

**STATE GOVERNMENT AGENCIES AND AUTHORITIES
AFFECTING THE USE AND MANAGEMENT
OF FORESTS IN NORTHERN UNITED STATES**

by

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STATE GOVERNMENT AGENCIES AND AUTHORITIES AFFECTING THE USE AND MANAGEMENT OF FORESTS IN NORTHERN UNITED STATES

Abstract

State agencies responsible for the use, management and protection of forests have increased in number and have become increasingly more diverse in mission and organization. Such is often inconsistent with holistic approaches advocated for the management of large forest ecosystems. An assessment of state agencies affecting forest conditions in the North was undertaken in 2000-2001. The assessment found that such agencies are dispersed over all sectors and levels of state government; a state's lead forestry agency is often only a small piece in the puzzle of state agencies affecting forests; consequences of fragmented state agency responsibility for forests are generally adverse, especially public confusion over agency roles and lack of integrated resource management; and coordination among state agencies affecting forest conditions takes many forms, although its occurrence is generally modest.

INTRODUCTION

Public environmental and natural resource authorities have become increasingly diverse in their mission and the manner in which they organize. They often appear to look at forests as ecosystems that are easily divisible and readily amenable to a large number of often unrelated and frequently conflicting programs and activities (Haskell and Price 1973, General Accounting Office 1996, Jenks and Wright 1993, Rabe 1986). Although compelling cases have been made for more integrated approaches to safeguarding the integrity of forest ecosystems, the reality is that a truly integrated set of agencies and bureaus for doing so is often nonexistent (Cortner and others 1996, Meidinger 1997, Rabe 1986, U. S. Department of Agriculture 2002). State governments provide a good example of a fragmented institutional setting applied to forests.

In the Fall of 2000, we carried out an assessment to determine what state government agencies in the Northern region of the United States are responsible for programs that influence the statewide condition of forests, the degree of that influence, and the ways these authorities coordinate their activities (Ellefson and others 2001) (see Table 1 for states in the Northern region). An *authority* (entity, unit, bureau, agency) was defined as an administrative unit of state government that is responsible for carrying out a well-defined set of responsibilities focused on achievement of a common goal, while *influence* was defined as the ability of an authority — through whatever policies and programs it is responsible for implementing — to change, alter or modify the way forests are used, managed or protected. State government executive-branch authorities that have statewide influence over forests were the assessment's focus. Federal agencies were excluded, as were legislative and judicial branches of government and certain independent (or nearly so) units of state government such as extension services of state university systems.

For each of the 20 states in the North, a list of state authorities thought to have influence (however large or small) over forest conditions was prepared. The list was based on examinations of government agency directories, reviews of state government web sites, inspection of reports describing programs implemented by state agencies, and careful reviews and subsequent revisions of the list by state foresters and their staffs. Once an accurate list of agencies in each state was established, the list was incorporated into a questionnaire that was sent to state foresters, who were asked to provide insight about influence of state agencies over forests in their state. Responses were received from all 20 states. Since state foresters are typically executive-level administrators that track a broad range of state organizations engaged in programs affecting forests, they were in an especially good position to complete the questionnaire.

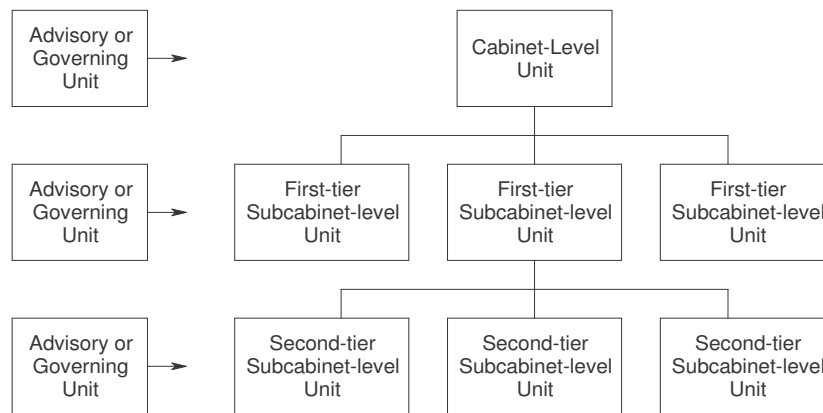


Figure 1. Hypothetical Types and Levels of Authorities or Entities Forming an Organization.

For purposes of analysis, state government authorities affecting forests were divided into four separate categories (Figure 1), namely (a) cabinet level authorities (for example, New York Department of Environmental Conservation), (b) first-tier subcabinet-level authorities (for example, New York Office of Natural Resources), (c) second-tier subcabinet-level authorities (for example, New York Division of Lands and Forests), and (d) special governing or advisory units (for example, New York Fish and Wildlife Management Board). Although often part of a vertically integrated organization, the authorities were viewed as separate hierarchal entities operating to carry-out their own responsibilities with only strategic direction from higher levels within an organization.

TYPE AND FREQUENCY OF AUTHORITIES

The assessment determined there were 627 state government authorities responsible for programs that influence forests in the North (Table 1). Averaging about 31 per state, such authorities represented 43 percent of the nation's 1,453 state government agencies directing attention to the way in which forests are used and managed. With 46 entities each, Illinois and Michigan accounted for the largest portion of these authorities, namely 14 percent combined. Other states with a large number of authorities influencing the condition of forests in the North are Maryland (45 entities), Maine (41 entities), West

Virginia and Wisconsin (36 entities each). These five states, plus Michigan, account for 40 percent of the state government authorities influencing forest conditions in the North (15 percent of the national total). The fewest number of authorities affecting forests occurs in Delaware (12).

Table 1. Number of State Government Executive Branch Authorities Influencing the Use, Management and Protection of Forests in the North, by State and Level of Government. 2000-2001.

States within Northern Region	Number of Authorities and Level of Government				
	Cabinet-Level	First-tier Subcabinet-level	Second-tier Subcabinet-level	Governing or Advisory Units	Total
Connecticut	3	9	9	1	22
Delaware	4	8	0	0	12
Illinois	6	17	17	6	46
Indiana	6	10	12	5	33
Iowa	4	11	11	4	30
Maine	9	18	5	9	41
Maryland	5	15	12	13	45
Massachusetts	2	6	8	1	17
Michigan	7	29	1	9	46
Minnesota	9	22	4	4	39
Missouri	5	13	0	11	29
New Hampshire	7	17	2	6	32
New Jersey	4	11	7	7	29
New York	7	8	9	3	27
Ohio	5	20	0	3	28
Pennsylvania	8	18	0	6	32
Rhode Island	3	4	11	2	20
Vermont	7	9	0	9	25
West Virginia	10	14	6	6	36
Wisconsin	6	11	12	7	36
Total	117	272	126	112	627

Cabinet and Subcabinet Authorities

Of the 627 state authorities occurring in the region, 117 (19 percent) were at the highest level in state government, namely cabinet level, and were variously labeled as agencies (Vermont Agency of Natural Resources), commissions (Pennsylvania Commission on Game), departments (Indiana Department of Natural Resources), or offices (Wisconsin Office of State Lands and Investments) (Tables 1 and 2). Each state had approximately six cabinet-level authorities, with the largest number of cabinet level entities occurring in West Virginia (10), Maine (9), Minnesota (9), Pennsylvania (8) and Michigan, New York and Vermont (seven each). The most common name assigned to these entities was “department,” with “office” a distant second.

Beneath cabinet level authorities are 398 subcabinet (first and second tiers) units

of state government (63 percent of all authorities) that influence the condition of forests in the North. Averaging about 20 per state, 272 of these entities are considered first-tier authorities and are most commonly named divisions (133 so named) (for example New Jersey Division of Parks and Forestry), bureaus (49 so named) (for example, Connecticut Bureau of Natural Resources), and offices (38 so named) (for example, West Virginia Office of Abandoned Mines and Reclamation) (Tables 1 and 2). The number of first-tier authorities varies considerably among states, appearing most commonly in Michigan (29), Minnesota (22) and Ohio (20), and least common in Delaware (8), New York (8), Massachusetts (6) and Rhode Island (4).

Table 2. Number of State Government Executive Branch Authorities Influencing the Use, Management and Protection of Forests in the North, by Unit Name and Level of Government. 2000-2001.

<p>A. Cabinet Level Authorities</p> <p>Agency – 8 Commission – 4 Department – 68 Office – 27 Other – 10</p> <p>Number of Units – 117 Average Number Per State – 5.8 Portion of National Total – 33 percent</p> <p>B. First-tier Subcabinet-Level Authorities</p> <p>Department – 14 Division – 133 Bureau – 49 Office – 38 Program – 4 Section – 7 Service – 3 Survey – 3 Unit – 3 Other – 18</p> <p>Number of Units – 272 Average Number Per State – 13.6 Portion of National Total – 42 percent</p>	<p>C. Second- tier Subcabinet-Level Authorities</p> <p>Bureau – 36 Division – 49 Office – 19 Other – 22</p> <p>Number of Units – 126 Average Number Per State – 6.3 Portion of National Total – 64 percent</p> <p>D. Governing or Advisory Units</p> <p>Board – 44 Council – 23 Committee – 10 Commission – 33 Other – 2</p> <p>Number of Units – 112 Average Number Per State – 5.6 Portion of National Total – 45 percent</p>
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Second-tier subcabinet authorities are another level of state government, occurring 126 times as units influencing the condition of forests in the North (64 percent of national total) (Tables 1 and 2). These authorities average about six per state and are most common in Illinois (17, for example Illinois Division of Forest Resources), Indiana (12, for example Indiana Division of Nature Preserves), Maryland (12, for example Maryland Forest, Wildlife and Heritage Service), Wisconsin (12, for example Wisconsin Bureau of

Watershed Management), Iowa (11, for example Iowa Bureau of Wildlife), and Rhode Island (11, for example Rhode Island Office of Water Resources). Second-tier authorities were not recorded for Delaware, Missouri, New York, Ohio, Pennsylvania, and Vermont. As for names assigned to second-tier entities, most common are “division” (49 so named) and “bureau” (36 so named).

Governing or Advisory Units

State governments in the North have also established governing or advisory units (permanent or transitory), whose responsibilities range from providing advice on program development and implementation, to being legally responsible for directing and managing a particular unit of government. Often, but not always, they are composed of interested citizens appointed by a state’s governor or by the chief administrator of the authority to which the unit is to provide advice or exercise governance. In 2000-2001, states in the North had 112 governing or advisory units that affect the condition of forests (45 percent of national total)(Tables 1 and 2). Variouslly labeled as “boards” (for example, Michigan Environmental Science Board), “councils” (Minnesota Forest Resources Council), “committees” (Iowa State Conservation District Committee), or “commissions” (for example, Missouri Commission on Clean Water), an average of nearly six such units exist in each state (compared with an average five nationwide). Maryland is at the forefront in the number of advisory-governing bodies directed in some manner toward forests (namely, 13), with Missouri (11), and Maine, Michigan, and Vermont following close behind (nine entities each). Delaware reported having no such units involved forest resource matters, and Connecticut and Massachusetts indicated only one each.

