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# State Forest Resource Planning Programs in the Northeast United States

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**ABSTRACT:** *A survey of state forest resource planning programs in the northeast United States was conducted in 2003. Using a mail-back questionnaire, the lead planners of state forestry agencies provided information on the types of planning processes undertaken, organizational capacity for planning, perceptions of planning effectiveness, planner training needs, adequacy of federal support for state planning efforts, and important barriers to more effective planning programs. Survey results indicate that state forest resource planning continues to evolve in response to important organizational and economic changes, as well as important changes to the state's forest resource base. Each state's forest resource planning program is unique and influenced by such factors as statutory authority and direction, available resources, and political support for planning. Opportunities to improve state forest resource planning include designing more effective and useful planning processes, increasing the visibility of planning efforts and resultant benefits among decisionmakers and interest groups, strengthening the professional capacity of planners to effectively carry out planning processes, and integrating state planning efforts with federal planning initiatives and programs. North. J. Appl. For. 22(4):221–228.*

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Planning is an integral part of forest management in the United States. Each year, public and private land managers make substantial investments in the development of plans to guide the management and use of forest resources. While the format and focus of these plans can vary considerably, outcomes often include an increased awareness by decisionmakers about the economic, social, and ecological contributions of forests, a long-term vision for the management of forest resources, an evaluation and prioritization of an organization's programs and management direction, and enhanced communication and coordination in the management of forest resources (Ellefson 1984).

Within the public sector, a great deal of the forest resource planning interest and focus has been on activities undertaken by the federal government, most notably the USDA Forest Service (see, for example, Schuett et al. 1998, Germain et al. 2001, Twarkins et al. 2001). Often overlooked, however, are forest resource planning activities undertaken by state government. States have a long history

of involvement in forest resource planning dating back to the early 1900s (Ellefson et al. 2002a). While initial efforts focused on resource protection (e.g., insects, wildfire), state forest resource planning has evolved considerably in scope, format, and sophistication.

Today, a state forestry agency's planning program commonly encompasses a variety of strategic and operational planning activities. These include comprehensive statewide forest resource plans that provide strategic direction for the management of nonfederal forest land, land management plans for forests administered by state government, plans focused on specific types of forests (e.g., old-growth forests), plans focused on specific forest values or outputs (e.g., economic development, water quality), land use plans, and environmental impact analyses. Similarly, the number of state agencies involved in state forest resource planning has expanded considerably. Although state forest resource planning was once the sole responsibility of state forestry agencies, it now encompasses the efforts of several state agencies. In 2000, states reported having between eight and 10 executive branch entities undertaking planning processes that, directly or indirectly, impact the management, use, and protection of its forest resources (Ellefson et al. 2002b).

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Previous reviews of forest resource planning programs within state government are few in number. The first formal national assessment of statewide forest resource planning, conducted in 1982, found that 47 states had planning programs (McCann and Ellefson 1982). In the late 1980s, Gray and Ellefson (1987) undertook a national review of the effectiveness of statewide forest resources planning initiatives. Although studies have focused on specific aspects of state forest resource planning programs (e.g., Cole 1985), it has been more than 20 years since the last comprehensive review of state forest resource planning programs was conducted (Ellefson et al. 2002a).

We hypothesized that state forest resource planning programs have undergone substantial evolution over the last two decades in response to changes in the financing and organization of state forestry agencies as well as important economic, demographic, and cultural trends. Areas in which we anticipated changes to be the most pronounced included the capacity, type, efficiency, and effectiveness of planning programs, format and content of plans, technologies used in planning, planning needs of natural resource professionals, and issues affecting planning.

We were particularly interested in understanding the nature and scope of state forest resource planning programs that exist in the northeast United States, the latter defined as those 20 states located generally north and east of the state of Missouri. This region contains 84% of state-administered forest land in the continental United States. It also contains 48% of the nation's nonfederal forests (e.g., private, county, municipal) that are often the recipients of land management and planning assistance provided by state forestry agencies (Smith et al. 2001).

## Study Methods

### Study Objectives and Questionnaire

The objective of our study was to ascertain the current status of state forest resource planning programs in the 20 northeastern states with respect to the planning processes undertaken, organizational capacity to conduct planning, internal and external perceptions of planning effectiveness, planner training needs, adequacy of federal support for state planning efforts, and important barriers to more effective planning programs. To do so, the University of Minnesota's Department of Forest Resources, in consultation with the Northeastern Forest Resource Planners Association

(NFRPA) and USDA Forest Service, Northeast State and Private Forestry (S&PF), developed a mail-back questionnaire.

