

**Boards, Commissions and Councils Engaged in  
Policy Development and Conflict Management  
Involving Forest Resources:  
A Review of State Government Structures in the  
United States**

by

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# Contents

	<u>Page</u>
Introduction.....	1
Objectives and Procedures.....	1
Boards, Commissions and Councils: General.....	2
History and Extent .....	3
Types and Establishment .....	3
Roles and Functions.....	5
Structure and Operation .....	6
Limitations and Effectiveness.....	8
Management and Conflict.....	10
Boards, Commissions and Councils: Forest Resources.....	10
Establishment and Frequency .....	10
Purpose and Function.....	12
Membership and Interests.....	13
Leadership and Decision Making .....	16
Finances and Staff.....	16
Issues Addressed.....	17
Future Conditions .....	18
Conflict Management.....	19
Effectiveness and Proficiency.....	22
Summary and Recommendations .....	24
Establishment, Design and Operation.....	25
Potential Research.....	27
Literature Cited .....	28
Appendix A: State Natural Resource-related Boards, Councils, and Commissions.....	31
Appendix B: State Forest Resource Boards, Councils, and Commissions.....	36
Appendix C: State Forest Resource Boards, Councils, and Commissions: Example Entities .....	37

## Tables

Table 1. State forest resource boards, commissions, committees and councils, by type and region, 2004.....	11
Table 2. Time period of establishment of forest resource entities, by region and type of entity, 2000-2004.....	12
Table 3. Function of forest resource entity, by region and type of entity, 2004.....	13
Table 4. Interest representation on forest resource entities, by category of interest, number of entities and region, 2004 .....	14
Table 5. Interest representation on forest resource entities, by category of interest, portion of total membership and region, 2004.....	15
Table 6. Forest resource issues addressed by forest resource entities from 2000 through 2004, by issue and region .....	18
Table 7. Member characteristics promoting forest resource entity's ability to constructively manage conflict, by region, 2004 .....	21
Table 8. Organizational and management characteristics promoting forest resource entity's ability to constructively manage conflict, by region, 2004.....	21
Table 9. Consequences of conflict on forest resource entity's performance by region, 2004.....	22
Table 10. Leadership judgment of forest resource entity effectiveness, by region and measure of effectiveness, 2004 .....	23
Table 11. Leadership judgment of forest resource entity operational problems, by region and measure of problem significance, 2004 .....	23
Table 12. Stakeholder support of actions taken by forest resource entity, by region and stakeholder group, 2004.....	24

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Calder M. Hibbard, Michael A. Kilgore and Paul V. Ellefson<sup>1</sup>

## **Introduction**

The growing proliferation of state government boards, commissions, councils and committees in the United States has heightened increased interest in their relevance and effectiveness as administrative structures. In the field of natural resources alone, over 375 such entities are known to exist (Appendix A). Unfortunately, research-based information focused on boards, commissions, and related structures is often incomplete and imperfect, conditions which have left public administrators and elected officials with meager evidence on which to make judgments regarding their establishment and subsequent management. Such an information void is especially troublesome, given that such entities are increasingly being promoted as venues for the management of political conflict. Focused on the making of better informed decisions, this review seeks to inform the forest resources community about the appropriateness and management of boards, commissions, councils and committees (hereafter, “entity” may refer individually or collectively to board, commission, council or committee).

## **Objectives and Procedures**

Public boards, commissions, and councils exist at local, regional, state, and federal levels and in many points within each level of government. These public entities have varying topical, geographical, and political concerns, and their programs and actions can have a wide range of consequences for various sectors of society. In an effort to more thoroughly understand the implications of such entities for the use and management of forest resources, a review was undertaken to determine more explicitly the characteristics of entities which function at the highest levels of state government (executive cabinet level or the level of a state’s lead forest resource agency) and which have responsibilities for addressing statewide interests in the use and management of forests. Acknowledged is that boards, commissions and councils focused on forest resources are often part of wider range of entities that focus on natural resources generally (see Appendix A for a partial listing, of which forest resource entities an important part).

The overall objective of the review was to secure a better understanding of the structure, administration, and effectiveness of state boards, commissions and councils that are engaged in

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the management of conflict involving the use, management, and protection of forest resources. Specifically, the objectives were to:

- Define the national landscape of state forest resource boards, commissions and councils. Specifically identify: function, structure, and operating characteristics; type and character of issues addressed; extent of involvement in managing conflict; and type and character of conflict management methods employed.
- Evaluate the operational effectiveness of state forest resource boards, commissions, and councils, especially regarding the management of conflict.
- Identify ways to improve the design and the ability of state forest resource boards, commissions, and councils to more effectively operate and manage conflict involving forest resources.

The objectives of the review were accomplished in four major stages, namely (1) extensive gathering of *information from relevant sources* of literature (including Agricola, Agris, Article First, Biological Abstracts, CAB Abstracts, Current Contents, General Reference Center Gold, GPO Access, LexisNexis, Ingenta, TREE CD) and from informed professionals in the field of organizational design and administration; (2) *implementation of a national survey* focused on 30 state forest resource boards, commissions and councils, seeking information about their structure and operation, types of issues addressed, and approaches to the management of conflict; (3) an *in-depth review and analysis of three example entities*, namely the California Board of Forestry and Fire Protection, the Minnesota Forest Resources Council, and the South Carolina Forestry Commission; and (4) an *analysis and synthesis of collected information*, with the intent of determining how forest resource boards, commissions and councils might be more appropriately designed and operated to undertake conflict management responsibilities. Criteria used to select entities for the national survey included, a principle focus on forests and forest resources, a statewide orientation of entity programs, a broad range of different policy and program initiatives, a diversity of entity sizes and structures, and a geographically well-distributed national assortment of entities. A more detailed description of the review's objectives and procedures can be found elsewhere (Hibbard 2006).

## **Boards, Commissions and Councils: General**

“Most of the affairs of American life are controlled or influenced by boards—in government, in business, and in the countless organizations and associations—by which people seek to achieve common purposes” (Houle 1989). The significance of this fact is great, yet it is often under- or unappreciated in the fields of governance and public administration. Such is especially true of public boards, commissions, and councils, of which very little is known their extent, purpose and operation (Mitchell 1997; Johnson 2003). Much of the theoretical foundations regarding boards, councils, and commissions involves the notion that “collective knowledge and deliberation are better suited” to overseeing an organization, program, or policy than oversight by a single individual (Forbes 1998). These entities—board, commissions and councils—are then “foremost, a voice from ownership to management,” regardless of their nature as a public, quasi-public, or private entity (Carver 2001).

## History and Extent

The first documented board in the North America was founded at Harvard University in year 1636 (Houle 1989), although other such entities commonly existed prior to the formation of the United States (Mitchell 1997). In response to an increase in state government functions and responsibilities, the late nineteenth and early twentieth century saw a vast increase in the number and type of such entities (Johnson 2003). Nelson (1982) suggests that this increase in number and variety was prompted as a means of disbursing the concentration of government power. Mitchell (1997) suggests that these bodies were created by reformists during the good government movement of the early twentieth century, incited by the idea that groups of citizens are better suited to pursue the public interest than elected officials or public administrators. It was thought that these newly created public bodies would aid in making the public sector more democratic and competent. Houle (1989) describes this period as a time when “government often seemed remote, essentially negative in character” and it was thought that for these reasons some matters should not be left up to government and were, in turn, relegated to public boards. As many of these entities were created in a reaction to corruption and concentrated power during the “progressive era” in the United States, it is noteworthy that the structure of these public bodies runs antithetical to the overriding themes of this movement: rationalization and centralization (Johnson 2003).

The twentieth century saw a marked proliferation of public boards, councils, and commissions (Brown 1955; Henry and Harms 1987; Carver 1990; Fox 2001) and were often referred to as the “fourth branch of government” (Henry and Harms 1987). Public executives, agencies, and legislatures increasingly employed these administrative structures to serve particular functions, such as channeling interest groups into policymaking activities and as a means of responding to changing state-federal relationships and responsibilities (Fox 2001, Fredericksen 1996). Haight and Ginger (2000) surmise that new state and federal laws; growing citizen activism; and changing professional values have combined to increase the influence boards, councils and commissions, especially in the fields of natural resource management. Although accurate and definitive numbers do not exist regarding the extent of public boards, councils, and commissions in the United States, some have made attempts to determine their extent. Henry and Harms (1987) identified 222 state established public boards in Virginia, with 68 having a statewide focus. Nationally, Houle (1989) estimated the existence of approximately 4.5 million boards in the United States, 71,319 of which were public boards. More recently, Balia and Wright (2001) identified approximately a thousand federal advisory committees, with 36,586 persons serving on them. Many of these federal advisory committees have been created or modified in response to the Federal Advisory Committee Act of 1972.

