

Mississippians take great pride in the state's natural resources. Forests cover 62% of the state's total land area (18.6 million acres). Landowners and foresters manage 750,000 acres of these forests each year.

Improper management of

forest acres may cause streams and rivers to become polluted. Because many rivers and streams originate and flow through our forests, an effective and economical erosion and pollution control method was needed.

In 1988, state guidelines to control pollution were developed. These voluntary guidelines are called Best Management Practices (BMPs). BMPs are effective at controlling pollution and have numerous direct and indirect benefits. These benefits are valuable to all Mississippians. The benefits typically outweigh any direct costs involved in implementing BMPs.

In some cases, benefit values are hard to measure. Some examples of these benefits include clean water and scenic beauty. The social and environmental values of these benefits are obvious. However, it is hard to measure an individual's or community's satisfaction in dollars and cents. Similarly, costs can be hard to measure.

A recent project completed by the Forestry Department at Mississippi State University developed a list of potential benefits from three commonly used BMPs. Mississippi landowners, forestry consultants, and timber industry professionals provided their perceived values of these benefits.



Benefits selected for streamside management zones included:



- 🕈 enhanced wildlife habitat
- improved public opinion
- increased aesthetic/scenic value
- increased bank stability
- increased filtration of chemicals
- * increased habitat diversity
- increased income opportunities
- increased recreational opportunities
- increased shade for aquatic organisms
- increased water clarity
- increased water quality protection
- increased wildfire protection
- reduced erosion and sedimentation
- reduced flood damage
- reduced water treatment/storage costs

In general, all groups placed the highest values on benefits that protected and/or improved soil and water.

Benefits selected for road and trail construction included:



- rextended harvest season
- improved land access
- reduced habitat impacts
- reduced initial and long-term erosion
- reduced water runoff

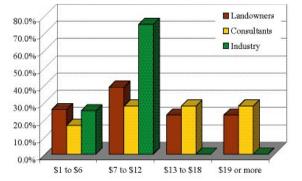
In general, all groups placed the highest values on benefits that maintained the utility of roads and improved site access. Benefits selected for site preparation and tree planting included:

- nhanced wildlife habitat
- increased habitat diversity
- increased potential income
- increased recreational opportunities
- increased scenic beauty
- increased soil moisture
- * reduced erosion and sedimentation
- reduced runoff
- * reduced soil nutrient loss

In general, all groups placed the highest values on benefits that conserved soil resources.

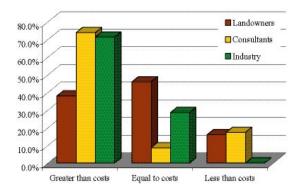
To better gauge the value groups placed on benefits, they were also asked to indicate what dollar amount they would be willing to pay per acre if they could receive any of the listed benefits.

- 26% of landowners, 17% of consultants, and 25% of industry professionals were willing to pay \$1 to \$6 per acre.
- 39% of landowners, 28% of consultants, and 75% of industry professionals were willing to pay \$7 to \$12 per acre.
- 23% of landowners and 28% of consultants were willing to pay \$13 to \$18 and \$19 or more per acre.



Groups were also asked to indicate if they felt total BMP benefits were greater than, equal to, or less than total costs of BMP application.

- 38% of landowners, 74% of consultants, and 71% of industry professionals felt that BMP benefits were greater than costs.
- 46% of landowners, 9% of consultants, and 29% of industry professionals felt that BMP benefits were equal to costs.
- 16% of landowners and 17% of consultants felt that BMP benefits were less than costs.



Despite some differences in opinion, all groups had a similar perception of BMP benefit values. All groups felt BMPs were effective at controlling pollution, and all valued direct and indirect BMP benefits. More importantly, the groups had a largely positive perception of BMPs and their associated benefits.

The conservation and future survival of our forest and water resources depends on continued good relationships among all Mississippians. We are all obligated to practice responsible forest management, and to realize that the practices we conduct today (2) and will affect our future.



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Economic Benefits of Mississippi's Forestry Best Management Practices





Mississippi State University Forest and Wildlife Research Center



Central Mississippi Resource Conservation and Development Council



Mississippi Department of Environmental Quality



Natural Resources Conservation Service