



Keeping Sediment in Check with BMPs

Snapshot: 2011 Report on Logging Activities in North Carolina

What We Did

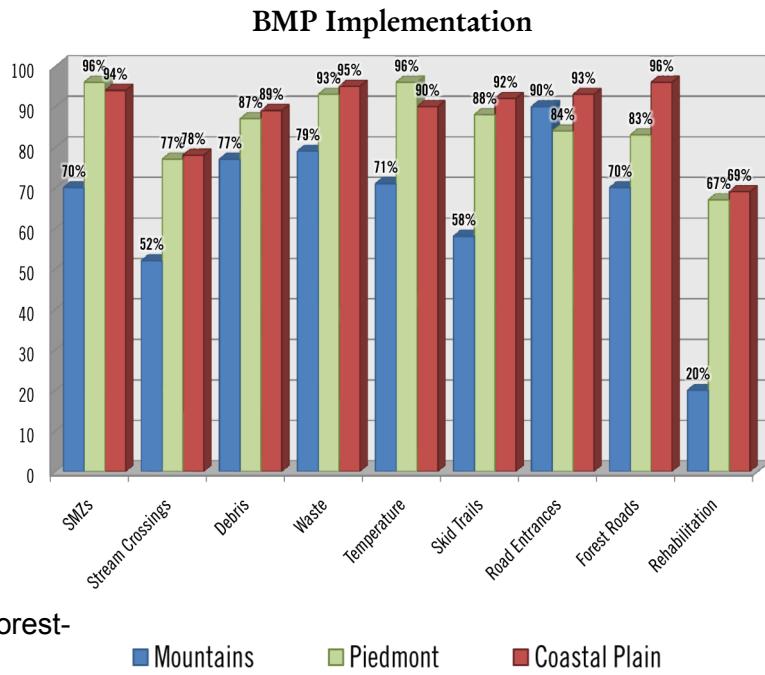
- The North Carolina Forest Service has completed and published its latest report describing two years worth of site evaluations to determine the degree to which loggers implement site-specific measures for controlling erosion and protecting water quality.
- These voluntary measures are known as *best management practices* (BMPs) and include a wide choice of options for protecting water quality when harvesting timber.
- The report generated summarized the results of 212 site survey field evaluations with 7,661 BMPs, conducted between May 2006 and March 2008. The final result was the *North Carolina Forestry BMP Implementation Survey Results* booklet, and represents the second statewide survey of active logging sites.

What We Were Looking For

- To determine the level of BMP implementation occurring on active (or recently active) logging sites throughout North Carolina.
- To assess the implemented BMP practices for strengths and weaknesses with regard to water quality protection.

What We Found

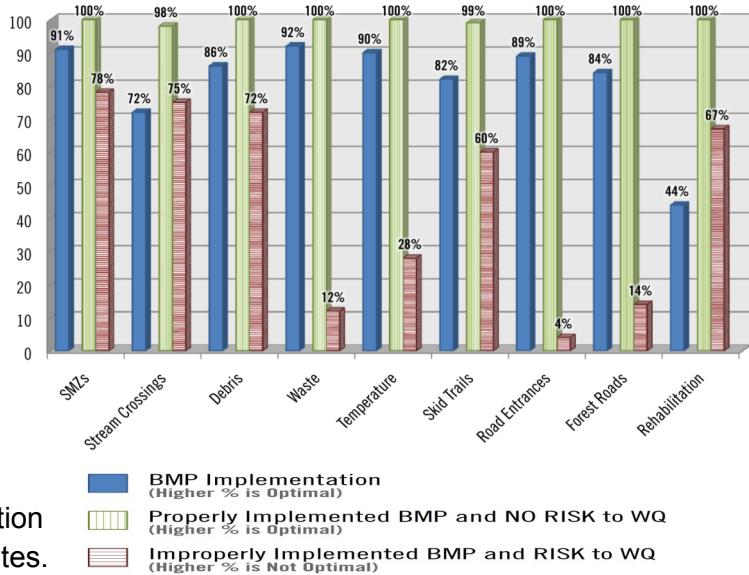
- Overall findings show relatively frequent use of voluntary protection measures, with room for improvement. The statewide average rate of BMP implementation was 85 percent.
- Regional breakdown: 66 percent in the Mountains, 88 percent in the Piedmont, and 91 percent in the Coastal Plain.
- When BMPs were properly implemented, there was no risk to water quality observed nearly 100 percent of the time.
- The findings of the 2011 BMP report indicate a strong correlation between the use of voluntary BMPs and associated compliance with the state's forest-practice regulations.





Other Key Findings

- 💧 The BMPs for streamside management zones were implemented at a rate of 91 percent on average statewide. These protective zones are established alongside streams to filter out sediment, provide shade, stabilize the stream bank, and maintain habitat for certain wildlife species.
- 💧 This survey estimated the widths of streamside management zones (SMZs), and findings indicated that SMZs greater than 10 feet wide resulted in a notable reduction in the risk to water quality on the surveyed sites.
- 💧 The average width of all SMZs surveyed statewide that had no risk to water quality was 50 feet on perennial streams, and 36 feet on intermittent streams.
- 💧 When technical forestry assistance was provided for the timber harvest, the rate of BMP implementation was notably higher (88 percent) than on those sites that did not receive assistance (77 percent).
- 💧 Loggers that completed professional training courses implemented BMPs at a higher rate (88 percent) than those loggers who had not completed professional training (76 percent).



Challenges Continue

While this latest report summarizes several positive outcomes of using forestry BMPs, the report also notes continued challenges with respect to logging. Some of these more challenging activities, which offer room for improvement, include properly crossing streams; keeping debris out of streams; stabilizing critical soil areas upon completion of harvest; and overall harvesting activities on steep topography or on soils that are more prone to erosion. BMPs for rehabilitation (rehab) of the project site and stream crossings are very important to water quality protection; however, they were found to have the lowest rate of implementation.

The Future

The NC Forest Service will begin its third cycle of these recurring, periodic BMP site evaluations in mid-2011 in an effort to monitor the continued application of best management practices on forestry harvest sites.