## Types and Establishment

“Governance structure emerge(s) as people in organizations strive to develop patterned ways in which to discover and articulate goals, select among means, cope with uncertainty and controversy generated both within and outside the organization, and foster legitimacy and commitment inside and outside the organization” (Hult and Walcott 1990). Public boards, councils, and commissions are one type of these governance structures which emerge from the aforementioned conditions. However, when these entities are created they differ in numerous and substantial ways. Brown (1955) acknowledges these differences by referring to these public

bodies as “creatures of circumstance”, differing in response to the type of problem they were created to face, type of leadership exerted, and type of external pressures brought upon them. Not only do these public bodies vary at their point of origin, but they are constantly changing in response to outside political, economic, and institutional frameworks (Fox 2001). As with non-profit boards, they are deeply influenced by these various contexts within which they operate (Ostrower and Stone 2003). Depending on their reason for origin and the various contexts which have influenced their operation since inception, public boards, commissions, and councils have a number of varying characteristics including type of entity, roles and functions, operational and structural features, among others.

There are a wide variety of boards, commissions, and councils associated with different types of organizations including government agencies, social service organizations, hospitals, universities, corporations, among others. Generally, these entities are grouped by their economic nature: for-profit boards, non-profit boards, and governmental entities. Carver (1990) notes that each type of entity has variable characteristics and that the significant differences between these three types is in the level of public scrutiny they receive, the extent to which they are governed by law, and the strength of their traditions. However, Drucker (1974) humorously reminds us that there are commonalities between these bodies, writing “there is one thing that all boards have in common regardless of legal position, they do not function.”

Some make a number of differentiations between types of entities. For example, Carver (1990) uses a classification scheme of boards differentiating by their position within their respective organization as follows: governing board (positioned at the top of the organization), advisory board (non-governing, may be positioned anywhere), line board (similar to governing board, but positioned elsewhere within the organization), and workgroup board (more informal, does its own work, no staff). Many states differentiate between types of public boards by function or statutory authority, for example Oregon specifies policy-making boards, advisory boards, licensing boards, and judgment boards, while Virginia specifies distinctions between supervisory boards, policy-making boards, and advisory boards.

Focusing on boards, commissions and related bodies in the forest resources sector, Kilgore and Ellefson (1992) found that the title given to a public body (board, commission, committee, or council) was often indicative of the function of these entities. For instance, forestry boards were found to have small memberships, a high degree of influence, and a focus on statewide policy development, whereas forestry committees tended to be informally established, have large memberships, and a more specific focus. Although the titles continue to be used, they are often less useful descriptors since the number of functions performed by such entities has changed (Ellefson et al. 2003). Dyer and Williams (1985) suggest but two major categories for boards, councils and commissions, namely advisory and governing. Suggested is that the latter can also be referred to as administrative or policy-making boards. Further complicating this landscape, Dyer and Williams (1985) note that governing boards themselves often have an advisory council or committee.

Public boards, councils and commissions have also been categorized with the aide of theories of public representation. Mitchell (1997) notes that these structures are quite varied, reflecting the “experimental character of American public administration,” and that public boards,

commissions, and councils were created for a multitude of reasons and vary because of efforts to experiment with differing approaches to governance. Four theories of public representation relating to these entities are suggested, namely trustee representation, delegate representation, status representation, and symbolic representation. Trustee representation presupposes that members of public entities will act in the public interest and that their actions will translate into the most effective and efficient policies. Delegate representation assumes that board members will act solely in the interest of those that appointed them. Status representation (recognizing the need for diverse perspectives) assumes that an appointee will act consistently with all other persons having characteristics similar to the appointee. Finally, symbolic representation presupposes that board, commission, or council members only exist to legitimize those decisions made by experts and top management. It is unlikely that any particular entity operates exclusively within any one of the a-for-mentioned categories, but typically operate under a combination thereof (Mitchel 1977).

Public boards, commissions, and councils are established for many reasons and are often accountable to a host of different authorities. Within a forest resources context, Kilgore and Ellefson (1992) found that most statewide forestry boards, commissions, committees, and councils were established by state law, with a few established in a more informal administrative manner. The most common reasons for establishment of forestry entities included a response to an environmental or natural resource issue, a result of recommendations from a legislative report, and recommendations from an independent commission. Of the 31 entities identified, 12 reported to the head of the state forestry agency, nine reported to the governor, seven to the state legislature, and three existed under a shared authority.

## Roles and Functions

Public boards, commissions, and councils play a wide variety of roles and perform a diverse set of functions, often to be broadly categorized as governing, policy-making, and advisory. Although. Statutory authority can often aid in determining which of these functions a particular board, commission, or council will perform, in reality, such authority often provides only a general guideline as “to where boards will go with their authority, there is a wide berth of destinations” (Henry and Harms 1987). Regarding workers’ compensation councils, Fox (2001) determined such councils to be involved in the entire policy development process, namely serving as gatekeepers to the legislature, facilitators of coalition formulation, forums for policy formulation, and providers of political cover for legislators.

Although boards, councils and commission often serve strictly in an advisory capacity, some serve action-oriented, governing functions, including reviewing and redirecting an agency’s mission; setting goals and developing strategic plans; developing and implementing specific programs and projects; establishing and assuring application of suitable business practices; evaluating established policies and programs; securing important resources (for example, funds, staff, materials); exercising fiduciary responsibilities (for example, establishing and approving budgets); authorizing and ensuring proper audits and inspections; promoting and advocating programs and their financing; developing community relationships and linkages; and evaluating agency policies and programs generally so as to ensure adherence to established directions and accountability for actions taken (Dyer and Williams 1985).

Boards, councils and commissions engage in many roles by design or in spite of design. Many of these roles are advantageous to certain parties, most often their creators, which are generally legislators or executive agencies. Emanating from either of these sources, public boards, commissions, and councils can be places to put political supporters, laboratories for generating new ideas, and means for generating or maintaining political support (Brown 1955; Henry and Harms 1987). From a public executive's standpoint, public boards, commissions, and councils can be utilized as a means of supporting desired legislative actions, a sounding post for agency ideas, or a place to make contacts and establish relationships (Brown 1955). From a legislative standpoint, the creation of a board, council or commission can help influence executive agency actions, minimize political risks, and aid in curbing strong or threatening administrators (Bala and Wright 2001; Brown 1955; Fox 2001).

Boards, councils and commissions can also serve important roles in connecting the public to governmental activities. They help executives and legislators gather interests, provide divergent viewpoints, channel interest group pressure, and absorb or shift criticism and blame (Bala and Wright 2001; Brown 1955; Dyer and Williams 1985; Fox 2001; Kilgore 1994; Price 1963). In bringing a number of interests together, these public entities also can serve as a forum for divergent interests to reach agreement and resolve conflicts (Brown 1955; Price 1963; Dyer and Williams 1985; Fox 2001). By serving as a forum for working through differences, boards, councils and commissions can also play a coordinating amongst different government agencies, (Kilgore and Ellefson 1992, Price 1963).

### Structure and Operation

Public boards, commissions, and councils vary considerably in their organizational structure, conditions which can have a direct implication for their operation and ultimate success. Fox (2001) identified a number of important structural features, of which membership composition, statutory authority, and assigned responsibilities appear to be paramount. Among other noteworthy structural characteristics are source and amount of funding, staffing patterns and requirements, member and staff leadership roles, and conflict management processes. With the exception of size of membership and its diversity, few of these characteristics have been examined in a definitive manner (Fox 2001).

The number and alignment of members assigned to a board, council or commission can be an especially important structural characteristic. Mitchell (1997) determined that as membership increases in size, there is an expansion in the number of viewpoints to be considered which in turn may slow an entity's ability to reach crucial decisions in a timely fashion. Such has suggested to some that entities "should be small enough to act as a deliberative body, yet large enough to carry out necessary responsibilities" (Houle 1989). After examining water monitoring councils, the US Environmental Protection Agency (2003) determined that "size should be determined by complexity of the job to be done and the number of people interested in the issue at hand." As for a specific ideal number of members, Mitchell (1997) found federal advisory committee membership should probably range from three to 49 members, while Kilgore and Ellefson (1992) suggest that forest resource related boards, councils, and commissions function best with five to 30 members. However, other examinations of membership size have concluded that a definitive pattern or optimum size for boards, councils and commissions is simply not discernable (Brown 1955; US Environmental Protection Agency 2003).