Lead Forestry Authorities

Responsibility for forests and forestry among states in the North has historically been assigned to a specific entity within state government (here referred to as a “lead state forestry agency”). In 2000-2001, these assignments were as follows.

•*Cabinet level*: no states.

•*Subcabinet-level, first-tier*: 11 states (Delaware, Maine, Michigan, Minnesota, Missouri, New Hampshire, Ohio, Pennsylvania, Vermont, West Virginia, and Wisconsin). Examples are the West Virginia Division of Forestry within the state’s cabinet-level Bureau of Commerce, and the New Hampshire Division of Forests and Lands within the cabinet level Department of Resources and Economic Development.

•*Subcabinet-level, second-tier*: Eight states (Connecticut, Illinois, Indiana, Iowa, Maryland, Massachusetts, New Jersey, New York, and Rhode Island). Examples are the Connecticut Division of Forestry within the Bureau of Natural Resources within the state’s cabinet-level Department of Environmental Protection, and the New Jersey Forest Service within the Division of Parks and Forestry of the cabinet-level Department of Environmental Protection.

•*Subcabinet-level, third-tier*: one state (Massachusetts). Massachusetts Bureau of Forestry within the Division of Parks and Forests within the cabinet-level Department of Environmental Management.

The most common name for a lead forestry authority in the North is “division” (so named in 14 states), followed by “bureau” (three states), and one each “section,” “service, and “department.” In some cases, lead agencies may be known by more than one title, for example in Maine the lead agency is known as both the Bureau of Forestry and by the more popular label “Maine Forest Service.”

Lead state forestry units assigned first-tier subcabinet-level status in the North are very similar to their national proportion among states, namely 55 percent in the North versus 58 percent nationally. Oregon is the only state in the nation in which the lead state forestry unit is positioned at the cabinet level (Oregon Department of Forestry). In no state in the North (or in the West) is an advisory or governing unit responsible for statewide forest resource programs, while in the South, five lead state forestry authorities operate in such a manner (for example, Arkansas Forestry Commission, South Carolina Forestry Commission). Nationwide, five lead state forestry authorities are part of a state university system (for example, the Colorado Department of Higher Education’s State Forest Service, and the University of Nebraska’s Forest Service). In no case does such occur in the North.

INFLUENCE OVER FOREST CONDITIONS

Extent of Influence

State foresters were asked to specify whether an authority’s influence over forests within their state was *virtually none* (for example, demographic reports prepared by a state’s cabinet-level planning agency), of *little consequence* (for example, purchase of historic sites by a state’s subcabinet level historic preservation division), of *moderate importance* (for example, implementation of a wetland protection program by a state’s subcabinet level pollution control agency), or *substantial influence* (for example, implementation of a forest harvesting permit-inspection program by a cabinet-level forestry agency). The inquiry focused on governing and advisory units and on first-tier subcabinet-level authorities, plus 67 second-tier authorities which some state foresters strongly suggested could exercise influence comparable to first-tier units.

Of the 339 subcabinet-level authorities considered, 58 percent (196 authorities) were identified as implementing programs that have a moderate or a substantial amount of influence over forest conditions within a state (Table 3). The portion of authorities exercising moderate to substantial influence in any one state ranged from a low of 10 to 35 percent in five states to a high of 65 to 90 percent in eight states. On average, three to four (3.4) authorities per state were viewed as having substantial influence (69 units), while at the other extreme, 42 percent (143 entities) or about seven entities per state were judged as having little or virtually no influence over forest conditions. Compared with nationwide conditions, states in the North tend to have a larger average number of units exercising

moderate (6.4 versus 5.7) and little influence (5.3 versus 4.7), while having fewer entities exercising substantial influence (3.4 versus 3.5) or virtually no influence (1.9 versus 4.7).

Table 3. Influence of Subcabinet-Level Authorities and Governing and Advisory Units of State Government over the Use, Management and Protection of Forests in the North, by Extent of Influence. 2000-2001.

Cabinet Level (first and selected second-tier units)	Governing or Advisory Units
<u>Substantial Influence</u> Number of Units – 69 Portion of Total – 20 percent Average Number of Units per State – 3.4 Portion of National Total – 20 percent	<u>Substantial Influence</u> Number of Units – 19 Portion of Total – 17 percent Average Number of Units per State – 1.0 Portion of National Total – 17 percent
<u>Moderate Influence</u> Number of Units – 127 Portion of Total – 38 percent Average Number of Units per State – 6.4 Portion of National Total – 38 percent	<u>Moderate Influence</u> Number of Units – 38 Portion of Total – 34 percent Average Number of Units per State – 1.9 Portion of National Total – 34 percent
<u>Little Influence</u> Number of Units – 106 Portion of Total – 31 percent Average Number of Units per State – 5.3 Portion of National Total – 31 percent	<u>Little Influence</u> Number of Units – 43 Portion of Total – 38 percent Average Number of Units per State – 2.2 Portion of National Total – 38 percent
<u>Virtually None</u> Number of Units – 37 Portion of Total – 11 percent Average Number of Units per State – 1.9 Portion of National Total – 11 percent	<u>Virtually None</u> Number of Units – 12 Portion of Total – 11 percent Average Number of Units per State – 0.6 Portion of National Total – 11 percent
Total Number of Units – 339	Total Number of Units – 112

A large number of authorities in a state is not sufficient reason to conclude that all have significant influence over forests. For example, although in 2000-2001 Michigan reportedly had 29 authorities responsible for programs that affect forests, 59 percent were judged to have little or virtually no influence. Similarly, Minnesota indicated there were 24 authorities, half of which are considered to have little or no influence over forests. Yet in other states with a relatively large number of authorities, substantial influence over forests emanates from a relatively large number of units of state government (subcabinet-level authorities). Examples are Illinois with 28 authorities, 32 percent of which have substantial influence over forests; and Indiana with 21 authorities, 33 percent influencing forests in a substantial way. By contrast, influence appears concentrated in relatively few units in New Jersey (11 authorities, 45 percent having substantial influence) and Iowa (11 authorities, 36 percent).

As for governing and advisory units in the North, over half (51 percent) of the 112 entities identified have at least moderate to substantial influence over forest conditions, although about one in ten (11 percent) were considered to have virtually no impact on forests. States in the North that have the largest number of governing and advisory units with substantial influence over forests are Illinois (six out of every five such units) and Iowa (three of four units). Although Maryland has a sizeable number of governing-advisory units with potential to affect forests (namely 13), seven are considered to have little influence and four virtually no influence. Similarly, six of Maine's nine such units are considered to have little or virtually no impact of the use and management of forests.

Type of Influence

Agencies responsible for programs that influence the condition of forests usually have certain primary functions or responsibilities, some of which have a greater affect on forests than others. For purposes here, five major agency functions were identified, namely resource management (for example, insect and disease management, wildlife and wetland management), assistance and enforcement (for example, planning, information management, issuance of permits), promotion and development (for example, taxation and business promotion), health and safety (for example, public health and working conditions), and environmental protection (for example, waste management, water pollution abatement).

Table 4. State Government Executive Branch Authorities Influencing the Use, Management and Protection of Forests in the North, by Primary Function and Level of Government. 2000-2001.

Organizational Level	Primary Function or Responsibility (percent of authorities)					Total
	Resource Management	Assistance and Enforcement	Environmental Protection	Promotion and Development	Health and Safety	
•Cabinet Level	36	25	12	24	3	100
•Subcabinet Level	37	26	21	15	1	100
•Advisory or Governing Units	54	13	21	11	1	100
All Levels	43	24	18	14	1	100

State foresters were of the opinion that of the 627 authorities having potential to affect forest conditions in the North, 43 percent were engaged in some form of resource management activity, while 24 percent provided assistance or engage in enforcement activities that affected forests (Table 4). Least common to the region's organizational landscape affecting forest conditions were state authorities responsible for health and safety matters (about 1 percent of seven authorities). The North is similar to other regions of the nation in the portion of authorities engaged in the five functions described here. The only major difference is the proportionally large number of governing and advisory bodies that are engaged in resource management in the West, namely 73 percent (63 of 86

governing and advisory bodies), versus 54 percent (61 of 112) in the North and 58 percent (29 of 50) in the South.

CONSEQUENCE OF MANY AUTHORITIES

Expected Future Conditions

Half the 20 state foresters in the North are of the opinion that their state would have “about the same number” of state government authorities affecting forest conditions 20 years in the future, while four (20 percent) indicated there would be fewer such state units at that time. In support of the latter, one state forester indicated “the public is demanding more accountability from government – duplication of effort will not longer be acceptable,” while another also predicted fewer government authorities “because of agency consolidation, although total government presence will be the same.” Six state foresters (30 percent) were of the opinion that there would be more forestry influencing units in the future, with one state forester reasoning that “more parcelization yields more owners with wider interests . . . leads to more conflicts . . . results in more government involvement by more agencies.” Contrasted with views from other regions, state foresters in the North were aligned with those in the West on the a-for-mentioned measures, but they contrasted with state foresters in the South which were much more likely to predict fewer state authorities affecting forests in the future (38 percent of 13 state foresters).

Outcomes of Many Authorities

Problems alleged to result from having many government agencies with a similar purpose include duplication and waste, overlapping and incompatible purposes, inconsistent application of similar programs, avoidance of responsibility for key issues, and confusion among client groups as to which program is targeted to their needs (Bardach 1998, Rabe 1986, Grubb and McDonnell 1996.). Some suggest that large government departments have become nothing more than holding companies for entities that remain largely independent (Ringquist 1993). However, others suggest positive outcomes from a dispersed agency landscape, including more avenues of access to government and a more efficient government provoked by competition among agencies (Lyons and Lowery 1989). As for the forestry and forest resource consequences of a patchwork of diverse and unconnected government authorities, a previous assessment indicates the following results: lack of a unified voice in government, with standing, for forest resources generally; contradictory and poorly matched agency missions, policies and programs; troublesome implementation of policies and programs (limited resources spread thin); overlapping policy and program development processes; limited policy and program planning in a comprehensive sense (conflicting plans representing single entity views) (Kilgore and Ellefson 1992).

In 2000-2001, state foresters in the North were asked to identify major consequences of having multi-state authorities having influence over the use and management of forests (Table 5). Leading in frequency of very likely occurrences were

public confusion and skepticism about the need for a large number of forest influencing authorities, and the absence of integrated management of forest resources (12 responses each). If “very likely” and “somewhat likely” responses are merged, the following rank order of consequences occurs: public confusion and skepticism, unproductive competition among agencies, absence of integrated resource management, and duplication of government programs and activities. Absence of a single strong and unifying advocate for forests is also seen as a concerning outcome of having many authorities engaged in forestry matters. As for consequences considered to have little likelihood of occurring, most commonly cited by state foresters was the occurrence of narrow single-client support for programs involving forests (for example, timber industry, environmental community), inappropriate applications of forestry practices (for example, ignoring state forestry best management practices), and excessive advocacy by some resource professionals (for example, timber managers, wildlife managers).