The questionnaire was sent to state forestry agencies in the 20 northeastern states in Mar. 2003. Individuals who were responsible for coordinating forest resource planning in each state's lead forestry agency were requested to complete and return the survey. The survey was administered using procedures described by Dillman (2000). Information on state forest resource planning activities was provided by 18 of the region's 20 states, resulting in a 90% response rate. Collectively, the responding northeastern states account for 92% of the region's forests and 87% of its forest land administered by state government (Smith et al. 2001).

## Results

As used in this study, the term "state forest resource planning" describes all forestry-related planning activities undertaken by the state's forestry agency. The term "state forest resource plans" describes all plans produced through state forest resource planning processes. The term "state forest resource planners" describes those individuals within the state's forestry agency who are responsible for undertaking forestry-related planning activities.

### Number and Types of Planning Initiatives

Within the northeast region, state forest resource planners managed as few as one and as many as five different planning efforts in 2003. This amounted to an average of 3.6 distinct planning efforts that state forestry agencies had the lead responsibility for undertaking. Greater than 80% of the region's responding states indicated they led between three and five forest resource planning programs. Only two states (11%) stated their forest resource planning program consisted of just one type of planning.

In 2003, state forestry agencies in the northeast United States had the lead responsibility for undertaking a wide range of planning activities. Planning for the management of state-administered forest lands was the most common type of planning undertaken; 83% of the responding states indicated they had such a program (Table 1). Comprehensive statewide forest resource planning that sets strategic direction for the management of nonfederal forest land in a state, as well as planning that focuses on specific topics, issues or activities (e.g., old-growth forests) were conducted

**Table 1. Types of planning undertaken by state forestry agencies in the northeast United States (n = 18).<sup>a</sup>**

Type of planning	Percent of states	Percent of total planning effort per state	
		Mean	Maximum
State-administered forests	83	34	99
Comprehensive statewide forest resource planning	78	10	29
Select topics, issues, or activities	78	14	49
Operational agency work planning	72	24	55
Land use planning	28	9	29
Other	17	10	19

<sup>a</sup> Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

in 78% of the responding northeast states. Land use planning that allocates forest land among various uses was less common. Such efforts were led by only 28% of northeast state forestry agencies.

### Planning Priorities

The proportion of total planning effort dedicated to a particular type of planning activity varied considerably among individual northeastern states in 2003 (Table 1). Some states devoted their entire planning effort toward the development of plans for the management of state-administered forest lands. More common, however, was a forestry agency that apportioned resources among multiple planning processes (e.g., comprehensive statewide forest resource planning, land use planning). For those that did, no one planning process consumed greater than 55% of the agency's planning resources.

On average, one-third of a state's planning time was spent developing plans for the management of state-owned forests. Developing annual or biennial work planning and/or budget planning, the second most time-demanding planning activity, consumed an average of 24% of an agency's available planning resources. Only 10% of an agency's planning resources was spent developing comprehensive statewide forest resource plans, significantly less than what was allocated to statewide forest resources planning when first-generation plans were developed in the early 1980s (Gray and Ellefson 1989).

### Involvement in Other Agency Planning Efforts

In addition to planning activities initiated within the agency, state forest resource planners often participated in the planning efforts undertaken by other state executive-branch agencies. Our survey found these individuals were involved in a wide range of nonforest planning processes (Table 2). Of the different nonforestry planning efforts we examined, northeast state forest resource planners had the greatest level of participation in the planning efforts of state fish and game management, water and soil resources, and agricultural agencies. On average, state forest planner involvement in transportation, economic development, pollution control, and waste management planning was extremely minimal.

When asked about the perceived influence planning efforts led by other state agencies have on the forest resources in their state, forestry planners stated that fish and game management planning was perceived to be the most influential on the state's forest resources (Table 2). Economic development and water and soil resources planning were the second-highest-rated state planning activities affecting forest resources. Only planning conducted by a state's waste management agency was considered to have minimal effect on the state's forest resources.