The diversity of interests represented on a board, council or commission is also an important structural characteristic. Most states have laws that encourage diversity of interests in such entities generally, although in 2001 only eight states had specific requirements for interest-based membership (Norman-Eady 2002). There is some evidence that over the past 50 years, diversity of interests represented on public boards, councils and commissions may have increased in some sectors. In the early 1960s, there existed little interest diversity on state fish and game boards (Price 1963), while today diversity of interest on such boards is often substantial. As for state forest resource boards and commissions, evidence also suggests a definite upward trend in the diversity of interests represented on such entities (Kilgore and Ellefson 1992). The availability of more diverse experiences and superior intellectual perceptions has been determined to be a positive result of greater diversity of interests on corporate boards. However, such benefits come with a cost, namely an increase in the level of conflict among members (Forbes and Milliken 1999).

In addition to structural characteristics, public boards, councils and commissions and councils have a number of common operational characteristics, including method of appointment, determination of leadership, method of decision-making, compensation of members, and length of member terms. Mitchell (1997) found that most (80 percent) public board members are nominated by a chief executive and subsequently approved (or disapproved) by a legislative body. In some cases, boards and members thereof, were established an appointed by legislative bodies. After examining 31 state forest resource boards, commissions, and councils, Kilgore and Ellefson (1992) determined that 29 of 31 entities examined relied on some form of an appointment process, whether it be appointments by the governor, state forester, or an agency or department head. The other two entities were populated by way of public election.

As with the appropriate membership for boards, councils and commissions, there seems to be no tangible rule regarding membership tenure. Suggested is that “tenure should be long enough to provide continuity of policy and practice, but short enough to secure constant freshness of viewpoint” (Houle 1989). Suggested is that this can be accomplished in a number of ways, including overlapping member terms (provide for continuity) and specified length of terms or limitations on the number of consecutive terms to be served (provide means for removing uninterested or unproductive members). For federal boards and commissions, Mitchell (1997) determined that member terms ranged from two to 14 years and that there was considerable variation in authority to reimburse member expenses and to compensate members for services rendered (ranging from none, to small stipend, to full-time salary). As for leadership selection, decision-making process, and budget and staffing considerations of boards, councils and commissions, little systematic attention has been focused on such operating characteristics.

Proper design and operation of public boards, councils, and commissions is critical to their effectiveness. Within such a context, a number of suggestions have been made (Carver 1990; Houle 1989; Mitchell 1997; Morrison and Bass 1996; Neu 1997), including: focus on strategic responsibilities, apply effective elements of teamwork, master small-group decision making, clearly define roles (authority, power, function) and relationships, establish dependable board-staff partnering arrangements, fittingly use board member time and energy, establish clear operational rules and procedures, assess and visibly respond to public concerns, periodically evaluate board performance, continuously develop staff management and leadership skills, and

systematically evaluate the implementation of policies and programs for which the board, council or commission is responsible.

### Limitations and Effectiveness

Although a public board, commission or council can be beneficial and can serve many important roles and functions, there exist a number of limitations and risks associated with their establishment and subsequent implementation. For example, one of the many reasons given for forming such an entity is to bring government and the general public closer together. In reality, members of boards and commissions tend to have self-servicing interests that may not reflect the broader interests of the general public (Houle 1989). In examining public commissions, Price (1963) found that members “are not average with respect to power, prestige, or income,” a matter that can be of concern to broader segments of the public which may harbor less narrow political, social, economic, and bureaucratic interests (Mitchell 1997). There are number of reasons why boards and commissions may tend to serve more narrowly defined interests (Balía and Wright 2001). For example, certain interests are likely to have more economic and political resources which can favor their successful appointment, others are more “politically connected” in that they tend to come from the interest groups that initially advocated for the entity, while some candidates for membership are favored by agency and legislative biases concerning a preferred diversity in membership of an entity. For some boards, the industrial community has been found to be heavily favored with membership (Brown 1955). Such is the case with state forest resource boards, commissions, and councils, even though the diversity of interests represented had increased between 1980 and 1995. Even so, in 1994, forest industry remained the most heavily represented, with 79 percent of state foresters indicating satisfaction with this composition (Kilgore 1994).

Boards, councils and commissions can also be hampered by lack of clarity in mission, roles, and responsibilities. Hampered by directives that are unclear, Carver (1990) found that an entity’s staff can often have trouble with accountability issues involving the general public, agency executives and the entity itself. Lack of clarity in mission can also lead board members to feelings of futility which in turn can lead to apathy and inappropriate actions (Brown 1955). In some cases, the objectives and authority assigned to boards, councils and commissions are “too lofty,” when what is needed are clear, measurable targets that can foster and be directly linked to better outcomes (Drucker 1999).

Boards, councils and commissions can often be drains on the time and energy of the agencies they are charged with advising or partnering. Agency executives and technical staff bemoan the staffing expectations of some entities. Brown (1955) and Houle (1989) note that boards often spend an inordinate amount of energy meddling in agency management issues and demand excessive amounts of time and talent from agency administrators. Equally troublesome, boards have been found to spend too much time on trivial matters, fail to have a long-term outlook, and behave in reactive manners with little thought for the consequences of hasty actions (Carver 1990). In somewhat the same vein, unclear priorities may lead boards to deal with too many things at once (Drucker 1999). As for allocation of their energies, some public boards have been found to spend an excessive amount of time focusing on staff and staffing issues at the expense of providing services to important clientele or the general public (Carver 2001),

Boards, councils and commissions are also challenged by the reality that over time they may become conservative in the execution of their responsibilities and show a lack “experimental qualities” that are necessary if an entity is to maintain its relevance (Drucker 1999). Traditional approaches, conformist attitudes, reluctance to address new challenges are definite symptoms of an entity that needs revitalization and the assumption of more enlightened approaches. In some cases, severe challenges can face the very existence of a board when it becomes more conservative than the agency or agency administrator it was charged with advising (Brown 1955). Houle (1989) observes that public boards which have been in existence for extended periods of time often operate slowly and ineffectively, their decisions are often weakened by compromise, and they become saddled with traditionalists who have been members for extended periods of time.

### *Definition and Measurement*

Conceptual approaches for defining and measuring the effectiveness of boards, councils and commissions are elusive and often intangible. Keeley (1984) denotes this concern by stating “no single statement of effectiveness is possible or desirable with regards to boards.” Ostrower and Stone (2003) agree that “effectiveness has been a difficult, elusive, and contentious concept to define and operationalize in relation to boards and to organizations generally.” A major problem is the reality that such entities typically have a number of constituencies, each of which offers a different set of criteria for judging the goodness or badness of how a board is structured and how it operates (Callen et al. 2003; Herman and Renz 2000; Keeley 1984). Also challenging is the reality that over time boards, councils and commissions regularly and often dramatically are assigned new roles and responsibilities that require changes in structure and administration (Ostrower and Stone (2003). Forbes (1998) observes that in many cases “organizational [board] effectiveness is a negotiated product of repeated interactions between organizational actors [board members] and the environment in which they function [constituents].”

There have been a number of approaches used to measure the effectiveness of boards, councils and commissions, of which three major categories are dominant, namely goal approach, resource approach, and stakeholder approach (Callen et al. 2003; Forbes 1998; Keeley 1984). The *goal approach* focuses on the degree to which the goals of an entity are being achieved, an approach that assumes a board’s goals are clearly identifiable, unambiguous in nature, and are not multiple in number and conflicting in substance. The *resource approach* to judging effectiveness focuses on how successful an entity is in acquiring resources (for example, staffing, financing, physical facilities), focusing on inputs rather than outputs and on interactions between an entity and its environment. As an approach to judging effectiveness, it too has its limitations, including problems in defining which resources are relevant, how much of each resource to acquire, and a tendency to overemphasize resource accumulation at the expense of focusing on the important roles and responsibilities that have been assigned to an entity. The *stakeholder approach* to evaluation focuses on constituent judgments (opinions) regarding an entity’s effectiveness, relying on the solicitation of opinions of key persons within and outside a board, council or commission and on their perceptions of the criteria that are most appropriate for judging effectiveness. A stakeholder approach is also not without its difficulties, including judgment of effectiveness based solely on the self-interest of a narrow set of stakeholders (performance only partially evaluated) and the potential for contradictions among stakeholders in the criteria that are used to make judgments about an entity’s effectiveness (one groups’ measure of increased effectiveness may be another groups’ diminishment of effectiveness).