Table 5. Consequences of Dispersed State Executive-Branch Authorities Influencing the Use, Management and Protection of Forests in the North, by Type of Consequence. 2000-2001.

Type of Consequence	Likelihood of Occurrence (percent of respondents)		
	Very Likely	Somewhat Likely	Little or No Likelihood
• Public confusion and suspicion	60 [12]	35 [7]	5 [1]
• Absence of integrated forest resource management	60 [12]	30 [6]	10 [2]
• Absence of single strong unifying advocate for forests	55 [11]	30 [6]	15 [3]
• Duplication of programs and activities	50 [10]	40 [8]	10 [2]
• Unproductive competition among agencies	40 [8]	55 [11]	5 [1]
• Allocation of forests to inappropriate uses	30 [6]	45 [9]	25 [5]
• Inappropriate resource management practices	25 [5]	45 [9]	30 [6]
• Platforms for excessive advocacy by some resource professionals	25 [5]	45 [9]	30 [6]
• Intense single-client support for programs forests	15 [3]	50 [10]	35 [7]
• Improper size (scale) of programs and agencies	5 [1]	75 [15]	20 [4]

Note: Numbers in brackets are number of states.

RESPONSE TO MANY AUTHORITIES

How best to management dispersed organizational landscapes has challenged managers of public agencies for years. As administrators, they often face: an array of public agencies, not all of which are inclined to be engaged in a resource issue at any one time; a variety of resource focused goals and objectives, some of which are compatible while others are not; dominance within agencies of strongly-held professional values, many of which are in conflict and seldom expressed with any neutrality; and a fractured setting for resource program implementation, wherein responsibility for accomplishing some mission lies within the purview of many government authorities (Mandell 1989). Administrative response to these conditions has typically been to coordinate, namely get

the diverse authorities and organizations to arrange, match or harmonizes policies and programs to achieve shared goals and objectives (Rogers and Whetten 1982).

Coordination among multiple agencies can be accomplished in a number of ways, including informal communication, memorandums of agreement, information systems, strategic planning of multiple subject areas, formal administrative mechanisms (for example, boards and councils), and wide-ranging agency reorganization (Jennings and Ewalt 1998). As noble a goal as coordination may be, agency decisions to participate in joint activities are influenced by a variety of factors, including self-serving interest in the resources that might flow to an agency, assessment of possible political advantages to be gained over other units, resistance to cooperation nurtured by professional norms and values, an interest in reducing critical uncertainties about an agency's future, and a need to somehow appear as responding to a legal requirement to cooperate. Realistically, when an agency becomes involved in a cooperative venture it not only loses some of its freedom to act independently, it also must invest scarce resources and energy to develop the cooperative relationships (returns on which are often unclear and intangible) (Weiss 1987). Compounding the problem is the clash of very contradictory missions that are often statutorily assigned to some units of government. In such an environment, it would appear easier to advocate coordination than to practice it.

Extent of Coordination

State foresters in the North suggest their state's various departments, divisions and advisory bodies are generally engaged in coordination activities. However, the intensity of this coordination varies considerably among states. Eight of 20 state foresters in the North indicated that government authorities influencing the condition of forests in their state are loosely coordinated, 11 indicated general coordination, and only one suggested that close agency coordination occurs. Is further coordination desirable? Fifty-five percent (11 state foresters) said yes, but not achievable in practice, while 45 percent suggested it was desirable and practical in the near future. To achieve a more focused indication of coordination activities, state foresters were presented with a list of state agencies they previously identified as involved in forest resource matters in their state. They were asked to specify for each first-tier subcabinet-level authority the amount of coordination that unit participates in on matters involving forests.

Coordination among first-tier subcabinet-level authorities is respectable, namely 47 percent are so involved on matters involving forests (Table 6). However, the flip side is that a nearly similar portion (48 percent) seldom or never coordinate their activities involving forests. And even though state foresters are typically lead state administrators on forest resource matters in their state, they were not always able to specify if an agency known to engage in forestry activities participated in any coordinating activities (such agencies averaged about one of every 17 agencies within a state). As for the actual number of first-tier subcabinet-level authorities involved in coordinating activities, an average of about eight entities per state coordinate on a regular basis, while an average of three per state never coordinate. Compare to national conditions, the North has a larger portion of its forest-

influencing authorities regularly engaging in coordination, while the South has the smallest portion so engaged, namely 26 percent. As for the portion of agencies never coordinating, the South also leads with 31 percent while the North and the West are nearly the same at 18 and 19 percent, respectively.

Table 6. Coordination by State Government Executive Branch Authorities Influencing the Use, Management and Protection of Forests in the North, by Extent of Coordination. 2000-2001.

First-tier Cabinet-level Units	Governing or Advisory Units
<u>Regularly Coordinate</u> Number of Units – 159 Average Number of Units Engaged per State – 8.0	<u>Regularly Coordinate</u> Number of Units – 37 Average Number of Units Engaged per State – 1.8
<u>Seldom Coordinate</u> Number of Units – 103 Average Number of Units Engaged per State – 5.2	<u>Seldom Coordinate</u> Number of Units – 49 Average Number of Units Engaged per State – 2.4
<u>Never Coordinate</u> Number of Units 60 Average Number of Units Engaged per State – 3.0	<u>Never Coordinate</u> Number of Units – 22 Average Number of Units Engaged per State – 1.1
<u>Unknown Whether Coordinate</u> Number of Units – 17 Average Number of Units Engaged per State – 0.8	<u>Unknown Whether Coordinate</u> Number of Units – 4 Average Number of Units Engaged per State – 0.2
Total Number of Units – 339	Total Number of Units – 112

Note: Extent of coordination is defined as: *regularly coordinates* – coordinating activities occur at least once every six months; and *seldom coordinates* – coordinating activities occur at least once every twelve months.

As for governing and advisory units in the 20 Northern states, only a modest one-third regularly coordinate on matters involving forests; 63 percent seldom or never do so (Table 6). In any one state, an average of about two governing-advisory bodies regularly engages in program coordination focused on forests. Even though governing and advisory bodies are frequently charged with coordination of disparate agency activities, a greater number of these entities in a state was not found to be correlated to more coordination on activities involving forest resources.

As for coordination by primary function of units, those engaging in resource use and management were most likely to regularly engage in coordination on matters involving forest resources (67 percent), followed by units responsible for assistance and enforcement activities (52 percent) (Table 7). For the five major functional areas considered, the proportion of units seldom or never coordinating on forest resources matters: 100 percent of entities with health and safety as a primary function, 73 percent with promotion and development functions, and 67 percent with primary functions involving environmental resource protection.

Table 7. Sub-Cabinet Level (first tier) Executive Branch Units of State Government Coordination of Activities Involving Use, Management or Protection of Forests in the North, by Primary Function and Extent of Coordination. 2000.

Primary Function of Units and Participation in Coordinating Activities	North (percent)	United States (percent)
Resource Use and Management (for example, agriculture, wildlife, minerals, wetlands, resource protection)		
Regularly	67	57
Seldom	28	32
Never	5	11
Total (percent)	100	100
Number of Units	137	348
Assistance and Enforcement (for example, planning, budgeting, enforcement, legal counsel, information management)		
Regularly	52	34
Seldom	27	37
Never	21	29
Total (percent)	100	100
Number of Units	85	209
Promotion and Development (for example, tourism, tax policy, transportation, economic development)		
Regularly	27	22
Seldom	39	40
Never	34	38
Total (percent)	100	100
Number of Units	52	106
Health and Safety (for example, conditions of employment, public health and welfare)		
Regularly	0	6
Seldom	80	33
Never	20	61
Total (percent)	100	100
Number of Units	5	18
Environmental and Resource Protection (for example, chemical abatement, waste management, air and water pollutants, energy conservation)		
Regularly	33	35
Seldom	37	32
Never	30	33
Total (percent)	100	100
Number of Units	60	136

Note: Information about first tier units includes respondent judgements about coordination of some cabinet level units which often have responsibilities and administrative functions similar to many first tier units.

Approach to Coordination

Coordinating activities can take various forms, none of which captured a plurality of Northern state forester judgements that they are very effective (Table 8). Even though half consider informal inter-agency gatherings (such as leadership and staff meetings) and joint statements and declarations (such as memorandums of agreement) as very effective approaches, and equal number of state foresters consider the same mechanisms to be of limited effectiveness or not effective. Dominating opinion that they are limited or not effective are centralized information systems, joint budgetary commitments, and formal administrative mechanisms such as boards, councils or commissions. The disfavor with

joint budgetary commitment and centralized information systems if further highlighted by the fact they are they are not used as coordinating mechanisms in some states.

Table 8. Coordination Mechanisms Used by State Government Executive Branch Authorities Influencing the Use, Management and Protection of Forests in the North, by Type of Mechanism and Effectiveness. 2000-2001.

Coordinating Mechanisms	Effectiveness of Mechanism (percent of respondents)		
	Very Effective	Limited or Not Effective	Not Used
• Informal inter-agency gatherings (for example, leadership and staff meetings)	50 [10]	50 [10]	0
• Joint statements and declarations (for example, memorandums of agreement)	50 [10]	50 [10]	0
• Formal administrative mechanisms (for example, a committee, board, council, commission)	40 [8]	60 [12]	0
• Joint budgetary commitments (for example, common budget line items)	40 [8]	45 [9]	15 [3]
• Multi-agency policy, plan and review process (for example, review of environmental impact statements)	35 [7]	60 [12]	5 [1]
• Centralized information management system (for example, resource information inventories)	20 [4]	70 [14]	10 [2]

Note: Numbers in brackets are number of states.

Coordination of programs and activities focused on forests can confront a variety of obstacles. Six of ten state foresters in the North identified inadequate time and resources as a very important factor detracting from agency involvement in coordination, with disinterest in coordination by one or more units of government a close second (half of state foresters) (Table 9). As for what promotes successful coordination, 85 percent of the region's state forests indicated that a legal requirement for coordination was a very important prod to coordination among agencies (Table 10). An equal portion of state foresters cited informal personal contacts among different agency staffs or agency leadership requiring or encouraging coordination as very important factors promoting to coordination (65 percent each). The existence of a formal coordinating authority (such as a board or commission) or the location of a state agency in state government's overall structure (such as cabinet versus subcabinet level), were both viewed as limited in their contribution to the promotion of coordination on matter involving forests and their management.

Table 9. Factors Detracting from Coordination of State Government Executive Branch Authorities

Influencing the Use, Management and Protection of Forests in the North, by Factor and Importance. 2000-2001.

