

## Reducing The Cost of Reforesting Land Damaged by a Natural Disaster

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Forest landowners are faced with many uncertainties, from predictions on wood prices twenty years away to never knowing when natural disasters are going to hit. Natural disasters can include tornados, microbursts, hurricanes, floods, wildfire, and even the occasional ice storm. For those that were landowners during the Hurricane Hugo era, you all too well remember the devastation that some of these natural disasters are capable of on a large scale. The good news is this, your forest will recover and there are people available to help, we just need to start with a plan.

This publication will help you decide which path is best for you and your forest. It will address the many different ways to get the best forest regeneration that a landowner can afford. We will start by addressing the need for a forest management plan. Then look at how various state and federal agencies have cost share programs that are available to help reduce your final cost. And lastly, we will talk about the various reforestation techniques that may accomplish your goals without the high cost that is associated with the traditional high-intensity methods.

### Do We Have A Plan?

Typically, most forest landowners who actively manage their land(s) have a management plan. Granted these management plans never allocate for a natural disaster, but they do serve as a great guide in reaching their goal. After a natural disaster, a plan is a must for any landowner. This is mainly due to careful planning to prevent wasteful spending. The last thing anyone wants to do is waste money on unnecessary expenditures that are either not needed or counterproductive. At worst case, you might end up with a forest that is no better off than where you were after the natural disaster.

A professional forester will be your first stop in developing a plan to meet your objectives. Professional foresters who will help develop a plan for you typically are either private consulting foresters or project foresters with the South Carolina (SC)

Forestry Commission. By talking with a professional forester, they will help formulate the best plan for you and your land.

One thing to keep in mind is that every forest and every landowner are different, thus no two forestry plans will be exactly alike. When discussing the variables involved with your professional forester, remember to mention such things as; what you desire for your land, possible reforestation methods, and your ability to afford these various reforestation methods, as well as short and long term goals. Also keep in mind that if you desire cost-share assistance, they will require you to have a forest management plan.

If you decide to have a SC Forestry Commission forester work on your plan, a complete list of whom to contact in your county can be found on their website at <http://www.state.sc.us/forest/>. If you are in need of a consulting forester, a list of companies and individuals can typically be found at your local Clemson Extension Office and SC Forestry Commission.

### Cost-Share Assistance

Cost-share assistance programs are offered to landowners by both federal and state agencies. The two main agencies offering assistance are the United States Department of Agriculture – Natural Resource Conservation Service (USDA-NRCS) and the SC Forestry Commission. Most of these agencies programs have been stream lined into two programs. These programs change from year to year based on funding and other parameters from both the federal and state governments. Most of these programs have varying requirements and your professional forester can help guide you through this as well as the employees with both respected agencies.

The USDA-NRCS program known as Environmental Quality Incentive Program (EQIP) is the only one they offer as of now. Like many of the various programs they have offered in the past, EQIP is designed to promote conservation of soil and water. EQIP is capable of assisting landowners at 75%-90% of the average cost of

reforestation. You will need to carry out the work by their approved management plan. Your local NRCS office will gladly assist you in this process.

The SC Forestry Commission program known as Forest Renewal Program (FRP) supports reforestation as well. Reforestation practices can include the various practices of mechanical, chemical and prescribed fire for site preparation and seedling planting. One thing landowners must remember about FRP, it is a cost-share reimbursement program, thus you have to front 100% of the cost before reimbursement. Your local SC Forestry Commission Project Forester can walk you through these requirements.

Due to tough economic times for many, as well as increased interest for these programs during natural disasters, these cost-share programs are in high demand. Once again, remember that a management plan is required and it will help speed up the process of you getting funded. Lastly, work closely with your professional forester to help determine what combination of lowest-cost reforestation practice and cost-share program will benefit you in reaching your reforestation goals.

### Low-Cost Reforestation Methods

When determining with your professional forester what your low-cost reforestation options are, often times we repeat history only because we are accustomed to doing things one particular way. As mentioned earlier, every forest site is different and this is usually due to conditions on site and your particular goals. Thus these stand conditions oftentimes dictate which reforestation method is available to us while ruling out others. Sometimes this process of choosing which single method of reforestation is best is clouded by the destruction of a stand due to the disaster the landowner is facing. Here are a few techniques that might work for you, but are not limited to.

### Natural Regeneration

Natural regeneration of a forest stand can be one of your least expensive forms of reforestation. Granted your professional forester will need to check to make sure that you have enough natural hardwood sprouts and/or pine seedlings that germinated. Keep in mind that these seedlings will not be the same tree that your genetically improved trees were, but it will help you get another forest stand started. The one down side to natural regeneration is typically you will end up with too many seedlings to the acre, seedling spacing that is too close or a non-uniform coverage across the entire affected

area. It is not unusual for a landowner to end up with all three scenarios with natural regeneration across the entire landscape of the large scale affected area. Thus mechanical or chemical control might be necessary to thin out the seedlings to get a better distribution of surviving seedlings in crowded areas.

### Chemical Control of Vegetation

Chemical control is one of the best forms of controlling competing vegetation. Competing vegetation can mean many different things, from too many stems from natural regeneration to herbaceous plants or invasive species that might be flourishing from direct sunlight. The chemical control will have different goals dependent on which form of control you are after. Chemical control is used in natural regeneration to thin back the number of stems to the acre. Whereas a chemical application for herbaceous control is to make certain that all available nutrients go into growing your trees and not unwanted plants. Oftentimes prescribed fire can be coupled with this method as another low-cost technique aimed at maintaining what actions you have started with chemical treatments.

### Stand Rehabilitation

Many timber stands are simply damaged and not totally destroyed by most natural disasters, with exception to hurricanes. Ice damage from winter storms can oftentimes have mixed results from broken tops to mini-destroyed areas to total loss. If enough healthy trees are still remaining to provide an adequate stocking, a stand might continue to be managed even with the damaged areas left in the stand until the next form class of timber is grown. Some of these timber stands may call for you to modify your next thinning method by removing as many of the damaged trees as possible then. Other timber stands may need areas of natural or artificial regeneration due to the holes that are left in the stand. Also, some of these holes could be converted into wildlife areas for the time being until it is time to completely regenerate the stand after clear cut. Again, working with your professional forester will help determine what is best for you and your land.

### Strip Clearing

If you have a stand that is not justifiable as needing salvage cut after a disaster, strip clearing might be an option. Basically strip clearing is used when a stand has more down trees, brush and tangled mess than desired and movement about the stand is hindered, yet clearing the area with heavy equipment is too costly. Strip clearing is when you push corridors throughout the woody debris. These strips can be as wide or as narrow as

needed. Typically if wide strips were made, you then have seedlings planted along these corridors. Granted it will add uneven-age management to your forest, but it will at least fill in the holes and gaps if the landowner decides they do not need more travel corridors or wildlife food plot openings. If narrow strips are made, and depending on the distribution of remaining standing timber, you may decide that the cost of planting seedlings verses filling in the gap and having to manage for uneven-aged trees is not needed.

## Conclusion

These are just a few ideas to think about when faced with the troubled times a natural disaster can leave on your forest. This small list of methods and ideas at reducing the cost of reforestation is by no means a complete list, but rather an informative piece to show you that there are options out there. As you can see, it is imperative that you work with a professional forester as he will use his experience to formulate the best plan for your situation. As a landowner, your goals are an important part of the recovery process. Even if the recovery process is larger than your financial means will allow, there are options available to you. One of the great things about forests is their ability to adapt and recover. Talking with a professional forester will aid you in your journey of bringing your land back to where it was.