### Human Resources Devoted To Planning

Gray and Ellefson (1987) reported that in 1981, the period when most states were preparing first-generation statewide forest resource plans, staff resources devoted to planning averaged 1.5 full-time equivalents (FTE) across the 20 northeast states. By 1985, as these initial planning processes neared completion, the regional average had dropped to 1.2 FTEs per state. Our survey found that many northeast state forestry agencies had significantly expanded the staff resources devoted to planning. Regionwide, forestry agencies averaged 4.4 FTEs devoted to planning in 2003. Nearly half of the responding states had no more than one planner, while three had more than 10 FTEs (Figure 1). One agency indicated it had 20 FTEs allocated to its planning programs.

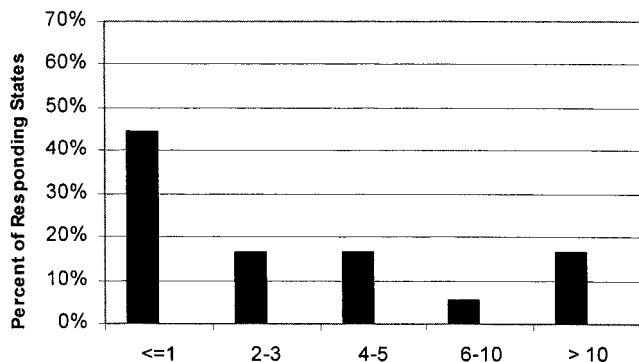
Over the past 10 years, the region has experienced considerable variation in a state's capacity to undertake forest resource planning (Figure 2). Twenty-eight percent of the northeast states indicated their planning staff capacity has decreased by more than 50% over the past decade, while 22% lost between 10 and 50% of their planning capacity. Together, half the states indicated a loss in planning staff of at least 10% over the past 10 years. In contrast, one-third of the responding northeast states stated their planning staff has increased by at least 10% since 1993. Of those states that added planning staff capacity over the past decade, 17% reported increases exceeding 50%, and an additional 17% indicated gains between 10 and 50 percent. Seventeen percent indicated their planning staff capacity changed by less than 10% over this same period.

**Table 2. State forestry agency involvement in and impact of planning activities led by other state agencies in the northeast United States (n = 18).<sup>a</sup>**

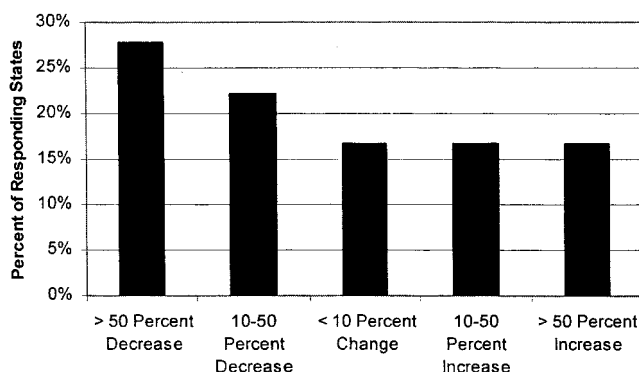
State agency	State forestry agency involvement in planning activities of other state agencies		Impact of planning activities of other state agencies on state forest resources	
	Mean <sup>b</sup>	Response range	Mean <sup>b</sup>	Response range
Fish and game	2.6	4-2	3.1	4-2
Water and soil resources	2.4	3-1	2.8	4-1
Agriculture	2.3	3-1	2.5	4-1
Economic development	1.9	3-1	2.8	4-2
Pollution control	1.8	3-1	2.2	4-1
Transportation	1.7	3-1	2.6	4-1
Waste management	1.6	2-1	1.8	2-1

<sup>a</sup> Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

<sup>b</sup> Rating scale: 4 = extensive, 3 = moderate, 2 = minimal, 1 = none.



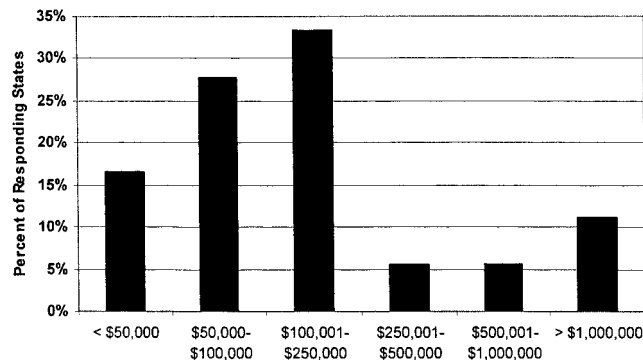
**Figure 1.** Number of full-time equivalents assigned to planning activities within state forestry agencies in the northeast United States ( $n = 18$ ). States surveyed included Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.