Factors Detracting from Coordination	Importance of Factor (percent of respondents)		
	Very Important	Somewhat Important	Little or No Importance
• Inadequate time and resources	60 [12]	40 [8]	0
• Disinterest of one or more units of government	50 [10]	45 [9]	5 [1]
• Unequal influence or power among units	35 [7]	40 [8]	25 [5]
• Inadequate legal authorities or directives	30 [6]	45 [9]	25 [5]
• Limited understanding of other unit's responsibilities	25 [5]	75 [15]	0
• Historical suspicion and skepticism of some units	25 [5]	35 [7]	40 [8]
• Resistance by some resource professionals	25 [5]	70 [14]	5 [1]
• Client groups' resistance to coordination initiatives	15 [3]	40 [8]	45 [9]
• Fragmented federal agencies and programs	15 [3]	40 [8]	45 [9]
• Unclear benefits of efforts to coordinate	15 [3]	65 [13]	20 [4]
• Lack of formal coordinating mechanisms (for example, a committee, board, council, commission)	15 [3]	35 [7]	50 [10]
• Lack of a common information or knowledge base	10 [2]	65 [13]	25 [5]
• Physical isolation from other units of government	0	50 [10]	50 [10]

Note: Numbers in brackets are number of states.

Table 10. Factors Contributing to Coordination of State Government Executive Branch Authorities Influencing the Use, Management and Protection of Forests in the North, by Factor and Importance. 2000-2001.

Factors Contributing to Coordination	Importance of Factor (percent of respondents)		
	Very Important	Somewhat Important	Little or No Importance
• Legal requirements to coordinate	85 [17]	10 [2]	5 [1]
• Informal, personal contacts among agency staffs	65 [13]	30 [6]	5 [1]
• Leadership requires or encourages coordination	65 [13]	30 [6]	5 [1]
• Shared responsibility for program implementation	60 [12]	35 [7]	5 [1]
• Seek expertise residing in another agency	50 [10]	50 [10]	0
• Citizen or legislative pressure to coordinate	45 [9]	45 [9]	10 [2]
• Required for participation in certain federal programs	45 [9]	40 [8]	15 [3]
• Common data bases need to be shared	35 [7]	55 [11]	10 [2]
• Organizational location of an agency in state government (for example, department versus lower level position)	25 [5]	40 [8]	35 [7]
• Existence of formal coordinating mechanisms (for example, a committee, board, council, commission)	5 [1]	65 [13]	30 [6]

Note: Numbers in brackets are number of states.

SUMMARY OF CONDITIONS

Although compelling reasons have been set forth for establishing more holistic approaches to sustaining the physical attributes of geographically large forest ecosystems, attention has yet to be focused on establishing and implementing a complementary organizational landscape composed of integrated and coordinated public agencies and programs. Of important concern is what legal and political circumstances promote bureaucratic fragmentation? Do patterns of dispersed agencies encourage fragmentation of forest ecosystems? And how might government organizational patterns be better matched with the physical characteristics of large forest ecosystems? These are important and demanding questions. Although only a beginning toward getting some answers, the results of our assessment of state conditions in the North suggests the following.

- State agencies affecting forest conditions are located in virtually all sectors (horizontally) and levels (vertically) of state government, with some states having an especially rich assortment of forestry affecting agencies.
- A state's lead forestry agency is often only a small piece in the puzzle of state agencies affecting forests, with lead agencies in some states sharing forestry responsibilities with several agencies that have substantial influence over forests.
- State agencies affecting forests engage primarily in forest resource use and management activities, yet some state agencies can substantially affect forest conditions by aggressively implementing their responsibility for fisheries and wildlife, water pollutant management, and parks and recreation.
- Consequences of dispersed state agency responsibility for forests are many and generally adverse, with public confusion over agency roles and lack of integrated resource management being of paramount concern.
- Coordination among state agencies affecting forest conditions is modest and takes many forms, with informal inter-agency gatherings and joint statements and declarations being most common and most useful. Joint budgetary commitments and centralized information management systems are viewed with disfavor as approaches to coordination.

LITERATURE CITED

Bardach, E. 1998. *Getting Agencies to Work Together*. Brookings Institution Press: Washington, D.C.

Cortner, H. J., M. A. Shannon, M. G. Wallace and others. 1996. *Institutional Barriers and Incentives for Ecosystem Management: A Problem Analysis*. Tech. Rep. PNW-GTR-354. Pacific Northwest Forest Experiment Station, Forest Service, U.S. Department of Agriculture: Portland, OR.

Ellefson, P. V., R. J. Moulton, and M. A. Kilgore. 2001. *Programs and Organizations Affecting the Use, Management and Protection of Forests: An Assessment of Agencies Located Across the Organizational Landscape of State Governments*. Department of Forest Resources, University of Minnesota: St. Paul, MN.

General Accounting Office. 1996. *Federal Land Management: Streamlining and Reorganizational Issues*. GAO/T-RCED-96-209. General Accounting Office: Washington, DC.

Grubb, W. N., and L. M. McDonnell. 1996. *Combating Program Fragmentation*. *Journal of Policy Analysis and Management* 15(2):252-270.

Haskel, E. H., and V. S. Price. 1973. *State Environmental Management: Case Studies of Organization in Nine States*. Praeger Publishers: New York, NY.

Jenks, S. S., and D. S. Wright. 1993. *An Agency-Level Approach to Change in the Administrative Functions of American State Governments*. *State and Government Review* 25(2): 78-86.

Jennings, E. T., and J. G. Ewalt. 1998. *Interorganizational Coordination, Administrative Consolidation, and Policy Performance*. *Public Admin. Review*. 58(5): 417-428.

Kilgore, M. A., and P. V. Ellefson. 1992. *Coordination of Forest Resource Policies and Programs: Evaluation of Administrative Mechanisms Used by State Governments*. MN Agric. Experiment Station Bulletin 598-1992. Department of Forest Resources, University of Minnesota: St. Paul, MN.

Lyons, W. E., and D. Lowery. 1989. *Government Fragmentation Versus Consolidation: Five Public-Choice Myths about How to Create Informed, Involved and Happy Citizens*. *Public Administration Review* 49(6):533-543.

Mandell, M. 1989. *Network Management: Strategic Behavior in the Public Sector*. P. 29-54. In: *Strategies for Managing Intergovernmental Policies and Networks* by R. W. Gage and M. P. Mandell (eds.). Praeger Publishers: New York, NY.

Meidinger, E. E. 1997. Organizational and Legal Challenges for Ecosystem Management. P. 361-379. In: *Creating a Forestry for the 21st Century: the Science of Ecosystem Management* by Kohm, K. A. and Franklin, J. F. (eds.). Island Press: Washington, D.C.

Rabe, B. G. 1986. *Fragmentation and Integration in State Environmental Management*. The Conservation Foundation: Washington, D.C.

Ringquist, E. J. 1993. *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution*. M. E. Sharpe Publishers: Armonk, NY.

Rogers, D. L., and D. A. Whetten. 1982. *Interorganizational Coordination: Theory, Research, and Implementation*. Iowa University Press: Ames, IA.

U. S. Department of Agriculture. 2002. *The Process Predicament: How Statutory, Regulatory and Administrative Factors Affect National Forest Management*. Forest Service: Washington, D.C.

Weiss, J. A. 1987. Pathways to Cooperation among Public Agencies. *Journal of Policy Analysis and Management* 7(1):94-117.

APPENDICES

Appendix Table 1. State Government Executive Branch Agencies Influencing the Use, Management or Protection of Forests in the North, by State and Executive Branch Unit. 2000.

Appendix Table 2. Cabinet-Level Executive Branch Units of State Government Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

Appendix Table 3. Sub-Cabinet Level (first tier) Executive Branch Units of State Government Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

Appendix Table 4. Sub-Cabinet Level (second tier) Executive Branch Units of State Government Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

Appendix Table 5. State Government Governing or Advisory Bodies to Executive Branch Units (all levels) Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

Appendix Table 6. Lead Forestry Agency in State Government in the North, by State and Organizational Location. 2000.

Appendix Table 7. State Government Executive Branch Units Influencing Use, Management or Protection of Forests in the North, by State, Unit Name and Key Resource and Demographic Characteristics. 2000.

Appendix Table 8. State Government Executive Branch Units Influencing Use, Management or Protection of Forests in the North, by Primary Function and Organizational Level. 2000.

Appendix Table 9. Executive Branch Units of State Government in the North Influencing Use, Management or Protection of Forests, by Primary Function and Organizational Level. 2000.

Appendix Table 10. Influence of Sub-Cabinet Level (first tier) Units of State Government (executive branch) over Use, Management or Protection of Forests in the North, by Extent of Influence. 2000.

Appendix Table 11. Influence of Governing-Advisory Body Units of State Government (executive branch) over Use, Management or Protection of Forests in the North, by State and Extent of Influence. 2000.

Appendix Table 12. Expected Future Number of State Executive Branch Units of Government Influencing the Use, Management or Protection of Forests and Desired Coordination Among State Executive Branch Units of Government on Matters Involving Forest Use, Management and Protection in the North, by State. 2000.

Appendix Table 13. Sub-Cabinet Level (first tier) Units of State Government (executive branch) Coordination of Activities Involving Use, Management or Protection of Forests in the North, by State and Extent of Coordination. 2000.

Appendix Table 14. Governing-Advisory Units of State Government (executive branch) Coordination of Activities Involving Use, Management or Protection of Forests in the North, by State and Extent of Coordination. 2000.

Appendix Table 15. Sub-Cabinet Level (first tier) Executive Branch Units of State Government Coordination Activities Involving Use, Management or Protection of Forests in the North, by Extent of Coordination and Sub-Category within Primary Function. 2000.

Appendix Table 1. State Government Executive Branch Agencies Influencing the Use, Management or Protection of Forests by State and Executive Branch Unit. 2000.

CONNECTICUT

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Economic and Community Development
 Division of Tourism
 Department of Environmental Protection
 Office of Commissioner
 Office of Urban and Community Ecology
 Greenways Assistance Center
 Natural Areas Preserves Program
 Office of Planning and Development
 Office of Environmental Review
 Bureau of Air Management
 Bureau of Waste Management
 Bureau of Water Management
 Division of Inland Water Resources
 Bureau of Outdoor Recreation
 Bureau of Natural Resources
 Division of Forestry
 Division of Fisheries
 Division of Wildlife
 Environmental and Geographic Information Center
 Office of Attorney General
 Department of Environment

Governing or Advisory Body to Executive Branch

Council on Environmental Quality

DELAWARE

Cabinet or Sub-cabinet Level Executive Branch

Department of Agriculture
 Section of Forest Service
 Department of Natural Resources and Environment
 Division of Air and Waste Management
 Division of Fish and Wildlife
 Division of Soil and Water Conservation
 Division of Water Resources
 Division of Parks and Recreation
 Economic Development Office (cabinet status)
 Office of Tourism
 Office of Attorney General
 Department and Agencies Group

Governing or Advisory Body to Executive Branch

None

Note: Identified are *state government organizations in the executive branch* of government whose policies and programs have influenced or are likely to (change, alter or modify) over the use, management and protection of forests. Information sources: *State Government We*, *State Government Organizational Charts* by Council of State Governments (1995); *National Association of State Foresters*, *State Administrative Officials Classified by Function* by Council of State Governments (1989); *2000 Conservation Directory*, *Environmental Organizations* by National Wildlife Federation (2000) and various state reports on forest, environmental and forest management programs. State foresters (or staff) reviewed and suggested corrections in lists for their state.