### *Contributors to Effectiveness*

Although the conceptual foundations for assessing the effectiveness of boards, councils and commissions are yet to be fully developed, the community of researchers that addresses organizational design have not been want to suggest and subsequently investigate traits that may increase or decrease the effectiveness of such entities (Forbes and Milliken 1999; Herman and Renz 2000; Ostrower and Stone 2003; Pelled 1996; Pettigrew 1992). Among the traits of interest are organizational culture, human capital and capacity, agency support, leadership and supervision, task and work structure, public service motivation, individual performance, legislative and stakeholder networks, and relevance and clarity of mission. Not all researchers are convinced that current evidence is sufficient to explain the effectiveness of boards, councils and commissions. For example, Pettigrew (1992) states “great inferential leaps are made from input variables such as board composition to output variables such as board performance with no direct evidence on the processes and mechanisms which presumably link the inputs to the outputs.” Despite this skepticism, many have presented findings that suggest certain board characteristics have an influence on board effectiveness (Ostrower and Stone 2003; Pelled 1996).

### Management of Conflict

Conflicts over the use and management of natural resources has increased dramatically in number and intensity over the last 30 years (Crowfoot and Wondolleck 1990). These conflicts tend to involve numerous parties, multiple issues, deeply held values, cultural differences, scientific uncertainty, and legal and jurisdictional constraints (Walker and Daniels 1997). The management of these conflicts in the public policy arena can be an important functional aspect of public boards, commissions, and councils. The ability to manage conflict—ever present and unavoidable component of interactions between humans—can have a significant effect on the entity’s effectiveness.

Much has been written about group and organizational conflict in a variety of contexts (Coser 1956; Deutsch 1973; Folger et. al 1997; Pruitt and Robin 1986; Rahim 1992; Walker and Daniels 1997; Wall 1985). In regards to public boards, commissions, and councils, it has been suggested that these entities are commonly used as venues for airing and managing deep-seated differences over important matters of public policy (Brown 1955; Price 1963; US Environmental Protection Agency 2003). Price (1963) suggests that these public boards can serve as a buffer group between an agency and the public, by mediating differences and absorbing criticism. Brown (1955) suggest that public boards serve as an arena for agency’s to pit groups and interests against each other in hopes of their reaching an agreement. The US Environmental Protection Agency (2003) found that certain public councils can serve as a vehicle to unify disparate parties.

## **Boards, Commissions and Councils: Forest Resources**

### Establishment and Frequency

State government boards, commissions, and councils have been established for purposes of addressing a wide variety of environmental and natural resource matters (see Appendix A). Through examination of various literature sources and contact with well-informed persons in all 50 states, it was determined that an active board, commission, council or committee that focused

on statewide protection and management of forest resources existed in each of 30 states as of January 2004 (Table 1) (see Appendix B). Of these 30 entities, boards were most common (11 of 30, for example: Virginia Board of Forestry), while committees were least common (four of 30, for example: Wyoming Forestry Advisory Committee). Geographically, most of the entities existed in the North (12 of 30), while the least number existed in the West (eight of 30). Nearly all the commission-type entities existed in the South (for example, Louisiana Forestry Commission), while the majority of the councils existed in the North (for example, Minnesota Forest Resources Council).

**Table 1.** State forest resource boards, commissions, committees and councils, by type and region, 2004.

Type of entity	Number of entities			Total number of entities
	North	South	West	
Board	4	2	5	11
Commission	1	7	0	8
Council	5	1	1	7
Committee	2	0	2	4
<b>Total</b>	<b>12</b>	<b>10</b>	<b>8</b>	<b>30</b>
	(20 total states in region)	(13 total states in region)	(17 total states in region)	(50 total states)

Regions defined as: *North*—Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin; *South*—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia; *West*—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

A statewide forest resources board, commission, council or committee did not exist in 20 of the nation’s 50 states in 2004. Such entities were absent in eight states in the North, three in the South, and nine in the West. The relationship between a state with versus without such an entity was examined to determine if significant differences (standardized t-tests) existed between the two groups of states as regards resource and related conditions with a state, specifically forest-related employment, total forestland area, portion of state covered with forest, portion owned by federal government, portion owned by state government, portion owned by county or local governments, portion owned by forest industry, and portion owned by non-industrial private entities (American Forest and Paper Association 2001, Smith et al. 1997). Only two of these factors were significantly different between states which have such an entity and those that do not, namely the amount of forestland in a state and the extent of employment in forest and forest-related enterprises.

State forest resource boards, commissions, councils and committees have existed for more than a century. Although many such entities have come and gone (or been reestablished) during this period of time, this review focused on only those entities that existed as of January 2004—the oldest of which was established in 1885 (California Board of Forestry), the most recent in 2004 (Massachusetts Forestry Committee) (see Appendix C). Half of the 30 entities reviewed were established prior to 1980, the remaining portion during the ensuing 24 years (Table 2). Most of the commissions (for example, South Carolina Forestry Commission—1927) and a number of boards were established prior to 1960 (Oregon Board of Forestry – 1911), while all of the councils and committees were established after 1960, with most established after 1980 (for

example, Wyoming Forestry Advisory Committee—1984). Regionally, the majority of entities established before 1960 occurred in the South; nearly all of those in the North were established after 1979. The most common decades of establishment were the 1980s (seven entities), followed closely by the 1970s and the period 2000-2004 (five entities each). Nearly all, 93 percent, of the 30 entities reviewed here were established by state law. In only a few cases were they established by another board or in response to a federal law. None were established by formal inter-agency action or by informal consensus-based action (the evolutionary change in the number of state forest resource boards and commissions can be quite dramatic. In 1992, 31 such entities were identified in the United States. In 2000, 18 of these entities remain, seven no longer exist, six have been reconfigured, two additional are entirely new, and five entities included in this review were not identified in 1992 for various reasons (Kilgore 1990; Kilgore and Ellefson 1992).

**Table 2.** Time period of establishment of forest resource entities, by region and type of entity, 2000-2004.

Region and type of entity	Number of entities		
	1880-1959	1960-1979	1980-2004
North	1	2	9
South	6	1	3
West	2	3	3
Board	3	2	6
Commission	6	0	2
Council	0	3	4
Committee	0	1	3
<b>Total</b>	<b>9</b>	<b>6</b>	<b>15</b>

State forest resource boards, commissions, and councils are accountable (meaning to whom they report) to a wide variety of authorities. Nearly 60 percent of the 30 entities reviewed were accountable to a state executive agency generally or a specific official of state government. As for the latter, most involved the governor with a modest number being accountable to the State Forester or the State Commissioner of Agriculture. Six of the 30 entities were accountable only to the state legislature, three were accountable to a shared authority (most often involving the governor and the state legislature (for example the West Virginia Forest Management and Review Commission) and three were solely accountable to an independent body (such as another board).

### Purpose and Function

State forest resource boards, commissions, and councils can serve a wide variety of purposes and functions (Table 3). Such varied widely among the entities reviewed here, ranging from one to nine functions each, with 3.9 being the mean. Entities in the South tended to serve more functions (average of 5.1), while entities in the West and North tended to serve fewer (3.9 and 2.7, respectively). As for function by type of entity, commissions tended to serve six different functions, whereas all other types of entities engaged in an average of three functions each.

Functioning in an advisory and counseling capacity (providing advice to executives, agencies, or legislative bodies) was considered the single most important function of the reviewed entities, although nearly all indicated that at times they also exercised advisory responsibilities—however modest such may be (Table 3). Receiving and communicating public input on matters involving

forest resource policy and management was the second most common function with 60 percent of the entities so engaged. As for other functions (in rank order), such included encouraging program coordination and information sharing between agencies and interests, engaging diverse interest groups in policy and program formulation, promulgating legal and administrative rules, managing conflict between interests, reviewing and overseeing state agency programs, administration of state forestry programs (for example, educational, cost-share), and administration of a state's forest practice regulatory law (or laws). Developing harvesting guidelines or standards was identified as the primary or most important function of 11 entities; six indicated the advisory-counseling role as their most important function; and four identified oversight of the state forestry agency as their most important function. Only one entity indicated that encouraging coordination and information sharing was its most important function.