**Figure 2.** Percent change in staff support for planning within northeast state forestry agencies over the past 10 years ( $n = 18$ ). States surveyed included Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

### Financial Resources Devoted to Planning

Forestry agencies in the northeast United States devoted an average of \$433,000 annually to support forest resource planning activities in 2003 (Figure 3). This represents more than a 10-fold increase in planning resources available to these same agencies in 1985. Even when adjusted for inflation, planning budgets for forestry have increased substan-



**Figure 3.** Financial support for planning among northeast state forestry agencies in 2003 ( $n = 18$ ). States surveyed included Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

tially over the past two decades in real dollars. The average planning budget can give a misleading impression of the variability of expenditures on planning among individual state forestry agencies. Greater than three-fourths of the responding northeast states indicated their annual planning budgets totaled \$250,000 or less in 2003. In contrast, one state indicated its annual forest resource planning budget was \$3.5 million.

### Forest Resources Planning Technology

In 2003, northeast state forest resource planners had access to a number of technology-based planning “tools” to assist in measuring, analyzing, and predicting changes in forest resources. We asked planners to rate the importance of various technologies used in conducting forest resource planning activities. Of the technology tools evaluated, planners indicated that GIS was the most important (Table 3). Remote sensing technology was identified as the second-most important technology-based planning tool, although planners saw its importance as somewhat less than moderate. All other technologies we evaluated were considered by northeast planners to be minimally important.

### Use of the Internet

The Internet has substantially increased a forest resource planner’s ability to access information and to interact with the public in developing plans and planning documents.

Northeast state forest resource planners used the Internet for a variety of functions in the development of their plans

**Table 3.** Importance of technology in conducting state forest resource planning in the northeast United States ( $n = 18$ ).<sup>a</sup>

Forest resource planning technology	Mean <sup>b</sup>	Response range
Geographic information systems (GIS)	3.3	4-1
Remote sensing	2.6	4-1
Ecological models	1.9	4-1
Economic models	1.9	4-1
Resource simulation models	1.9	4-1
Decision support models	1.7	3-1

<sup>a</sup> Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

<sup>b</sup> Rating scale: where 4 = very important, 3 = moderately important, 2 = minimally important, 1 = not important.

**Table 4. Use of the Internet in state forest resource planning in the northeast United States.<sup>a</sup>**

Internet uses in planning	Mean <sup>b</sup>	Response range
Notifying the public (e.g. availability of planning documents, notice of upcoming meetings/events)	3.3	4-2
Disseminating planning documents	3.1	4-1
Making planning-related data and maps available for public review and use	2.8	4-1
Accepting comments from the public on draft planning documents	2.6	4-1

<sup>a</sup> Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

<sup>b</sup> Rating scale: 4 = extensively used, 3 = moderately used, 2 = minimally used, 1 = not used.

(Table 4). The most extensive use of the Internet was notifying individuals about specific planning events or activities such as the availability of planning documents and upcoming public meetings. Every state in the region used the Internet for this purpose in 2003. Disseminating reports and documents was considered to be the second-most common use of the Internet in forest resources planning. Northeast planners rated use of the Internet to make planning-related data and maps available to the public, as well as accept public comments on draft forest plans as moderate.

### Training Needs of Planners

The set of skills required of today's forest resources planners is extensive. In addition to being thoroughly grounded in the biological, physical, and social sciences associated with forest management, planners need to have well-developed analytic capabilities, meeting facilitation, and "people" skills. Planners are constantly seeking out new techniques and technologies that will assist them in developing more effective and efficient planning processes. We asked northeast state forest resource planners to describe their training needs in a number of skill areas commonly used in forest resources planning. Of the training needs examined, techniques in managing conflict among multiple interests were considered to be the greatest (Table 5). Also considered moderately important by planners was training in the development and implementation of quantitative models to assess forest resource conditions. Developing more effective meeting facilitation skills ranked lowest among the training needs we evaluated. This finding suggests considerable proficiency among planners in an extremely important aspect of state forest resource planning, namely facilitating the public's input on draft plans and in planning processes.