ILLINOIS

Cabinet or Sub-cabinet Level Executive Branch Units

Environment & Natural Resources Leadership Cabinet
Department of Agriculture
 Division of Natural Resources
 Bureau of Land and Water Resources
 Farm Development Authority
 Rural Bond Bank
Department of Commerce and Community Affairs
 Division of Business Development
 Division of Energy and Conservation
 Division of Tourism
Department of Natural Resources
 Office of Land Management and Education
 Division of Land Management
 Division of Education
 Office of Mines and Reclamation
 Division of Land Reclamation
 Office of Resource Conservation
 Division of Fisheries
 Division of Forest Resources
 Division of Natural Heritage
 Division of Wildlife Resources
 Watershed Management Section
 Wetlands and Environmental Restoration Program
 Section on Federal Aid and Special Funds
 Office of Reality and Environmental Planning
 Division of Energy and Environmental Planning
 Division of Natural Resource Review & Coordination
 Division of Planning
 Division of Reality
 Office of Scientific Research and Analysis
 Geological Survey
 Natural History Survey
 Office of Water Resources

 Division of Water Resource
Office of Attorney General
 Bureau of Environmental Crimes
Environmental Protection Agency
 Bureau of Air
 Bureau of Land
 Bureau of Water

Governing or Advisory Body to Executive Branch

Council on Forest Development (Division of Forest Resources)
Nature Preserves Commission (Division of Forest Resources)
Endangered Species Protection Board (Division of Forest Resources)
Pollution Control Board
Board of Natural Resources and Conservation (Division of Natural Resources)
Natural Resources Advisory Board (Department of Natural Resources)

INDIANA

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Commerce
Department of Environmental Management
 Office of Planning and Assessment
 Office of Pollution Prevention and Control
 Office of Water Management
 Office of Air Management
 Office of Land Quality
Department of Natural Resources
 Bureau of Management
 Division of Fish and Wildlife
 Bureau of Resource Regulation
 Division of Entomology and Plant Pathology
 Division of Soil Conservation

INDIANA (continued)

Division of Water
Division of Reclamation
Bureau of Land, Cultural and Recreation Resources
Division of Forestry
Division of Historic Preservation and Archaeology
Division of Land Acquisition
Division of Law Enforcement
Division of Nature Preserves
Division of Outdoor Recreation
Division of State Parks and Reservoirs
Department of Tourism
Office of Commissioner of Agriculture
Division of Natural Resources
Office of Attorney General
Division of General Counsel & Litigation
Section on Environment

Governing or Advisory Body to Executive Branch Units

Ethics Commission
Natural Resources Commission (Department of Natural Resources)
Natural Resources Foundation (Department of Natural Resources)
Rural Development Council
Water Quality Advisory Board (Office of Water Management)

IOWA

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture and Land Stewardship
Division of Soil Conservation
Bureau of Water Resources
Bureau of Financial Incentives Programs
Department of Economic Development
Division of Business Development

Division of Community and Rural Development
Division of Tourism
Department of Natural Resources
Division of Environmental Protection
Bureau of Air Quality
Bureau of Land Quality
Bureau of Water Quality
Division of Fish and Wildlife
Bureau of Fisheries
Bureau of Wildlife
Division of Forests and Prairies
Bureau of Forestry Services
Bureau of State Forest Management
Division of Parks, Recreation and Public Lands
Division of Waste Management Assistance
Division of Energy and Geological Resources
Bureau of Energy
Bureau of Geological Survey
Office of Attorney General
Division of Environmental and Agricultural Resources

Governing or Advisory Body to Executive Branch Units

Environmental Protection Commission (Department of Natural Resources)
Natural Resources Commission (Department of Natural Resources)
Preserves Advisory Board (Department of Natural Resources)
Soil Conservation District Committee (Division of Soil Conservation)

MAINE

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Administrative and Financial Services
Office of Geographic Information Services
Department of Agriculture
Office of Agriculture, Natural, and Rural Resources

MAINE (continued)

Department of Attorney General
Division of Natural Resources
Department of Conservation
Bureau of Forestry (Maine Forest Service)
Division of Forest Policy and Management
Division of Forest Health and Monitoring
Division of Forest Protection
Bureau of Land Use Regulation (Land Use Regulation Commission)
Bureau of Parks and Lands
Natural Resources Information and Mapping Center
Division of Natural Areas
Geological Survey
Department of Economic and Community Development
Office of Business Development
Office of Tourism
Office of Community Development
Department of Environmental Protection
Bureau of Air Quality
Bureau of Land and Water Quality
Bureau of Remediation and Waste Management
Department of Inland Fisheries and Wildlife
Bureau of Resource Management
Bureau of Information and Education
Department of Labor
Department of Professional and Financial Regulation
Office of Licensing and Registration (foresters)
Office of Licensing and Registration (arborists)
State Planning Office
Land for Maine's Future Board

Governing or Advisory Body to Executive Branch Units

Arborist's Examining Board (Office of Licensing and Registration)

Board of Environmental Protection (Department of Environmental Protection)
Board of Licensure for Professional Foresters and Registration
Board of Pesticides Control (Office of Agricultural Resources)
Board of Workers Compensation
Environmental Priorities Council
Land Use Regulation Commission
Maine Rural Development Council (Department of Community Development)
Natural Areas Advisory Board (Division of Natural Resources)

MARYLAND

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
Office of Resource Conservation
Agricultural Land Preservation Foundation
Department of Business and Economic Development
Division of Business Development
Division of Regional Development
Division of Tourism, Films and Arts
Office of Tourism Development
Department of the Environment
Air and Radiation Management Administration
Waste Management Administration
Water Management Administration
Environmental Permits Center
Department of Natural Resources
Chesapeake and Coastal Watershed Management
Division of Watershed Management
Division of Watershed Restoration
Division of Waterway Resources
Education, Bay Policy, & Groundwater Conservation Education

MARYLAND (continued)

- Resource Assessment Services
- Management Service
- Public Lands
 - Conservation Corps
 - State Forest and Park Service
 - Land and Water Conservation Service
 - Natural Resources Police Force
- Resource Management Service
 - Fisheries Service
 - Forest, Wildlife and Heritage Service
 - Forest Service
 - Forest Management Services
 - Forest Products Operators License
 - Forest Conservation Qualified Professional
 - Wildlife and Heritage Division
- Geological Survey
- Office of Attorney General
 - Division of Legal Counsel and Advice

Governing or Advisory Body to Executive Branch Units

- Agricultural Commission (Department of Agriculture)
- Chesapeake Bay Critical Area Commission (Department of Natural Resources)
- Commission on State Parks (State Forest and Park Service)
- Council on Ecosystem Management and Planning (Department of Natural Resources)
- Economic Development Commission (Department of Business and Economic Development)
- Environmental Trust
- Forestry Advisory Commission (Forest Service)
- Greenways Commission (Department of Natural Resources)
- Soil Conservation Committee (Department of Agriculture)
- Tourism Development Board (Division of Tourism, Films and Arts)

Geographic Information Systems Committee
Water Monitoring Council (Department of Natural Resources)
Wildlife Advisory Commission (Department of Natural Resources)

MASSACHUSETTS

Cabinet or Sub-cabinet Level Executive Branch Units

- Office of Attorney General
 - Division of Environmental Protection
- Executive Office of Environmental Affairs
 - Department of Environmental Management
 - Division of Administration
 - Office of Management
 - Division of Forests and Parks
 - Bureau of Forestry
 - Bureau of Recreation
 - Bureau of Fire Control
 - Division of Resource Conservation
 - Bureau Of Resource Conservation
 - Office Of Natural Resources
 - Office Of Water Resources
- Department of Environmental Protection
 - Bureau of Resource Protection
 - Bureau of Strategic Policy and Planning
- Department of Fisheries, Wildlife & Environmental Enforcement
 - Division of Fisheries and Wildlife
- Department of Food and Agriculture
 - Division of Agriculture
 - Bureau of Land Use
- Department of Economic Development
 - Office of Business Development
 - Office of Travel and Tourism
- Metropolitan District Commission
 - Division of Watershed Management

MASSACHUSETTS (continued)

Governing or Advisory Body to Executive Branch Units

Department of Environmental Management Advisory Board
(Department of Environmental Management)

MICHIGAN

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
 Division of Pesticide and Plant Pest Management
 Division of Environmental Stewardship
Department of Civil Service
 Employment Relation and Management Services
Department of Consumer and Industry Services
 Bureau of Commercial Services
 Division of Licensing (foresters)
 Bureau of Safety and Regulation (MIOSHA)
 Division of Energy
 Office of Fire Safety
 Public Services Commission
Department of Environmental Quality
 Division of Air Quality
 Division of Drinking Water and Radiological Protection
 Division of Environmental Assistance
 Division of Environmental Response
 Division of Land and Water Management
 Division of Surface Water Quality
 Division of Geological Survey
 Office of Special Environmental Projects
 Office of the Great Lakes
Department of Natural Resources
 Bureau of Finance and Operations Services
 Division of Human resources
 Division of Fisheries

Division of Wildlife
Division of Forest Management
Division of Parks and Recreation
Division of Land and Mineral Service
Division of Law Enforcement
Office of Field and Investigative Studies
Michigan Jobs Commission
 Business Development
 Travel Michigan
Office of Attorney General
 Division of Natural Resources

Governing or Advisory Body to Executive Branch Units

Board of Foresters (Bureau of Commercial Services)
Commission on Agriculture (Department of Agriculture)
Environmental Science Board
Natural Resources Commission (Department of Natural Resources)
Natural Resources Trust Fund Board (Department of Natural Resources)
Rural Development Council (Department of Agriculture)
Soil Conservation Committee (Department of Agriculture)
Water Resources Commission (Department of Natural Resources)
Waterways Commission (Department of Natural Resources)

MINNESOTA

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
Department of Commerce-Public Service
 Division of Trade and Economic Development
 Division of Energy
Department of Labor and Industry
Department of Natural Resources
 Division of Enforcement
 Division of Fisheries

MINNESOTA (continued)