**Table 3.** Function of forest resource entity, by region and type of entity, 2004.

Function	Region				Type of entity			Total entities
	North	South	West	Board	Commission	Committee	Council	
Advising and Counselling	11	9	8	11	7	3	7	28
Receiving Public Input	6	7	5	5	6	3	5	18
Coordination of Programs	6	7	4	6	7	2	3	17
Engaging Interests	4	5	3	4	5	2	3	12
Promulgating of Rules	0	6	4	3	6	0	1	10
Agency Oversight	0	7	2	2	7	0	0	9
Conflict Management	3	3	3	3	3	1	2	9
Program Administration	0	5	1	1	5	0	0	6
Regulatory Enforcement	0	2	1	1	2	0	0	3

## Membership and Interests

The membership of forest resource boards, commissions, and related types of entities varies extensively in both in number of members and the interests they represent. In aggregate, the number of members ranged from 7 to 24, with an average of 11 members per entity (since one entity was open for all to join, only 29 entities were used to determine these and the following member averages. In 2004, that entity had 73 documented members, of which 30 to 40 were active). Regionally, the North averaged 12 members per entity, while the South and West each averaged 10 members. Fourteen entities reimbursed member expenses incurred to attend meetings, while eight entities provided members a small stipend for attending meetings in addition to expense reimbursement. Six entities did not provide members any compensation; one entity paid a small stipend without reimbursing expenses. An annual salary was not paid to any members of the boards and commission reviewed here.

A state governing body (generally the legislature) or a state executive (generally the governor or agency head) appointed all members of the entities reviewed here (with exception of the above referenced self-nominated entity). In no case were members elected at large. Although in some cases gubernatorial appointments required additional consent or confirmation by the state senate, 57 percent of the members were appointed exclusively by a state executive. In five cases, entities had members appointed by both a state executive and by the state legislature. Four entities had most of their members appointed by an executive and also had ex-officio members (for example, certain agency heads). In one case, an entity's members was appointed solely by the state

legislature (with the exception of ex-officio positions), while in another case an entity's membership was determined by detailed statutory specification of persons to serve as members.

**Table 4.** Interest representation on forest resource entities, by category of interest, number of entities and region, 2004.

Interest category represented	Number of entities on which interest is represented			Total number of entities
	North	South	West	
Nonindustrial Private Landowners	10	9	4	23
Forest and Wood Products Industry	10	8	5	23
Academic and Research Interests	9	5	3	17
Environmental Interests	7	3	4	14
State Government Agencies	6	3	5	14
General Overall Public	4	5	4	13
Timber Harvesters	5	5	3	13
County and Local Government Interests	7	1	3	1
Fish and Wildlife Interests	5	2	4	1
Manufacturing Interests	5	4	0	8
Recreational Interests	5	0	1	6
Professional Foresters	2	2	1	5
Legislature and Legislators	4	0	1	5
Federal Government Agencies	4	0	1	5
Other Forest Landowners	2	2	1	5
Urban-City Interests	3	1	0	4
Agricultural Interests	2	1	1	4
Labor Interests	2	0	0	2
Tribal and Native Interests	1	0	1	2
Mining Interests	0	0	2	2
Rangeland and Grazing Interests	0	0	2	2
Political Parties	1	0	0	1
Tourism Interests	1	0	0	1
Fire Suppression Interests	1	0	0	1
Conservation Interests	1	0	0	1
Soil Management Interests	1	0	0	1

Note: Information reflects interest representation for only 29 of the 30 boards, commissions and councils reviewed here.

Members serving on the boards, commissions and councils reviewed here represented 26 different interests in resources, ranging from the interests of the general public to manufacturing interests and from recreational interests to tourism interests (Table 4). Of this total, non-industrial private landowner interests and forest industry interests were the most common, both being represented on nearly 80 percent of the reviewed entities. Academic and research interests, environmental interests, state agency representatives, the general public, timber harvesters, county and local government representatives, and fish and wildlife interests were present on at least one-third of all entities reviewed. Least represented in terms of number of member were interests involving fire suppression, conservation, and soil management.

Each entity examined here may have more than one representative from any one interest category. As such, it is important to acknowledge the portion of total entity membership that is accounted for by each interest category (Table 5). Again, nonindustrial private landowner interests and forest industry interests were collectively the most widely represented interests, accounting for a combined 29 percent of the total entity membership. No other interest category

accounted for more than 10 percent of the membership of all entities considered. Regionally, entity membership in the South tended to be more heavily weighted toward nonindustrial private landowners (26 percent) and forest industry representatives (22 percent) than other regions, comprising nearly one-half of total membership on all the entities reviewed here. Membership in the North was also weighted toward these two membership categories (12 percent each). The West was much different than the North and South in terms of membership representation. Most commonly represented fish and wildlife interests (12 percent), state agency representatives (10 percent), environmental interests (10 percent), county and local government representatives (8 percent), and federal representatives (8 percent).

**Table 5.** Interest representation on forest resource entities, by category of interest, portion of total membership and region, 2004.

Interest category represented	Proportion of members (percent)			Percent all members
	North	South	West	
Nonindustrial Private Landowners	12	26	4	15
Forest and Wood Products Industry	12	22	6	14
General Public	7	9	6	8
Environmental Interests	9	1	10	6
Academic and Research Interests	7	6	6	6
Timber Harvesters	4	9	6	6
State Government Agencies	4	4	10	6
County and Local Government Interests	6	0	8	4
Fish and Wildlife Interests	1	1	12	4
Manufacturing Interests	4	7	0	4
Professional Foresters	4	4	2	4
Legislature and Legislators	6	0	4	3
Recreational Interests	6	0	2	3
Federal Government Agencies	1	0	8	3
Agricultural Interests	0	3	2	2
Mining Interests	0	0	6	2
Labor Interests	3	0	0	1
Tribal and Native Interests	1	0	2	1
Rangeland and Grazing Interests	0	0	2	1
Urban-City Interests	1	0	0	1
Tourism Interests	1	0	0	1
Conservation Interests	1	0	0	1
Soil Management Interests	1	0	0	1
Political Parties	0	0	0	0
Fire Suppression Interests	0	0	0	0

Note: Because of rounding errors, percentages do not add to 100. Based on information from 19 entities.

The formal leadership of the entities contacted here were nearly unanimous in their opinion that the number of interests represented on their entity was appropriate and in the right proportion. Only two of the 30 representatives indicated otherwise—one indicating too few interests represented, the other too many interests represented. Among other general observations made by leaders were that varied member interests and backgrounds improved the operation of an entity; although not members, other interests were expressly made welcome (did not feel excluded) to appear and make presentations to an entity; members representing the general public were often expected to represent environmental interests; and in some cases, interests on an entity was over or under represented (for example, lacking municipal representation, dominated by forest industry and environmental interests).

## Leadership and Decision Making

Positions of leadership, operating procedures, and rules for decision-making are especially important concerns for boards, commissions and councils. The majority (16 entities) of entities reviewed here selected a chairperson or president via member-involved election procedures. In eight cases an entity's chairperson was appointed by an outside authority (usually the governor), though in four cases such was specified by state law. Some entities required leadership positions to be rotated among members at specified periods of time, while in other cases leadership roles were established by predetermined operating procedures.

Members of entities also played an important role in establishing decision-making procedures, although less so than regarding leadership positions. Of the entities reviewed here, in only nine cases did entity members determine decision-making procedures. Formal decision-making procedures did not for six entities, instead they relied on informal or ad hoc processes. In three cases, decision-making procedures were determined by an entity's leadership, two cases by procedures specified in state law (two entities), and in one case by an entity's organizational charter. Some entities noted that decision-making procedures vary depending on the types of decisions that need to be made and when they have to be made.

The rules for making decisions were very straight forward for most of the boards, commissions and councils reviewed here. For 21 entities, official decisions were made by majority rule, defined as agreement by more than one-half of an entity's voting members. In four cases, official decisions were exclusively made by unanimous agreement of all members. Although the entities reviewed often strived for consensus or unanimous agreement, they often fell back on majority rule as a decision-making principal. Three of the reviewed entities indicated that the method of making official decisions was adaptable, noting that the decision rule depends upon the nature of the issue being addressed. In no case were official decisions of an entity made by an entity's leadership.

