



## MEMORANDUM

To: All Field Offices, Consulting Foresters, Timber Buyers, Loggers, and Other Interested Parties

From: Gail Bledsoe, Division of Forest Resources Water Quality and Wetlands Staff Forester

Date: May 2, 2011

Subject: Salvage of Tornado-Damaged Timber in Streamside Management Zones as it relates to the Forest Practices Guidelines and Division of Water Quality Riparian Buffer Rules

The North Carolina Division of Forest Resources (DFR) has received many calls asking about harvesting timber that has been damaged from the recent outbreak of tornadoes. Many of those questions deal with salvaging the damaged timber from within the Streamside Management Zones (SMZs). When dealing with forestland harvests, there are two aspects to keep foremost in mind when harvesting near and within the SMZs. One aspect is the Forest Practices Guidelines Related to Water Quality (FPGs), and the other aspect is the Division of Water Quality (DWQ) Riparian Buffer Rules. The FPGs apply to all intermittent streams as well as perennial streams and waterbodies in North Carolina. The DWQ Riparian Buffer Rules currently apply to qualifying surface waters in the Neuse River Basin, Tar-Pamlico River Basin, Catawba River Basin, Randleman Lake Water Supply Watershed, Goose Creek Watershed, and the Jordan Lake Water Supply Watershed. In these aforementioned river basins and watersheds, the FPGs and the DWQ Riparian Buffer Rules both apply simultaneously.

### FOREST PRACTICES GUIDELINES RELATED TO WATER QUALITY

- The DFR encourages the salvage of all downed timber to the extent possible. Proper and timely timber salvage can be done in a manner that benefits both the landowner as well as the environment. All necessary Best Management Practices (BMPs) should be utilized in order to remain in compliance with the FPGs.
- Timber that is down within the SMZ, but is not in or over the stream, should be removed in such a way that ground cover is protected / maintained to prevent accelerated erosion or sedimentation.
- Timber that is down within the SMZ and lying over the stream, but not causing a stream obstruction, may be salvaged. Again, care must be exercised to maintain adequate ground cover to prevent accelerated erosion or sedimentation. Additional debris should **not** be deposited in the stream as a result of the salvage operation.
- Timber that is down within the SMZ and is in the stream is a major concern. If all or part of the tree is to be salvaged, DFR would prefer to see the whole tree pulled out of the stream, before it is limbed or bucked. However, if this is not done, remember – **do not put any additional debris in the stream than what was put in it by the tornadoes**. As in the above situations, care must be taken to prevent accelerated erosion or sedimentation, and not deposit debris in the stream during the salvage operation. It is not DFR's intent to deter salvage operations with unreasonable requirements of cleaning up problems the logger did not create and does not make worse. DFR does strongly encourage, however, that when a tree in a stream is salvaged, as much of it be removed from the stream as is feasible.
- If a tree is across a stream or in a stream due to the tornado and no attempt is made to salvage it, it can be left since it is there by an act of nature. If it is cut from the stump or otherwise disturbed in a salvage attempt, it is the logger's responsibility to clean all debris from the tree from the stream.
- If timber is down within the SMZ, and the stream must be crossed, crossings must still be properly installed, maintained, and stabilized. Properly installed and utilized bridge mats are the PREFERRED method of crossing streams, since their use minimizes soil disturbance.

- Loggers are still expected to keep their equipment out of stream channels and to minimize equipment use in SMZs as much as possible to prevent FPG problems.



### **Division of Forest Resources Contact Information:**

If you have additional questions or require further assistance, site visits, etc., please visit the DFR website at <http://www.dfr.nc.gov/> A contact link is located at the top of the page that will lead you to contact numbers for county, district, region, and central offices.

## **ADDITIONAL INFORMATION FROM THE DIVISION OF WATER QUALITY FOR CLEARING DEBRIS FROM STREAMS AND WETLANDS, AND DEBRIS CLEANUP WITHIN AREAS THAT HAVE RIPARIAN BUFFER RULES**

Division of Water Quality has released two documents providing additional guidance on cleanup of tornado debris. The first is ***Hurricane and Tornado Storm Debris Stream Clearing Guidelines*** and can be found on the DWQ website at <http://portal.ncdenr.org/web/wq/home> Scroll down to the “Hot Topics” section and click on “Tornado Debris Cleanup in Streams & Wetlands” or try this direct link, [http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=47f3a89e-d7ba-4748-ad80-5ce7bbb042d7&groupId=38364](http://portal.ncdenr.org/c/document_library/get_file?uuid=47f3a89e-d7ba-4748-ad80-5ce7bbb042d7&groupId=38364)

The second is ***Guidelines for Tornado Debris Cleanup in the Neuse and Tar-Pamlico Buffers***, and can also be found on their website at <http://portal.ncdenr.org/web/wq/home> Scroll down to the “Hot Topics” section and click on “Tornado Debris Cleanup in the Neuse & Tar-Pamlico Buffers” or try this direct link, [http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=a941d4f6-37e3-4352-bc92-f6a3c7cf178b&groupId=38364](http://portal.ncdenr.org/c/document_library/get_file?uuid=a941d4f6-37e3-4352-bc92-f6a3c7cf178b&groupId=38364)

Even though this document specifically speaks of the Neuse and Tar-Pamlico Riparian Buffers, I did confirm with Division of Water Quality that it would also apply to the other areas with Riparian Buffer Rules that had sustained tornado damage.

If you have additional questions for Division of Water Quality, please visit the DWQ website at <http://portal.ncdenr.org/web/wq/home> There is an interactive Regional Office Map that will provide you with contact information once you click on the desired region.