Division of Wildlife
Division of Ecological Services
Division of Forestry
 Resource Management Section
 Resource Protection Section
 Minnesota Conservation Corps
Division of Lands and Minerals
Division of Parks and Recreation
Division of Waters
Bureau of Management Information Services
Trails and Waterways Unit
Department of Trade and Economic Development
 Division of Business and Community Development
 Office of Trade
 Office of Tourism
Minnesota Planning Agency
 Land Management Information Center
 Local Planning Assistance
Pollution Control Agency
 Division of Policy and Planning
 Division of Environmental Outcomes
 Research and Reporting
 Monitoring and Analysis
 Community and Customer Research
 Division of Administrative Services
 Information Services
Office of Attorney General
 Division of Environmental Investigations
 Division of Environmental Protection
Office of Environmental Assistance

Governing or Advisory Body to Executive Branch Units

Board of Water and Soil Resources
Citizens Board (Pollution Control Agency)

Environmental Quality Board (Minnesota Planning Agency)
Forest Resources Council

MISSOURI

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
Department of Conservation
 Division of Fisheries
 Division of Wildlife
 Division of Forestry
 Division of Protection
 Division of Outreach and Education
 Division of Planning
Department of Economic Development
 Division of Community Development
Department of Natural Resources
 Division of Energy
 Division of Environmental Quality
 Division of State Parks
 Division of Geology and Land Survey
 Environmental Improvement and Enforcement
 Authority
Office of Attorney General
 Division of Environmental Protection

Governing or Advisory Body to Executive Branch Units

Advisory Committee on Chip Mills (Department of Conservation)
Advisory Committee on Minority Environmental Quality (Department of Natural Resources)
Commission on Air Conservation (Department of Conservation)
Commission on Clean Water (Department of Conservation)
Commission on Hazardous Waste (Department of Conservation Resources)

MISSOURI (continued)

Commission on Hazardous Waste Management (Department of Natural Resources)
Commission on Land Reclamation (Department of Natural Resources)
Commission on Tourism (Rural Economic Development Council)
Conservation Commission (Department of Conservation)
Rural Economic Development Council (Rural Economic Development Council)
Soil and Water Districts Commission (Department of Natural Resources)

NEW HAMPSHIRE

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
 Division of Agriculture Development
 Division of Pesticide Control
Department of Environmental Services
 Division of Air Resources
 Division of Water
 Division of Waste Management
Department of Fish and Game
 Division of Inland Fisheries
 Division of Wildlife
 Division of Enforcement
 Division of Public Affairs
Department of Revenue Administration
 Forest Land Documented Stewardship Program
Department of Resources and Economic Development
 Division of Economic Development
 Office of Travel and Tourism Development
 Division of Forests and Lands
 Division of Parks and Recreation
 Natural Heritage Inventory Program

Office of State Planning
 Coastal Program
 Scenic and Cultural Byways Program
 State Data Center
Office of Attorney General
 Bureau of Environmental Protection

Governing or Advisory Body to Executive Branch

Advisory Committee on Resources & Economic Development
 (Department of Resources and Economic Development)
Board of Licensure and Certification
 Board of Licensure for Foresters
 Board of Certification for Natural Scientists
 Board of Licensure for Land Surveyors
Council on Natural Resources and Development
 Resources and Economic Development
Current Use Board (Department of Revenue)
Forest Advisory Board (Division of Forests and Wildlife)
Pesticide Control Board (Department of Agriculture)

NEW JERSEY

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
 Division of Rural Resources
Department of Commerce
 Office of Sustainable Businesses
 Office of Travel and Tourism
Department of Environmental Protection
 Division of Compliance and Enforcement
 Division of Environmental Regulation
 Division of Water Quality
 Division of Land Use Management
 Division of Fish and Wildlife
 Bureau of Freshwater Fisheries

NEW JERSEY (continued)

Bureau of Lands Management
Bureau of Wildlife Management
Bureau of Wildlife Education
Division of Parks and Forestry
Bureau of Forest Fire Management
Bureau of State Parks
New Jersey Forest Service
Division of Solid and Hazardous Waste
Geological Survey
Office of Attorney General

Governing or Advisory Body to Executive Branch Units

Board of Certified Tree Experts
Commerce and Economic Growth Commission (Department of
Commerce)
Community Forestry Council (New Jersey Forest Service)
Clean Air Council (Department of Environmental Protection)
Delaware River Basin Commission
New Jersey Pinelands Commission
Soil and Conservation Committee (Department of Agriculture)

NEW YORK

Cabinet or Sub-cabinet Level Executive Branch Units

Adirondack Park Agency
Department of Economic Development
Department of Environmental Conservation
Office of Water Quality and Environmental Remediation
Division of Environmental Remediation
Division of Water
Office of Air and Waste Management
Division of Air Resources
Division of Solid and Hazardous Materials

Office of Natural Resources
Division of Fish, Wildlife and
Division of Lands and Forest
Division of Mineral Resource
Office of Administration
Division of Environmental Pe
Office of Public Protection
Division of Forest Protection
Department of Public Service
Office of Energy Efficiency and Envir
Empire State Development Corporation
Office of Attorney General
Bureau of Environmental Protection
Office of Parks, Recreation and Historic Pres
Division of Land Management

Governing or Advisory Body to Executive Branch Units

Fish and Wildlife Management Board
Freshwater Wetlands Appeal Board
Soil and Water Conservation Committee (Dep
and Markets)

OHIO

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
Department of Development
Division of Business Assistance
Division of Tourism
Department of Natural Resources
Division of Parks and Recreation
Division of Forestry
Division of Geological Survey
Division of Natural Areas and Preser
Division of Mines and Reclamation

OHIO (continued)

Division of Real Estate and Land Management
Division of Soil and Water Conservation
Division of Water
Division of Wildlife
Division of Civilian Conservation Corps
Environmental Protection Agency
Division of Air Pollution Control
Division of Drinking and Ground Waters
Division of Environmental and Financial Assistance
Division of Hazardous Waste Management
Division of Surface Water
Office of Environmental Education
Office of Pollution Prevention
Office of Attorney General
Section on Environmental Enforcement

Governing or Advisory Body to Executive Branch Units

Advisory Council on Forestry (Division of Forestry)
Commission on Recreation and Resources (Department of Natural Resources)
Environmental Appeals Commission (Environmental Protection Agency)

PENNSYLVANIA

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
Bureau of Farmland Protection
Department of Community and Economic Development
Bureau of Tourism and Marketing
Bureau of Business Financing
Department of Conservation and Natural Resources
Bureau of Forestry

Bureau of Recreation and Conservation
Bureau of State Parks
Department of Environmental Protection
Bureau of Abandoned Mine Reclamation
Bureau of Air Quality
Bureau of Oil and Gas Management
Bureau of Mining and Reclamation
Bureau of Water Quality Protection
Bureau of Watershed Conservation
Bureau of Water Supply Management
Bureau of Land Recycling and Waste
Commission on Fish and Boats
Bureau of Fisheries
Commission on Game
Bureau of Land Management
Bureau of Wildlife Management
Historical and Museum Commission
Bureau of Historic Preservation
Office of Attorney General

Governing or Advisory Body to Executive Branch Units

Citizens Advisory Council (Department of Environmental Protection and Natural Resources Advisory Commission)
(Department of Conservation and Natural Resources)
Environmental Quality Board (Department of Environmental Protection)
Governor Green Government Council
Hardwoods Development Council (Department of Environmental Protection)
State Conservation Commission (Department of Environmental Protection)

RHODE ISLAND

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Environmental Management
Bureau of Policy and Administration

RHODE ISLAND (continued)

Office of Strategic Planning and Policy
Office of Planning and Development
Bureau of Environmental Protection
Office of Technical and Customer Assistance
Office of Air Resources
Office of Water Resources
Office of Compliance and Inspection
Bureau of Natural Resources
Division of Parks and Recreation
Division of Enforcement
Division of Forest Environment
Division of Fish and Wildlife
Division of Coastal Resources
Economic Development Corporation
Division of Tourism
Office of Attorney General

Governing or Advisory Body to Executive Branch Units

Water Resources Board
Coastal Resources Management Council

VERMONT

Cabinet or Sub-cabinet Level Executive Branch Units

Agency of Commerce and Community Development
Department of Agriculture, Food and Markets
Department of Tourism and Marketing
Department of Economic Development
Department of Public Service
Agency of Natural Resources
Department of Environmental Conservation
Department of Fish and Wildlife
Department of Forests, Parks and Recreation

Geological Survey
Commission on Conservation
Department of Finance and Budget
Division of Budget and Management
Economic Development Authority
Housing and Conservation Board
Office of Attorney General
Division of Public Protection

Governing or Advisory Body to Executive Branch Units

Endangered Species Committee (Agency of Natural Resources)
Forests, Parks and Recreation Board (Department of Forests, Parks and Recreation)
Fish and Wildlife Board (Department of Fish and Wildlife)
Governor's Snowmobile Council
Natural Resources Conservation Council
Solid Waste and Air Quality Variance Board
Trails and Greenways Council
Vermont Youth Conservation Corps Board (Department of Forests, Parks and Recreation)
Water Resources Board (Agency of Natural Resources)

WEST VIRGINIA

Cabinet or Sub-cabinet Level Executive Branch Units

Department of Agriculture
Soil Conservation Agency
Division of Marketing and Development
Department of Tax and Revenue
Division of Business Taxation
Division of Property Tax
Bureau of Commerce
Division of Forestry
Division of Tourism
Office of Development

WEST VIRGINIA (continued)

Bureau of the Environment
 Division of Environmental Protection
 Office of Air Quality
 Office of Environmental Enforcement
 Office of Environmental Remediation
 Office of Mining and Reclamation
 Office of Waste Management
 Office of Water Resources
Division of Natural Resources
 Section of Wildlife Resources
 Section of Fisheries
 Section of State Parks and Forests
Office of Abandoned Mine Lands & Reclamation
 Stream Restoration Program
Office of Attorney General
Office of Development
 Division of Business and Industrial Development
 Division of Small Business Development
Soil Conservation Agency
Water Development Authority

Governing or Advisory Body to Executive Branch Units

Board on Air Quality (Bureau of the Environment)
Board on Environmental Quality (Bureau of the Environment)
Board of Examiners
 Registration for Foresters
Board on Solid Waste Management (Bureau of the Environment)
Board on Surface Mines (Bureau of the Environment)
Commission on Tourism (Division of Tourism)

WISCONSIN

Cabinet or Sub-cabinet Level Executive Branch

Department of Agriculture Trade and Consumer Protection
 Bureau of Plants, Insects and Diseases
Department of Commerce
 Division of Economic Development
Department of Natural Resources
 Division of Administration and Technical Services
 Bureau of Enterprise Information Systems
 Application
 Division of Air and Waste
 Bureau of Air Management
 Division of Customer Assistance and Complaint Resolution
 Bureau of Communication and Public Affairs
 Bureau of Community Finance
 Division of Enforcement and Science
 Bureau of Law Enforcement
 Bureau of Integrated Sciences
 Division of Forestry
 Division of Land
 Bureau of Endangered Resources
 Bureau of Facilities and Land Management
 Bureau of Parks and Recreation
 Bureau of Wildlife Management
 Division of Water
 Bureau of Drinking Water and Sanitation
 Bureau of Watershed Management
Department of Revenue
 Division of State and Local Finances
Department of Tourism
Office of Attorney General

