

# GEORGIA'S REVISED BEST MANAGEMENT PRACTICES FOR FORESTRY

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**Abstract.** Scientific studies have shown that when properly applied, Best Management Practices provide adequate water quality protection. The Georgia Forestry Best Management Practices have been revised based on new science and best available technologies. A select group of experts representing various interests including foresters, landowners, fish and wildlife biologists, soil and water conservationists, environmental advocates, and loggers was convened in February 1997 to revise the original 1981 BMPs and the 1989 wetland BMPs. The revised BMPs are combined into one comprehensive document. The Georgia Environmental Protection Division (EPD) approved the process. In December 1998, the manual was completed and went into effect January 1, 1999. Important highlights of the revisions include a pre-planning section that defines "waters of the state" that must be protected. Recommendations for landowners, timber buyers, and other managers to use soil maps and topographic maps to identify these "waters" before the practice begins is emphasized. Widths of streamside management zones (SMZs) or buffers next to perennial and intermittent streams have increased. Perhaps the most significant revision is that clearcutting is no longer recommended within these buffers. A clarification of various legal and regulatory requirements is also provided. A publication and communications plan is in place to advise the public and other stakeholders of these revisions.

## INTRODUCTION

The purpose of this paper is to introduce the new and revised Georgia's Best Management Practices for Forestry. The new BMP manual contains commonsense, economical, and effective recommendations to minimize nonpoint source pollution of streams and other water bodies. It is intended specifically for landowners, foresters, timber buyers, loggers, site preparation and reforestation contractors, and others involved with silvicultural operations and may be useful for personnel regulating development activities. Since many of the rules and regulations governing land-disturbing activities include implementation of BMPs, it is important that those involved are familiar with them in

order to protect our water bodies and to be in compliance with these rules and regulations.

## BACKGROUND

Due to advances in technology, strengthening of worker safety rules, the inclusion of Best Management Practices (BMPs) into rules and regulations governing land disturbing activities, and through results of recent BMP implementation and effectiveness monitoring surveys, the forestry community encouraged a revision of the 1981 forestry BMP manual. A process was approved by the Georgia Environmental Protection Division (EPD) and a select group of experts representing various interests including foresters, landowners, fish and wildlife biologists, soil and water conservationists, environmental advocates, and loggers was convened in February 1997 to revise the original 1981 BMPs and the 1989 wetland BMPs.

These experts represented such organizations and groups such as The Nature Conservancy, The Conservation Fund, The Georgia Conservancy, The Georgia Forestry Association, The Association of Consulting Foresters, the Georgia Forestry Commission, the Georgia Environmental Protection Division, and The Georgia Wildlife Federation. Others on the committee were from the University of Georgia School of Forest Resources, the Georgia Wildlife Resources Division, forest industry representatives, the US Forest Service, the Natural Resources Conservation Service, the US Environmental Protection Agency, the Southeastern Wood Producers Association, the Georgia Farm Bureau, and the Georgia Soil and Water Conservation Commission.

A steering committee was formed to guide the process and some of the members chaired subcommittees and selected other experts for the various forestry practices to review and revise the BMPs particular to that practice. After nearly two years and many drafts that received broad and extensive critique, a manual was completed and printed in December 1998. Accompanying brochures were printed as well for easy mailing and quick reference by the forestry community. The BMPs became effective January 1, 1999.

## CONCLUSIONS

- A pre-planning section is added that defines “waters of the state” that should be protected with BMPs.
- The use of soil maps and topographic maps to identify these “waters” before the practice begins is emphasized.
- Widths of streamside management zones (SMZs) or buffers next to perennial and intermittent streams have increased. Widths are dependent on slope instead of by physiographic region. Widths also vary by stream type, i.e. perennial, intermittent, and trout streams.
- For perennial streams, SMZ widths range from 40 feet on 0 to 20 percent slopes, 70 feet on 21 to 40 percent slopes, and 100 feet on slopes greater than 40 percent.
- For intermittent streams, SMZ widths range from 20 feet on 0 to 20 percent slopes, 35 feet on 21 to 40 percent slopes, and 50 feet on slopes greater than 40 percent.
- For streams designated as trout streams, SMZ widths are 100 feet regardless of slope or stream type.
- Clearcutting is no longer recommended within SMZs. Harvesting recommendations are dependent on stream type.
- For perennial streams, harvesting is allowed provided a minimum average basal area of 50 square feet per acre or 50 percent canopy cover of mid and overstory trees is left in the SMZ.
- For intermittent streams, harvesting is allowed provided a minimum average basal area of 25 square feet per acre or 25 percent canopy cover of mid and overstory trees is left in the SMZ.
- For trout streams, harvesting is allowed provided a minimum average basal area of 50 square feet per acre is left in the SMZ regardless of stream type.
- The use of mechanized harvesting equipment is allowed in SMZs provided there is no significant soil compaction or rutting.
- New tables for sizing permanent and temporary culverts for stream crossings are provided.
- The fifteen federally mandated stream crossing requirements are included.
- Use of broadcast applications of chemicals in SMZs is not recommended.
- More specific guidelines for mechanical site preparation options, based on slope and soil erodibility hazard ratings, are provided.
- The nine different wetland types identified in an EPA and Army Corps of Engineers memorandum are listed

as areas where mechanical site preparation for pine plantation establishment is prohibited.

- More wildlife friendly grassing and seeding recommendations are offered for soil stabilization.
- A section on Additional Management Objectives is included that offers alternatives with more emphasis on wildlife management, aesthetics, endangered species, cultural and historical areas, etc where a landowner’s objectives may not be solely focused on timber management.
- BMPs that correlate to various Federal, State, and local laws and regulations are designated.
- An Appendix is included with applicable Federal, State, and local laws.

## DISCUSSION

The new BMPs represent the best collective science, experience, and effort to establish sound, responsible, guiding principles for silvicultural operations in the State of Georgia. They will help forestry meet the objective of protecting the physical, chemical, and biological integrity of “waters of the state”. They will also help meet the issue of Total Maximum Daily Loads (TMDL), River Basin Planning, and Growth Planning Act concerns.

Through the American Forest and Paper Association’s Sustainable Forestry Initiative, The Georgia Forestry Association, The University of Georgia, the Georgia Forestry Commission, and the Southeastern Wood Producers Association are providing training for the logging community on the BMPs. Professional foresters that are registered with the Secretary of State’s Board of Registration must follow BMPs in order to comply with the code of ethics.

Since landowners are ultimately responsible for activities occurring on their property, it is up to those familiar with the new BMPs to educate and inform them of the new changes. Numerous efforts supported by the GFC, the GFA, the SFI etc. are planned to provide this education. Hopefully, this workshop will help spread the message.

The GFC will continue to monitor the implementation of BMPs through biennial statewide surveys. Educational efforts will concentrate on those landowner groups and regions where inadequacies are found in order to meet the GFA’s goal of 100 percent BMP implementation.