## Finances and Staff

The financial and staffing characteristics of state forest boards, commissions, and councils is complex and varies greatly from entity to entity and is often difficult to determine. Focusing on only 20 (of 30) entities for which complete information was made available, the average annual operating budget per entity in 2004 was just more than \$70,000. Five entities had no budget whatsoever, five had an annual operating budget of less than \$1,000, seven a budget between \$1,000 and \$25,000, and four entities had an annual operating budget between \$100,000 and \$1,000,000. The annual operating budget of 16 of the 20 entities was indicated as being stable from 2000 through 2004, although during this period the budget of one entity had increased while three had decreased. As for adequacy of budgets, seven entities characterized available finances as very adequate, 10 as either moderately adequate or moderately inadequate, and three very inadequate. Nine of the 20 entities relied solely on state general funds, whereas three relied exclusively on fees and certain state dedicated funds. The remaining entities received funding from a variety of sources, including a combination of state general funds and state dedicated funds, funding from the federal government (one entity), combination of private funds and dedicated public funds, and a complex assortment of state general funds, state dedicated funds and federal funds.

As with the source of operating funds, the allocation of financing resources within any one entity varies widely. The vast majority (none with budgets exceeding \$10,000) of the entities dedicated all their financial resources to an entity's operations (photocopying, telephone, travel expenses). Two entities with budgets exceeding \$25,000, evenly split their financial resources between board operations and personnel (professional and support staff). In some cases, budgets were heavily dedicated to an entity's staff (in one case, the entity's entire annual operating budget was so dedicated). Entities with the largest budgets (four entities exceeding \$100,000) allocate financial resources to a variety of programs. For example, one entity allocates as follows: 80 percent for education and public outreach, 20 percent for board operations; a second entity: 37 percent for education and public outreach, 25 percent for personnel, 20 percent for research, eight percent for board operations; and a third entity: 70 percent personnel, 25 percent board operations, and 5 percent for programs.

Staff supporting the operation of a forest resource board, council or commission is typically very modest in number. For more than two-thirds of 19 reporting entities, staffing was less than one full-time equivalent. Two of the entities indicated staffing was between five and six full-time equivalents, while four entities indicated access to only one full-time equivalent person. Most of the entities indicated staffing levels to be at least adequate, with about half reporting staff support to be very adequate. Three entities indicated staffing levels to be moderately to very inadequate.

## Issues Addressed

State forest resource boards, commissions, and councils address a wide variety of forest resource issues. During the five-year period 2000 through 2004, 20 or more entities focused on issues involving statewide forest management, harvesting of timber, forest health and productivity, prevention and management of fire, and watershed management (Table 6). Regional differences were notable. For example, entities in the North and South were far more likely to address issues involving assistance to private forestland owners than were boards and commissions located in the West. Forest planning, forestry research, and taxation of private forest property were common issues addressed in the North but rarely addressed by entities in other regions. In the South, issues of primary concern involved forest inventory and assessment, forest recreation and development, and urban and community forestry—subjects infrequently addressed in other regions. In the West, forest wildlife and fisheries management and the regulation of private forest practices were issues most commonly addressed.

A board, commission or council each was involved in an average of 9.5 issues during the period 2000 through 2004. Regionally, the differences were modest, namely South—10.1 issues per entity, North—9.7 issues per entity, and West—8.4 issues per entity. Twenty-four entities reported that the number of issues addressed had increased moderately (16 entities) or remained the same (8 entities) over this five-year period. For three other entities, the number of issues addressed had increased substantially, while for one entity the number had decreased substantially.

The process by which forest resource issues are brought to the attention of boards and councils apparently very seldom occurs in orderly and planned manners. Among the sources from which forest resource issues were brought to the attention of an entity, most common were agency

driven sources (26 entities), stakeholder or interest group driven (21 entities), entity member driven (19 entities), and legislatively driven (18 entities). In a modest number of cases, issues addressed by an entity were identified through strategic planning processes (10 entities) and through surveys of the public or segments thereof (3 entities). However, for most of the entities reviewed here, indications are that issues typically emerge from a multitude of sources.

**Table 6.** Forest resource issues addressed by forest resource entities from 2000 through 2004, by issue and region.

Forest resource issue	Number of entities engaged in issue			Total number of entities
	North	South	West	
Management of Forests	9	9	7	25
Harvesting of Timber	9	7	7	23
Forest Health and Productivity	8	8	6	22
Prevention and Management of Fires	6	9	5	20
Watershed Management	7	7	6	20
Assistance to Private Landowners	7	9	3	19
Inventory and Assessment of Forest Resources	4	9	3	16
Planning Use and Management of Forests	8	4	3	15
Management of Forest Wildlife and Fisheries	5	3	5	13
Recreation Development and Management	5	6	2	13
Urban and Community Forestry	5	8	0	13
Forestry Research	6	4	3	13
Regulation of Private Forestry Practices	4	3	5	12
Professional Continuing Education	3	5	2	10
Taxation of Forest Property	6	3	1	10
Management of County and Local Forests	3	3	3	9
Federal Forest Management	4	1	3	8
Environmental Review	1	3	2	6
Other Issues	6	0	1	7

The technical and political complexity of an issue can influence the amount of time and energy required by a board or commission to address a forest resource issue. For the period 2000 through 2004 and for all entities combined, issues involving timber harvesting were by far the most demanding of an entity's time and energy. Although less so, watershed management and forest health and productivity were also significant demanders of attention. Four entities indicated significant amounts of energy required to address fire management, forest planning, private forest landowner assistance, and the regulation of forestry practices applied on private forest land. Regionally, timber harvesting and forest planning issues were most demanding for entities in the North, while watershed management, fire management, and private forest landowner assistance captured much of the energy of entities in the South. Regulation of activities on private forest land overwhelmingly captured the operational time of boards and commissions in the West.

## Future Conditions

Boards, commissions and councils often face a plethora of challenges that can cloud their future. Queried as to the future role and importance of their respective entities, leaders of nine such entities indicated that the future for their board or commission looks to be very positive, to include an increasing presence generally in statewide arenas involving matters of forest resource policy, more active engagement in the development of effective policy responses to important forest resource issues, and being seen as an even more visible mechanism for managing

conflicting issues involving the use and management of forests. Although expected to remain the same or change only slightly, the prospects for seven of the entities reviewed here was also reported as generally positive. Three of the reporting entities expect to broaden involvement beyond forest resource matters, to include natural resources and environmental resources generally, and for one entity it's expected broadening of scope would be, at least in part, due to its past proven ability to deal with contentious issues involving forest resources. On a less positive note, leaders of some entities indicated that the prospect of dire financial conditions for state governments generally would pose an uncertain future for their entity and would possibly encourage greater reliance on partnering with other public boards and commissions.

Boards and commissions also face a number of future administrative and managerial issues. Most commonly cited by entity leaders were shrinking budgets, both with regard to the entities in question and the forest resource agencies with which such entities are associated. Other concerns include addressing the implications of potential reorganizations of state natural resources agencies (including a state's lead forestry agency); sustaining the commitment of members to an entity and promoting their active involvement in important statewide forest resource issues; and improving an entity's statewide visibility and usefulness as an important dimension of a state's broader community of forestry interests. Other issues of future concern were mainly forest resource oriented, including forest practice regulation, forest wildland-urban interface, forest fragmentation and conversion, habitat conservation, exotic species management, recreation resource management, wood supply chain certification, and biomass management for energy purposes.

## Conflict Management

With more than half noting as such, conflict was reported by entity leaders to occur very infrequently within the boards and commissions reviewed here (conflict was defined as incompatible behavior between parties whose interests differ; conflict management was defined as the practice of identifying and handling conflict). Four entities reported conflict to occur somewhat infrequently; five somewhat frequently; and two entities reported having never experienced any noteworthy conflict. Over the five-year period 2000 through 2004, nearly three-quarters of the entities reported that the level of conflict has remained about the same. Reasons for this low level of change included improvements in mutual respect among members, greater length of service by members, and improvements in the organizational stability of an entity. Five entities reported conflict had decreased over the five year period of interest; two entities noted substantial increases. Reasons for these decreases included improved ability to manage conflict, greater trust among members, change in makeup of entity membership, and decreases in the number and intensity of certain policy issues (for example, decrease in timber harvesting). Only two entities (both in the West) indicated that conflict within their entity had increased during the period 2000 through 2004.