### Benefits of Forest Resource Planning

State planners cited a number of tangible benefits flowing from their forest resource planning activities (Table 6).

Chief among these was a better understanding of the state's forest resource conditions and trends. Overall, planners in the northeast felt that their efforts had a moderate to extensive influence in the development of a concise picture of the changes that were occurring in the state's forest resources. Other important benefits of state forest resource planning that were cited included clearly articulating the agency's mission, identifying strategies to address important state forest resource issues, promoting integration of forest management approaches across disciplines, and facilitating better coordination among agencies responsible for managing the state's forests. Using planning to increase the public's awareness of the importance of forest resources within the state was considered to have only a moderate to minimal impact.

### Support for State Forest Resources Planning

The extent to which a state's forest resources planning program is successful depends on the support it receives from various constituencies, both within and outside the agency. We asked the region's planners to rate the support for their planning program among various clientele groups. Their responses suggest the greatest proponents of state forest resources planning programs are within the state's forestry agency (Table 7). In the northeast, the state forester (i.e., the director of a state's forestry agency) was rated the strongest supporter of the agency's planning efforts, followed by the agency's field staff. Support for state forest resources planning by the governor and state legislature, as well as private forestry interests (e.g., forest landowners) were considered fairly modest. Least supportive of an agency's forest resource planning programs were other state agencies.

### Impediments to More Effective Planning

Planners were asked to identify the greatest impediments to a more effective forest resource planning. Over half of the respondents stated that the lack of financial

**Table 5. Training needs of state forest resource planners in the northeast United States.<sup>a</sup>**

Training need of state forest resource planners	Mean <sup>b</sup>	Response Range
Conflict management	3.1	4-2
Model development and implementation	3.0	4-1
Use of technology (e.g. creating web pages, GIS mapping)	2.9	4-2
Data assessment and analysis	2.8	4-2
Meeting facilitation	2.6	4-2

<sup>a</sup> Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

<sup>b</sup> Rating scale: 4 = extensive need, 3 = moderate need, 2 = minimal need, 1 = no need.

**Table 6. Perceived benefits of state forest resource planning in the northeast United States.<sup>a</sup>**

Forest resource planning benefits	Mean <sup>b</sup>	Response range
Better understanding of the condition of and major trends in the state's forest resources	3.5	4-2
The mission of the state's forestry agency more clearly defined	3.2	4-1
Development of alternative strategies to address issues and/or achieve goals	3.0	4-1
Better integration of various resource disciplines (e.g. wildlife) impacting forest resources	2.9	4-2
Better coordination among agencies with forest resource management responsibility	2.8	4-2
Political support for forest resources management among state policy makers	2.7	4-2
Identification of important economic development strategies	2.6	4-1
Identification of important environmental protection strategies	2.6	4-2
Increased awareness of forest resources importance among state citizenry	2.5	4-1

<sup>a</sup> Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

<sup>b</sup> Rating scale: 4 = extensive influence, 3 = moderate influence, 2 = minimal influence, 1 = no influence.

**Table 7. Perceived support for state forest resource planning among various constituencies in the northeast United States.<sup>a</sup>**

State forest resource planning constituencies	Mean <sup>b</sup>	Response range
State forester	3.7	4-3
Agency field staff	3.1	4-2
Federal agencies	3.0	4-2
Other divisions within natural resources agency	2.9	4-1
Forest industries	2.8	4-1
Governor	2.6	4-1
Other private interests	2.6	4-2
Private forest landowners	2.6	4-1
State legislature	2.6	4-1
Other state agencies	2.3	4-1

<sup>a</sup> Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

<sup>b</sup> Rating scale: 4 = extensive support, 3 = moderate support, 2 = minimal support, 1 = no support.

resources needed to undertake planning was the greatest barrier. Inadequate staff resources were also an important obstacle to a more effective planning program, cited by 29% of the responding planners. Twenty-six percent of the planners mentioned the lack of time as being a significant barrier to developing more effective plans. These top three responses suggest planners have the tools and know-how to effectively undertake effective planning processes, but lack the capacity for planning as measured by budgets, staff, and available time. Moreover, they imply that staff and financial resources for state forest resource planning have not increased commensurate with state forest resource planner responsibilities.