Governing or Advisory Body to Executive Branch

WISCONSIN (continued)

Board of Agriculture Trade and Consumer Protection (Department of
Agriculture Trade and Consumer Protection)

Board of Environmental Education (Department of Natural
Resources)

Board of Land and Water Conservation (Department of Agriculture
Trade and Consumer Protection)

Board of Natural Resources (Department of Natural Resources)

Conservation Corps Board (Conservation Corps)

Council on Forestry (Division of Forestry)

Land Council (Office of Land Information Services)

Appendix Table 2. Cabinet-Level Executive Branch Units of State Government Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

State	Cabinet Level Unit Name and Number of Units					Total
	Agency	Commission	Department	Office	Other	
Connecticut			2	1		3
Delaware			2	2		4
Illinois	1		3	1	1	6
Indiana			4	2		6
Iowa			3	1		4
Maine			9			9
Maryland			4	1		5
Massachusetts				2		2
Michigan			5	1	1	7
Minnesota	2		5	2		9
Missouri			4	1		5
New Hampshire			5	2		7
New Jersey			3	1		4
New York	1		3	2	1	7
Ohio	1		3	1		5
Pennsylvania		3	4	1		8
Rhode Island			1	1	1	3
Vermont	2	1	1	1	2	7
West Virginia	1		2	3	4	10
Wisconsin			5	1		6
Region Total	8	4	68	27	10	117
U.S. Total	14	22	224	61	35	356

Note: Other units are: Illinois Environment and Natural Resources Cabinet; Michigan Jobs Commission; New York Empire State Development Corporation; Rhode Island Economic Development Corporation; Vermont Economic Development Authority; Vermont Housing and Conservation Board; West Virginia Bureau of Commerce; West Virginia Bureau of Environment; West Virginia Division of Natural Resources; West Virginia Water Development Authority.

Appendix Table 3. Sub-Cabinet Level (first tier) Executive Branch Units of State Government Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

State	Sub-Cabinet Level (first tier) Unit Name and Number of Units										Total
	Department	Division	Bureau	Office	Program	Section	Service	Survey	Unit	Other	
Connecticut	1	1	5	1						1	9
Delaware	1	5		1		1					8
Illinois		4	5	6						2	17
Indiana		2	3	5							10
Iowa		11									11
Maine		1	8	7						2	18
Maryland		4		1			3	1		6	15
Massachusetts	5	1									6
Michigan		18	3	4		2				2	29
Minnesota		16	1	2					1	2	22
Missouri		12								1	13
New Hampshire		12	1		3					1	17
New Jersey		8		2				1			11
New York		1	1	6							8
Ohio		17		2		1					20
Pennsylvania			18								18
Rhode Island		1	3								4
Vermont	7	2									9
West Virginia		8		1	1	3				1	14
Wisconsin		9	1					1			11
Region Total	14	133	49	38	4	7	3	3	3	18	272
U.S. Total	37	403	59	65	22	8	8	4	3	43	652

Note: Other units are: Connecticut Environmental and Geographic Information Center; Illinois Farm Development Authority; Illinois Rural Bond Bank; Maine Natural Resources Mapping Center; Maine Land for Maine's Future Board; Maryland Agricultural Land Preservation Foundation; Maryland Air and Radiation Management Administration; Maryland Waste Management Administration; Maryland Water Management Administration; Maryland Environmental Permits Center; Maryland Public Lands; Maryland Geological Survey; Michigan Business Development; Michigan Travel Michigan; Minnesota Land Management Information Center; Minnesota Local Planning Assistance; Missouri Environmental Improvement and Energy Resources Authority; New Hampshire State Data Center; West Virginia Soil Conservation Agency.

Appendix Table 4. Sub-Cabinet Level (second tier) Executive Branch Units of State Government

Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

State	Sub-Cabinet Level (second tier) Unit Name and Number of Units				Total
	Bureau	Division	Office	Other	
Connecticut		4	3	2	9
Delaware					
Illinois		12		5	17
Indiana		12			12
Iowa	11				11
Maine		4		1	5
Maryland		3	1	8	12
Massachusetts	2	4	2		8
Michigan		1			1
Minnesota				4	4
Missouri					
New Hampshire			1		2
New Jersey	6			1	7
New York		9			9
Ohio					
Pennsylvania					
Rhode Island	5		6		11
Vermont					
West Virginia			6		6
Wisconsin	12				12
Region Total	36	49	19	22	126
U.S. Total	53	91	22	31	197

Note: Other units are: Connecticut Natural Areas Preserve Program, Office of Commissioner, Department of Environmental Protection; Connecticut Greenways Assistance Center, Office of Commissioner, Department of Environmental Protection; Illinois Watershed Management Section, Wetlands and Environmental Protection Program, and Section on Federal Aid and Special Funds of the Office of Resource Conservation; Illinois Geological Survey and Illinois Natural History Survey of the Office of Scientific Research and Analysis; Maine Geological Survey; Maryland Education, Bay Policy and Growth Management, and Resource Assessment Services of Chesapeake and Coastal Watershed Services; Maryland Conservation Corps, State Forest and Park Service, Land and Water Conservation Service, and Natural Resources Police Office of the Department of Natural Resources; Maryland Fisheries Service and Forest, Wildlife and Heritage Service of Department of Natural Resources; Minnesota Research and Reporting, Monitoring and Analysis, Community and Customer Research, and Information Service of the Pollution Control Agency; New Hampshire Natural Heritage Inventory Program; New Jersey Forest Service.

Appendix Table 5. State Government Governing or Advisory Bodies to Executive Branch Units (all levels) Influencing Use, Management or Protection of Forests in the North, by State and Unit Name. 2000.

State	Governing or Advisory Body Name Number of Bodies					Total
	Board	Council	Committee	Commission	Other	
Connecticut		1				1
Delaware						
Illinois	4	1		1		6
Indiana	1	1		2	1	5
Iowa	1		1	2		4
Maine	6	2		1		9
Maryland	1	2	2	7	1	13
Massachusetts	1					1
Michigan	3	1	1	4		9
Minnesota	3	1				4
Missouri		1	2	8		11
New Hampshire	4	1	1			6
New Jersey	1	2		4		7
New York	2		1			3
Ohio		1		2		3
Pennsylvania	1	3	1	1		6
Rhode Island	1	1				2
Vermont	5	3	1			9
West Virginia	5			1		6
Wisconsin	5	2				7
Region Total	44	23	10	33	2	112
U.S. Total	92	38	23	92	3	248

Note: Other units are: Indiana Natural Resources Foundation (Department of Natural Resources); Maryland Environmental Trust; and Kentucky Agricultural Water Quality Authority (Department of Agriculture).

Appendix Table 6. Lead Forestry Agency in State Government in the North, by State and

Organizational Location. 2000.

Region and State	Executive Branch Level of State Government				Independent Governing Body (Board, Commission)	State University System
	Cabinet-Level	Sub-Cabinet Level: First Tier	Sub-Cabinet Level: Second Tier	Sub-Cabinet Level: Third or Lower Tier		
Connecticut			•			
Delaware		•				
Illinois			•			
Indiana			•			
Iowa			•			
Maine		•				
Maryland				•		
Massachusetts				•		
Michigan		•				
Minnesota		•				
Missouri		•				
New Hampshire		•				
New Jersey			•			
New York			•			
Ohio		•				
Pennsylvania		•				
Rhode Island			•			
Vermont		•				
West Virginia		•				
Wisconsin		•				
Region Total	0	11	7	2	0	0
U. S Total	1	29	8	2	5	5

Appendix Table 7. State Government Executive Branch Units Influencing Use, Management or Protection of Forests in the North, by State, Unit Name and Key Resource and Demographic Characteristics. 2000.

State	Organizational Level & Number of Units			Resource-Demographic Characteristic				
	Cabinet Units	Governing or Advisory Units	Total Units	Forest Area	Population	State-Local Government Units	State-Local Government Expenditures	Urban-Rural Setting
Connecticut	21	1	22	1863	3274	583	19797	0.604
Delaware	12	0	12	389	744	336	4218	0.730
Illinois	40	6	46	4294	12045	6835	59756	0.846
Indiana	28	5	33	4501	5899	3198	24272	0.649
Iowa	26	4	30	2050	2862	1876	13467	0.606
Maine	32	9	41	17711	1244	832	6006	0.446
Maryland	32	13	45	2701	5135	420	24711	0.813
Massachusetts	16	1	17	3264	6147	861	36639	0.843
Michigan	37	9	46	19335	9817	2775	49070	0.705
Minnesota	35	4	39	16796	4725	3501	27891	0.699
Missouri	18	11	29	14047	5439	3416	21614	0.687
New Hampshire	26	6	32	4955	1185	575	5192	0.510
New Jersey	22	7	29	1991	8115	1421	49032	0.891
New York	24	3	27	18581	18175	3413	145338	0.843
Ohio	25	3	28	7855	11209	3597	55041	0.741
Pennsylvania	26	6	32	16905	12001	5070	60353	0.689
Rhode Island	18	2	20	409	988	119	5582	0.860
Vermont	17	9	26	4607	591	691	2905	0.322
West Virginia	30	6	36	12108	1811	704	8437	0.361
Wisconsin	28	7	35	15963	5224	3059	26742	0.657

Notes: Forest area (1997) in thousand acres; population (1998) in thousands of persons; state and local government expenditures (1996) in millions of dollars; and urban-rural setting is ratio of urban to total population. Source: U.S. Census Bureau 1999, and USDA-Forest Service 2001.

Appendix Table 8. State Government Executive Branch Units Influencing Use, Management or

Protection of Forests in the North, by Primary Function and Organizational Level. 2000.

Organizational Level	Primary Function of Entity or Governing-Advisory Body (percent)					
	Resource Use and Management	Assistance and Enforcement	Promotion and Development	Health and Safety	Environmental and Resource Protection	Total
Cabinet Level	36	25	24	3	12	100
Sub-Cabinet Level First Tier	37	26	15	1	21	100
Advisory or Governing Bodies	54	13	11	1	21	100

Appendix Table 9.Executive Branch Units of State Government in the North Influencing Use, Management or Protection of Forests, by Primary Function and Organizational Level. 2000.