The boards and commissions reviewed here reported that the conflict did not impose any substantial adverse costs on an entities operation or its ability to carry-out its mission. When such did occur, the costs imposed usually took the form of allocation of additional time, increase in financial expenditures, and greater adverse public perceptions of an entity. Regionally, these costs were much more apparent in the South and West, being especially notable for boards and

commissions in the West. In the latter region, the costs included significant emotional stress among entity members and substantial delays in endorsing and subsequently implementing decisions made by members of an entity.

The need to manage conflict was most often related to issues involving the application of forestry practices, especially practices involving timber harvesting. The latter was reported by 21 of the entities reviewed here, but was usually couched in language such as environmental practices, timber harvest regulation, riparian management rules, forestry practice guidelines, or reforestation standards. Other issues precipitating the need to manage conflict involved public forest management generally, forest land use allocations, landscape planning and design, and re-organization and subsequent management of public agencies focused on forest resources.

Conflict over the use and management of forest resources within many states would probably escalate were not for the existence of a state forest resource board, commission or council. Without such conflict management mechanisms, the leadership of 19 entities indicated that conflict would increase, five reported it would greatly increase, seven indicated it would stay the same, and none thought the level of conflict would decrease. Reported for most entities was that a statewide board or commission provides a forum for handling conflicts—a venue for “airing differences,” “making balanced decisions,” and “carrying on discussions.” In some cases, entity leaders indicated that the lack of a board or commission would result in contentious issues being moved to less effective ways of managing conflict, such as judicial systems, legislatures, or the bureaucratic procedures of public agencies. Leaders of the entities reviewed here also indicated that conflict would increase as “there is no other real voice for forestry in the state,” or that “no other common group exists where all interests are at the table.” In cases where a statewide board or commission was viewed as unnecessary or questionable, the reasoning provided was that little conflict currently exists between forestry interests within a state (why promote conflict?), existing state boards or commissions regularly seek to avoid highly charged issues (useless mechanism?), or that an existing board or commission is often bypassed by parties engaged in conflict over the use and management of forests (irrelevant mechanism?).

The state foresters of the 20 states that lack a statewide board or commission were queried to determine whether the existence of such entity would change the current level of conflict over forest resources within their state. Of the 13 state foresters responding, five indicated that a board, commission or similar such entity would probably increase (moderately) the level of conflict regarding the use and management of forest resources. Their logic was that such an entity would only serve as a lightning rod for underlying issues or would isolate their (state forester’s) interests from larger, more encompassing and more important concerns. Although three state foresters indicated that the existence of a statewide board or commission would moderately or greatly reduce the level of conflict over the use and management of forests within their state, the remaining 16 indicated that the level of conflict over forest resources would probably remain unchanged.

The boards, commissions, and councils reviewed here employed a number of methods for managing conflict, many times being used in combination with one another. The most common approach was unassisted open discussion and negotiation among members (20 entities). Other approaches included formal facilitation with the aid of a third party (10 entities) and formal

mediation also with the aid of a third party (two entities). Some entities reported following Robert’s Rules of Order as a way of managing conflict, while others passed contentious issues to subcommittees where negotiations occurred and a recommended course of action was subsequently presented to the full membership.

**Table 7.** Member characteristics promoting forest resource entity’s ability to constructively manage conflict, by region, 2004.

Member characteristic	Scale of agreement score			Average score
	North	South	West	
Shared and Mutual Respect	3.9	3.9	3.9	3.9
Cooperative Tendencies	3.8	4.0	3.8	3.9
Open and Truthful Inclinations	3.8	4.0	3.6	3.8
Commitment to Resolving Differences	3.8	4.0	3.5	3.8
Sensitivity to Cultural Differences	3.3	3.9	3.8	3.6

Scale of agreement: 4=strongly agree, 3=somewhat agree, 2=somewhat disagree, and 1=strongly disagree.

The attitudes and outlooks of board or commission members can be important determinants of how well an entity manages conflict. Of concern here were such factors as shared and mutual respect, open and truthful inclinations, commitment to resolving differences, and sensitivity to cultural differences. How well an entity matches characteristics such as these was posed to leaders of the boards and commissions reviewed here (Table 7). In all cases, the member characteristics reported on here were all assigned extremely high positive ratings, with the average ratings for all entities being well above 3.5 (scale of one indicating strong disagreement . . . to four indicating strong agreement). Regionally, entities in the South consistently has the highest ratings in regards to each characteristic, while in the North sensitivity to cultural differences was viewed to be somewhat lower as an important conflict management attribute.

A board or commission’s ability to manage conflict can also be influenced by various organizational and managerial characteristics, including the number of members assigned to an entity, extent to which legal mandates limit an entity’s actions, and limits on the financial support available to carry-out an entity’s responsibilities. For the entities reviewed here, all such characteristics were assigned high positive ratings (average of 3.5 on scale of one being very negative . . . to four being very positive) (Table 8). The most notable regional variations were the consistently lower ratings for entities in the West.

**Table 8.** Organizational and management characteristics promoting forest resource entity’s ability to constructively manage conflict, by region, 2004.

Organizational and management characteristic	Scale of agreement score			Average score
	North	South	West	
Cohesiveness of Members	3.9	3.7	3.4	3.7
Decision-making Processes	3.7	3.9	3.1	3.6
Number of Members	3.7	3.7	3.3	3.5
Legally Binding Mandates	3.7	3.7	3.0	3.5
Budget and Finance Conditions	3.7	3.6	2.7	3.4
Operational Procedures	3.4	3.9	3.0	3.4

Organizational characteristic scale: 4=very positive, 3=somewhat positive, 2=somewhat negative, and 1=very negative.

Conflict can lead to a number of consequences for an entity’s ability to carry-out its mission. For example, ability to be innovative and pioneering, ability to implement policies and programs, and

ability to foster trust and respectful relationships between members. For the boards and commissions reviewed here, characteristics such as these were found to be at least somewhat positively affected by conflict, except for personal relationships between members (average of 3.1 on scale of one being very negative . . . to four being very positive) (Table 9). Regionally, conflict seemed to have the most positive effect on those entities in the North, while less so for entities in the West.

**Table 9.** Consequences of conflict on forest resource entity’s performance, by region, 2004.

Consequences	Scale of agreement score			Average score
	North	South	West	
Innovative Cutting-edge Ideas	3.3	3.3	2.8	3.2
Proper and Well-Thought-Out Decision-making	3.2	3.1	3.0	3.1
Effective Forest Policies and Programs	3.3	3.1	3.0	3.1
High Quality Entity Performance	3.3	3.0	2.7	3.0
Respectful Personal Relationships Among Members	2.7	3.3	2.8	2.9

Consequence scale: 4=strongly positive, 3=somewhat positive, 2=somewhat negative, and 1=very negative.

The extent to which agreements addressing matters of conflict are durable and long-lasting is an important consideration when judging the effectiveness of conflict management. Such can be viewed as an indicator of the quality of conflict management processes being used by boards or commissions when addressing important issues involving the use and management of forest resources. Most entities reviewed here (more than half) indicated that their decisions (such as policy and program recommendations) were revisited somewhat infrequently, while about one-quarter indicated somewhat frequent revisitation and one-quarter very infrequent revisitation. No entity reported that its decisions were revisited on a very frequent basis.

The ability of the boards and commissions to manage conflict involving the use and management of forests was reported by the entities reviewed here as being generally positive. More than 60 percent of the entities indicated their conflict management abilities were somewhat effective, while one-fourth reported being very effective in this regard. Only three entities reported conflict to be somewhat or very ineffectively managed. As for factors that determine a board or commission’s effectiveness in managing conflict, further analysis demonstrated no relationship between an entity’s conflict management effectiveness and factors such as number of functions, number of members, number of interests represented, type of decision-making process, or number of forest resource issues addressed (Hibbard 2006).

## Effectiveness and Proficiency

### *Member Perceptions*

The leaders of boards and commissions are quite adept at making informed judgments about the effectiveness of the entities of which they are a part, including judgments about operational problems in need of correction (Callen et al. 2003, Carver 1990, Dyer et al. 1985, Pettigrew 1992). When doing so, they reportedly base their judgments on how well an entity meets certain standards of effectiveness. Focused on roles and responsibilities involving forest resources, the standards considered here are:

- Is the entity accomplishing its mission?
- Is the entity influencing the application of forest management practices?

- Is the entity influencing the type and implementation of state forest resource policies?
- Has the entity secured public support for its activities?
- Does the entity have a positive influence on land use decisions?
- Has the entity secured the resources needed to carry-out its mission?

