

Indicator 4.20.

Proportion of Forest Management Activities That Meet Best Management Practices, or Other Relevant Legislation, To Protect Water-Related Resources Such as Riparian Zones, Water Quality, Quantity, and Flow Regulation

What is the indicator and why is it important?

Forestry best management practices (BMPs) to protect water resources are a set of preventative measures designed to control or reduce movement of sediment, nutrients, pesticides, or other pollutants from soils to receiving water bodies. When properly implemented, forestry BMPs can prevent the impairment of water bodies from silvicultural practices and other forest management activities. Because the protection of water quality primarily involves the management of soil conditions, the information presented in this indicator can also be applied to Indicator 18, which assesses BMPs focused on soil protection.

What does the indicator show?

The Water Resources Committee (WRC) of the National Association of State Foresters (NASF) conducts periodic surveys of State nonpoint source (NPS) pollution control programs for silviculture. The fifth survey in the series was published in 2004 (NASF 2004). Responding to the survey were 45 States and two trust territories and the overall detailed results are tabulated in the survey report (NASF 2004). The term States in the NASF report and the report for this indicator refers to States, the District of Columbia, and trust territories. Development of BMPs for silviculture has occurred in 43 States, although 4 States do not have silviculture BMPs (NASF 2004).

Twenty-seven States reported on overall rates of use of forestry BMPs although 20 States responded unknown, nonapplicable, or did not respond to this survey question. Of the responding States, the median overall use of silvicultural BMPs is 91 percent with a range of 25 to 100 percent (table 20-1). Best management practice categories include preharvest, stream management, logging roads, stream crossings, site preparation, chemical use, roads to bed, and wetlands.

What has changed since 2003?

This indicator did not exist in the 2003 report.

Are there important regional differences?

Reported overall BMPs use is slightly higher in the West and South than in the East.

Why can't the entire indicator be reported at this time?

Information for this indicator is dependent on State-level survey responses. Only 27 States provided responses that were applicable in constructing the indicator. Furthermore, BMPs are developed at the State level and may differ considerably both in their specific requirements and in their overall level of protection.

Table 20-1. Overall rates of forestry best management practice use in 2004 by State and National Association of State Foresters (NASF) regions.

NASF Northeastern Region		NASF Southern Group		NASF Western Council	
State	Overall rate of best management practices use (percent)	State	Overall rate of best management practices use (percent)	State	Overall rate of best management practices use (percent)
Connecticut	NA	Alabama	97	Alaska	92
District of Columbia	NA	Arkansas	89	Arizona	NA
Delaware	99	Florida	97	California	95
Iowa	25–50	Georgia	90	Colorado	80
Illinois	NA	Kentucky	NA	Guam	NA
Indiana	~80	Louisiana	93	Hawaii	NA
Massachusetts	85	Mississippi	89	Idaho	92
Maryland	NA	North Carolina	83	Kansas	NA
Maine	76	Oklahoma	90	Montana	95
Michigan	NA	Puerto Rico	NA	North Dakota	100
Minnesota	NA	South Carolina	94	Nebraska	NA
Missouri	Unknown	Tennessee	NA	Nevada	NA
New Hampshire	NA	Texas	92	New Mexico	NA
New Jersey	NA	Virginia	91.4	Oregon	96
New York	NA			South Dakota	NA
Ohio	80			Utah	NA
Pennsylvania	Unknown			Washington	NA
Rhode Island	NA			Wyoming	94
Vermont	70				
Wisconsin	86				
West Virginia	NA				
Northeast Region median	80	Southern Group median	91	Western Council median	95

NA = no response, no data available, or unknown.