Primary Function	Cabinet or Sub-Cabinet Level Executive Branch Units			Governing or Advisory Bodies to Executive Branch Units
	Cabinet Level	Sub-Cabinet Level First Tier	Sub-Cabinet Level Second Tier	
Resource Use and Management				
Agriculture, Range	15	4	1	2
Conservation, Natural Resources	18	9	1	13
Fisheries, Wildlife	4	20	14	5
Forests, Forestry	-	14	12	12
Mines, Minerals, Reclamation	1	6	4	2
Nature Preserves, Historical Heritage	1	2	6	3
Parks, Recreation	1	13	6	4
Public Land, Real Estate	-	3	5	-
Resource Protection (fire, insects, diseases)	-	3	3	1
Soil Conservation	1	4	2	8
Water, Watersheds, Wetlands	1	11	9	5
Other	1	11	5	6
Total	43	100	68	61
Assistance and Enforcement				
Administration, Personal, Operations	2	5	2	-
Information, Information Management	-	7	7	2
Education, Fiscal Assistance, Public Affairs	-	13	7	2
Law, Legal Counsel	20	12	1	-
Occupational Licensing	1	4	-	4
Planning, Budgeting, Review, Analysis	4	9	8	2
Regulation, Permits, Enforcement	-	10	7	2
Other	2	10	3	3
Total	29	70	35	15
Promotion and Development				
Economic Development, Business Promotion	22	25	2	8
Taxation, Revenue Collection	3	3	-	1
Tourism	2	13	3	3
Transportation, Communication	-	-	-	-
Other	1	1	-	-
Total	28	42	5	12
Health and Safety				
Public Health	-	-	-	-
Working Conditions	3	2	-	1
Other	-	1	-	-
Total	3	3	-	1
Environmental and Resource Protection				
Air Quality, Pollutant Management	-	12	4	3
Energy Conservation	1	7	2	-
Environmental Quality, Protection, Management	12	9	-	12
Waste Management, Recycling	-	9	2	3
Chemical and Pesticide Abatement	-	2	3	1
Water Quality, Pollutant Management	-	12	5	2
Other	1	6	2	2
Total	14	57	18	23
REGION TOTAL	117	272	126	112

Note: Some units recorded more than once because of multiple functions.

Appendix Table 10. Influence of Sub-Cabinet Level (first tier) Units of State Government (executive branch) over Use, Management or Protection of Forests in the North, by Extent of Influence. 2000.

State	Cabinet Level Units (first tier)				
	Number of Units	Number of Units by Extent of Influence over Forests			
		Substantial	Moderate	Little	Virtually None
Connecticut	12	3	5	2	2
Delaware	8	1	1	4	2
Illinois	28	9	15	4	0
Indiana	21	7	11	1	2
Iowa	11	4	4	3	0
Maine	19	1	5	7	6
Maryland	16	3	6	4	3
Massachusetts	15	3	7	4	1
Michigan	29	2	10	13	4
Minnesota	24	3	9	7	5
Missouri	14	0	2	12	0
New Hampshire	17	4	6	7	0
New Jersey	11	5	3	3	0
New York	15	2	8	5	0
Ohio	21	3	9	5	4
Pennsylvania	18	9	7	2	0
Rhode Island	13	1	2	5	5
Vermont	13	3	4	3	3
West Virginia	22	5	12	5	0
Wisconsin	12	1	1	10	0
Region Total	339	69	127	106	37
U. S. Total	817	177	284	236	120

Note: Information about first tier units includes respondent judgements about the influence of some cabinet level units which often have responsibilities and administrative functions similar to many first tier units.

Appendix Table 11. Influence of Governing-Advisory Body Units of State Government (executive branch) over Use, Management or Protection of Forests in the North, by State and Extent of Influence. 2000.

State	Governing-Advisory Bodies				
	Number of Units	Number of Units by Extent of Influence over Forests			
		Substantial	Moderate	Little	Virtually None
Connecticut	1	0	0	0	1
Delaware	0	0	0	0	0
Illinois	6	5	0	1	0
Indiana	5	1	3	1	0
Iowa	4	3	1	0	0
Maine	9	0	3	3	3
Maryland	13	1	1	7	4
Massachusetts	1	1	0	0	0
Michigan	9	1	5	2	1
Minnesota	4	2	2	0	0
Missouri	11	0	3	6	2
New Hampshire	6	1	5	0	0
New Jersey	7	1	4	2	0
New York	3	0	0	3	0
Ohio	3	0	2	1	0
Pennsylvania	6	0	2	4	0
Rhode Island	2	0	0	2	0
Vermont	9	0	6	2	1
West Virginia	6	1	1	4	0
Wisconsin	7	2	0	5	0
Region Total	112	19	38	43	12
U. S. Total	248	53	96	72	27

Appendix Table 12. Expected Future Number of State Executive Branch Units of Government Influencing the Use, Management or Protection of Forests and Desired Coordination Among State Executive Branch Units of Government on Matters Involving Forest Use, Management and Protection in the North, by State. 2000.

State	Extent of Current Coordination Among Units			Desirability of Further Coordination Among Units		Number of Units Influencing Forest Conditions in 20 Years		
	Loosely	Generally	Closely	Desirable but Not Achievable in Practice	Desirable and Practicable in Near Future	Fewer	Same	More
Connecticut	•			•		•		
Delaware		•			•		•	
Illinois		•			•			•
Indiana		•		•				•
Iowa		•			•		•	
Maine	•			•		•		
Maryland		•		•			•	
Massachusetts	•			•				•
Michigan	•			•			•	
Minnesota		•			•		•	
Missouri	•			•			•	
New Hampshire		•			•			•
New Jersey	•				•		•	
New York	•			•		•		
Ohio	•				•			•
Pennsylvania		•			•		•	
Rhode Island			•	•		•		
Vermont		•		•			•	
West Virginia		•			•		•	
Wisconsin		•		•			•	•
Region Total	8	11	1	11	9	4	10	6
U. S. Total	24	21	5	26	24	12	23	15

Appendix Table 13. Sub-Cabinet Level (first tier) Units of State Government (executive branch) Coordination of Activities Involving Use, Management or Protection of Forests in the North, by State and Extent of Coordination. 2000.

State	Cabinet Level Units (primarily first tier)				
	Number of Units	Number of Units Coordinating by Extent of Coordination			
		Regularly	Seldom	Never	Unknown
Connecticut	12	1	7	4	0
Delaware	8	1	3	4	0
Illinois	28	20	2	0	6
Indiana	21	12	2	7	0
Iowa	11	8	1	2	0
Maine	19	7	8	4	0
Maryland	16	5	5	6	0
Massachusetts	15	10	5	0	0
Michigan	29	13	12	0	4
Minnesota	24	18	4	2	0
Missouri	14	7	5	2	0
New Hampshire	17	12	5	0	0
New Jersey	11	3	4	4	0
New York	15	2	7	4	2
Ohio	21	4	6	8	3
Pennsylvania	18	9	7	2	0
Rhode Island	13	1	4	8	0
Vermont	13	5	4	2	2
West Virginia	22	14	7	1	0
Wisconsin	12	7	5	0	0
Region Total	339	159	103	60	17
U. S. Total	817	319	243	176	79

Note: Information about first tier units includes respondent judgements about the influence of some cabinet level units which often have responsibilities and administrative functions similar to many first tier units.

Appendix Table 14. Governing-Advisory Units of State Government (executive branch) Coordination of Activities Involving Use, Management or Protection of Forests in the North, by State and Extent of Coordination. 2000.

State	Governing-Advisory Bodies				
	Number of Units	Number of Units Coordinating by Extent of Coordination			
		Regularly	Seldom	Never	Unknown
Connecticut	1	0	1	0	0
Delaware	0	0	0	0	0
Illinois	6	5	0	0	1
Indiana	5	1	2	2	0
Iowa	4	3	1	0	0
Maine	9	2	6	1	0
Maryland	13	2	7	4	0
Massachusetts	1	1	0	0	0
Michigan	9	1	6	2	0
Minnesota	4	3	1	0	0
Missouri	11	2	7	2	0
New Hampshire	6	4	2	0	0
New Jersey	7	3	2	2	0
New York	3	0	2	1	0
Ohio	3	0	0	3	0
Pennsylvania	6	1	2	3	0
Rhode Island	2	0	1	1	0
Vermont	9	2	4	0	3
West Virginia	6	2	3	1	0
Wisconsin	7	5	2	0	0
Region Total	112	37	49	22	4
U. S. Total	248	86	108	36	18

Appendix Table 15. Sub-Cabinet Level (first tier) Executive Branch Units of State Government Coordination Activities Involving Use, Management or Protection of Forests in the North, by Extent of Coordination and Sub-Category within Primary Function. 2000.

Primary Function	Participation in Coordinating Activities			Total
	Regularly	Seldom	Never	
Resource Use and Management				
Agriculture, Range	1	5	2	8
Conservation, Natural Resources	3	5	1	9
Fisheries, Wildlife	21	7	-	28
Forests, Forestry	19	-	-	19
Mines, Minerals, Reclamation	4	4	1	9
Nature Preserves, Historical Heritage	3	2	-	5
Parks, Recreation	11	5	1	17
Public Land, Real Estate	6	1	-	7
Resource Protection (fire, insects, diseases)	4	-	-	4
Soil Conservation	5	1	-	6
Water, Watersheds, Wetlands	9	5	1	15
Other	6	3	1	10
Total Units	92	38	7	137
Portion of Total Involvement (percent)	67	28	5	100
Assistance and Enforcement				
Administration, Personal, Operations	2	3	-	5
Education, Fiscal Assistance, Public Affairs	4	-	1	5
Information, Information Management	12	5	5	22
Law, Legal Counsel	9	2	6	17
Occupational Licensing	1	1	1	3
Planning, Budgeting, Review, Analysis	5	4	3	12
Regulation, Permits, Enforcement	9	3	1	13
Other	2	5	1	8
Total Units	44	23	18	85
Portion of Total Involvement (percent)	52	27	21	100
Promotion and Development				
Economic Development, Business Promotion	9	12	4	25
Taxation, Revenue Collection	4	-	4	8
Tourism	-	8	-	8
Transportation, Communication	-	-	10	10
Other	1	-	-	1
Total Units	14	20	18	52
Portion of Total Involvement (percent)	27	39	34	100
Health and Safety				
Public Health	-	1	-	1
Working Conditions	-	3	1	4
Other	-	-	-	-
Total Units	-	4	1	5
Portion of Total Involvement (percent)	0	80	20	100
Environmental and Resource Protection				
Air Quality, Pollutant Management	2	5	7	14
Energy Conservation	2	2	2	6
Environmental Quality, Protection, Management	1	2	-	3
Waste Management, Recycling	2	6	5	13
Chemical and Pesticide Abatement	4	1	-	5
Water Quality, Pollutant Management	8	4	2	14
Other	1	2	2	5
Total Units	20	22	18	60
Portion of Total Involvement (percent)	33	37	30	100

Note: Information about first tier units includes respondent judgments about coordination of some cabinet level units which often have responsibilities and administrative functions similar to many first tier units.