberland owners.

Sixty-six percent of timberland owners incurred some out of pocket timberland related expenses other than lost timber, stumpage, and reforestation costs. Thirty-three percent incurred out of pocket expenses of \$5000 or more.

The importance of up to date timberland owner record keeping including knowledge and understanding of "basis" is vital information to the timberland owner with timber losses from a disaster.

The Mississippi Department of Transportation acting quickly to raise highway weight limits was considered a major positive factor by the forest community in the efforts to salvage storm timber in a timely manner.



# Disaster Preparation Checklist

For Timberland Owners

**COLLECT THE FOLLOWING DISASTER INFORMATION, CONTACTS & PHONE NUMBERS**

- Family Phone Numbers
- Friends Phone Numbers
- Neighbor Phone Numbers
- Know your “basis” – timber, land, etc.....(*Important tax information*)
- Have a copy of your Land Deed on hand .....(*Important for selling timber*)
- County Road Manager/Engineers/Supervisors Office Phone Numbers
- Updated List of Foresters Phone Numbers .....(*As many as you can find*)
- Updated List of Logging Contractor Phone Numbers .....(*As many as you can find*)
- State/County Forestry Commission Phone Numbers
- Current State/County Forestry Commission Vendor Lists
- Equipment Suppliers Phone Numbers .....(*Any you may need*)
- County Extension Office Phone Number
- Local NRCS Office Phone Number
- Local FSA Office Phone Number
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**EQUIPMENT PREPARATIONS FOR DISASTER**

Tractor/Truck

- Tuned up & maintained (Battery charged, plugs checked, etc.)
- Fueled & extra fuel on hand
- Oil & hydraulic fluid checked & extra on hand
- Tires checked with spare , repair kit & air on hand
- Accessories – chains, draw bar, grapple, etc. - on hand

Tools/Chainsaw

- Tuned up & maintained
- Fuel, mixing oil, bar oil and extra of all on hand
- Extra plugs, pull rope, etc. on hand
- Spare chains, bar, saw files, etc. on hand
- Hand tools – shovel, ax, saw, etc.
- Safety Items - ear plugs, glasses, chaps, gloves, hard hat, etc.
- Equipment availability – place the tractor, tools, etc. in an accessible location. (Open field, shed, etc.)
- \_\_\_\_\_
- \_\_\_\_\_

**PROPERTY & TIMBER PREPARATIONS FOR DISASTER**

- Woods roads repaired & shaped up
- Woods roads access improvements – widen, ditches or turnouts, turnarounds, etc...
- Water crossings repaired & shaped up
- Water courses cleared of obstructions
- Fire Lanes maintained (plowed, mowed, scraped clear) where already in place
- Fire lanes established where needed
- Property Lines/Boundaries – clearly defined & acknowledged by neighbors
- Neighbor agreements – emergency access, timber salvage co-op
- Timber Management Activities & Planning with considerations for disaster – species to plant (i.e. Longleaf Pine), thinning schemes, harvest timing and method, etc.
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