Planners also were queried to list the two most important factors influencing the future of forest resource planning in their state. Over one-third of the respondents cited the availability of financial resources allocated to planning as the single most important factor influencing the future direction and effectiveness of state forest resource planning. Twenty-seven percent of the planners believed that forest development and fragmentation is one of the most significant influences on the future of planning. Maintaining the public's interest in and support for plan-

ning, as well as that of policymakers were mentioned by 19% of the planners as important factors. These responses suggest that state forest resource planning will be strongly influenced not only by the political support for an agency's planning activities, but also important changes in the structure and composition of the state's forest resources.

### Opportunities for Improving State Forest Resource Planning

Our evaluation of state forest resource planning programs provided considerable insight on the current status of and important trends in the planning activities undertaken by state forestry agencies in the northeast United States. It suggests that state forest resource planning continues to evolve in response to important organizational and economic changes, as well as important changes that are occurring to the resource base. The survey also highlights the uniqueness of forest resource planning programs in each state due to a number of factors such as varying statutory authority and direction, available resources, and political support for planning. Understanding the current landscape of state forest resource planning is an important first step in assisting states and those that support these efforts (e.g.,

USDA Forest Service, S&PF) in designing more effective planning programs.

The information gathered from the survey indicates that several opportunities exist to improve state forest resource planning efforts. These include designing more effective and useful planning processes, as well as strengthening the professional capacity of the individuals who are responsible for designing and implementing these processes. To do so, suggested areas of focus for improving state forest resources planning include the following.

### **Greater Input into Planning**

Planners cited concern regarding the ability to design planning processes that facilitate meaningful input from a broad cross-section of interests. This includes input from the general public, special interests, and other public agencies (e.g., pollution control) and resource disciplines (e.g., fisheries) that have historically not participated in the development of state forest resource plans. Engaging a broader constituency in the planning process increases the likelihood that state forest resource plans will accurately reflect the public's attitudes and values about the use, management, and protection of its forest resources.

### **Access to Quantitative Planning Tools**

Several planners indicated a need to have access to models and other tools that would assist them in evaluating the long-term consequences of different management strategies on forest resource conditions. Frequently cited were forest growth, harvest scheduling, and spatial models. Training sessions on how to use these tools, interpret their output, and integrate them into forest resource planning processes would enhance their ability to describe future forest conditions associated with proposed plan alternatives.

### **Guidelines for Integrating State Plans with Federally Mandated Programs**

Several states indicated the need to receive additional guidance from the USDA Forest Service on how to more closely align state forest resource plans with plans for implementing federal programs (e.g., Forest Legacy Program). This assistance could be in the form of written "how-to" manuals, as well as formal training sessions.

### **Increased Visibility of Planning Benefits Among Decisionmakers**

Planners felt the governor's office and state legislators often had a very limited understanding of the benefits of state forest resource planning activities. Additionally, planners often perceived a lack of support for forest resource planning from other state agencies and outside interests. One key for creating an effective and efficient planning program is to communicate the importance of state forest resource planning and the role planning plays in forest management. For example, planning yields information on strategic issues affecting the state's forest resources that need to be addressed in program and policy development. Planning also is crucial to agency budget formulation and advocacy processes.

### **Incorporating Social Considerations into Plans**

Planners generally felt that their plans gave minimal attention to the social importance of forest resources (e.g., cultural uses and values of forests). Integrating such information into planning processes would increase the plan's ability to describe the contribution forests make to rural community economic development, stability, and quality of life.

### **Improving Conflict Management Skills**

Planners are called on routinely to manage conflict as part of the process of preparing a forest resource plan. Knowledge of different techniques to effectively manage disagreement among individuals or groups was identified by forest resource planners as a priority training need.

### **Expanded Use of the Internet in Planning**

The survey results suggest that although state forest resource planners use the Internet to assist in carrying out their planning programs, additional opportunities exist to expand its use. Examples include using the Internet as a means of enabling the public to access planning data and associated maps and obtaining real-time feedback from the public and stakeholder groups at various stages of the planning process.

### **Sharing Planning Experiences and Approaches**

Planners expressed an interest in furthering their understanding of how forest resource planning processes are undertaken in other states. This interest includes methods for traditional planning undertaken by state forestry agencies (e.g., comprehensive statewide forest resource and land management planning), as well as nontraditional planning approaches (e.g., developing criteria and indicators to benchmark forest resource conditions). Although limited opportunities for this exchange exist, planners felt additional venues would be beneficial.

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