The leadership of the boards, commissions and councils reviewed here collectively indicated these entities to be very effective at accomplishing their missions, influencing forest management practices, and influencing the development forest resource policies (Table 10). Leaders also indicated that the entities were between moderately ineffective and moderately effective at securing the public support needed to carry-out their activities, influencing forest land use decisions, and securing the resources necessary for operating and effective board or commission (staffing, finances). By whatever standard used, regional variation was minimal regarding the effectiveness of the entities reviewed here.

**Table 10.** Leadership judgment of forest resource entity effectiveness, by region and measure of effectiveness, 2004.

Category of entity effectiveness	Scale of effectiveness			Average score
	North	South	West	
Is the entity accomplishing its mission?	3.2	3.3	3.3	3.3
Is the entity influencing the application of forest management practices?	3.2	3.3	3.3	3.2
Is the entity influencing the type and implementation of state forest resource policies?	3.0	3.2	3.0	3.1
Has the entity secured public support for its activities?	2.8	2.9	2.6	2.8
Does the entity have a positive influence on land use decisions?	2.4	2.9	2.4	2.6
Has the entity secured the resources needed to carry-out its mission?	2.6	2.9	2.4	2.5

Scale of effectiveness: 4=very effective, 3=moderately effective, 2=moderately ineffective, and 1=very ineffective.

As for operational problems associated with the entities reviewed here, entity leadership indicated most operational problems to be of little or no significance (Table 11). At the extremes, operational problems involving unrealistic and unachievable goals were at the high end while excessive focus on a very limited number of interests was at the lower end. Although regional differences in the significance of operational problems are noticeable, overall they are relatively

**Table 11.** Leadership judgment of forest resource entity operational problems, by region and measure of problem significance, 2004.

Operational problem confronting entity	Scale of operational problem			Average score
	North	South	West	
Goals are Unachievable	2.2	1.8	2.3	2.1
Undue Reviewing, Reworking and Repeating	2.1	1.6	2.5	2.0
Attempting to Accomplish too Many Things	2.4	1.6	2.0	2.0
Unclear Entity Function and Purpose	2.0	1.7	2.4	2.0
Unnecessary Devotion to Trivial Matters	2.1	1.7	2.1	2.0
Mission too Broad and Wide-ranging	1.9	2.7	2.0	1.9
Short Term Emphasis at Expense of Long Term	1.9	1.6	2.1	1.9
Accountable to an Excessive Number of Interests	1.4	1.7	1.9	1.6
Excessive Medaling in State Agency Affairs	1.6	1.6	1.5	1.6
Undue Focus on Only a Few Interests	1.5	1.4	1.6	1.5

Scale of problem significance: 4=very significant, 3=moderately significant, 2=little significance, 1=no significance.

small in nature. The exception being the South where with few exceptions leaders reported less significant operational problems than associated with entities in the North and West.

### *Stakeholder Perceptions*

The leaders of the boards, commissions and councils reviewed here were asked to judge how a number of stakeholder groups perceive the actions of an entity (for example, influence over policy development, ability to influence land use decisions). Forest industry, public forestry professionals, and nonindustrial private forest landowners were reported to be most supportive of entity activities while least supportive were environmental groups (Table 12). Regionally, these same three aforementioned stakeholder groups were more supportive in the North and South than in the West, while environmental stakeholders were more supportive in the North than in the other two regions.

**Table 12.** Stakeholder support of actions taken by forest resource entity, by region and stakeholder group, 2004.

Stakeholder group	Scale of support score			Average score
	North	South	West	
Forest Industry	4.3	4.4	3.7	4.2
Public Forestry Professionals	4.4	4.3	3.4	4.1
Nonindustrial Private Landowners	4.3	4.6	2.7	4.1
Private Forestry Professionals	4.2	4.1	3.2	3.9
Timber Harvesters	3.7	3.7	3.2	3.6
General Public	3.7	3.6	3.3	3.6
Local Units of Government	3.8	3.6	3.2	3.5
Environmental Groups	3.6	2.8	2.7	3.1

Scale of stakeholder support: 5=very supportive, 4=somewhat supportive, 3=neutral, 2=somewhat opposed, 1=very opposed.

## **Summary and Recommendations**

Public boards, commissions, and councils are often significant contributors to the development of effective public policies and to the management of conflict involving various types of contentious issues. As noted by many, such entities have increased in number and influence, especially in the area of natural resources management (Fox 2001, Houle 1989, Kilgore and Ellefson 1992). As Hult and Walcott (1990) note, these governance structures have emerged to perform functions that are needed in order to respond to a society that is demanding ever more from both its public and private sectors. Because boards, councils and commissions are being looked to as institutions of ever increasing importance, there is virtue in securing a better understanding of the structure, administration, and effectiveness, especially as they might be engaged in the use, management, and protection of forest resources. Such was basically the intent of the review undertaken here.

The purpose, structure, and operation of 30 public boards, commissions, councils and committees of state government were a major focus for this review (Hubbard 2006). Although these entities are extremely diverse in their purposes and operations, collectively their characteristics can be summarized as follows:

- Established primarily during the period 1980 through 2000, although some boards and commissions were established in the 1920s, 1930s and 1940s. Average age was 25 years.

- Labels (names, titles) assigned to resource entities are not always indicative of their reason for being. Identifying labels may have remained the same (board, commission, council, and committee), yet their purpose and operation is very likely to have changed over time.
- Authorized primarily by state law and accountable in most cases to a specific executive of state government or to a state department-level agency generally.
- Primary functions are counseling and advising on policy and program matters, collecting and communicating public concerns and opinions, facilitating the coordination of public policies and programs, and gathering, organizing and distributing information.
- Membership averages 11 persons per entity representing seven different interests or sectors. Members are appointed primarily by an executive of state government.
- Procedures for decision-making and assignment to positions of board or commission leadership are most often determined by members.
- Funded almost entirely by state government monies, with an average operating budget of \$70,000, with upper extremes over \$1,000,000. Finances are dedicated almost entirely to operational expenses, with staffing averaging less than one full-time equivalent.
- Timber harvesting issues are among the most energy demanding of issues for an entity, followed closely by issues involving state forest management and forest health and productivity.
- Resource issues are brought to an entity from multiple sources, although most transmitted from state government agencies. Number of issues addressed has increased during the period 2000 through 2004.
- Forest industry is perceived to be the most supportive of boards or commissions, while environmental groups are viewed as being least supportive.
- Major administrative and managerial concerns are declining financial support for entities and sustaining the visibility of and confidence in established entities.
- Forest resource conflicts are viewed as being managed somewhat effectively by boards and commissions. The most common and most intense type of dispute involves the application of forestry practices.
- Without a board or commission, statewide conflict involving the use and management of forest resources is very likely to increase.

## Establishment, Design and Operation

A major objective of this review was to determine the worthiness of boards, commissions and councils as entities to be focused on the management of conflict involving the use and management of forests. Within such a context, special consideration was focused on how the design and operation of such entities might be improved. In this respect, the following suggestions are offered as a range of possibilities.

### *Establishment of a Board, Commission or Council Focused on Forest Resources Should Be Given High Priority by States.*

States lacking a statewide board or commission focused on forest resources should seriously consider establishing such an entity. Leaders of all the public entities reviewed here indicated that without a statewide board or commission, conflict involving forest resources would remain the same or increase within their respective states. In no case was it suggested that conflict would

decrease if such entities were abolished. For many, gathering conflicting interests under the umbrella of a board or commission results in better formulated policies and programs based on new and more creative ways of dealing with conflict. Such experiences cast doubt on the notion that such entities simply serve as a magnet for highlighting needless and very divisive issues, generating more conflict than otherwise would normally exist.

*Intent and Design of a Board, Commission or Council Focused on Forest Resources Should Be Given Careful and Thoughtful Attention.*

Examination of the boards, commissions and councils reviewed here highlighted a number of important structural and operational features that enable such entities to be successful. Although a single design characteristic may not be appropriate for all entities, consideration of the following design characteristics can be helpful.

- *Appropriate Number of Members*—a large number of members tends to incorporate a large spectrum of interests, while an entity with very few members tends to promote efficiency.
- *Appropriate Level of Interest Diversity*—a high level of interest/member diversity can increase the level of conflict among interests but can offer greater access to knowledge and informed opinions.
- *Appropriate Membership Tenure*—long-term appointments of members tend to promote continuity, but shorter terms promote injection of fresh ideas and new perspectives. Staggered terms and limits on consecutive appointments can be helpful approaches to addressing concerns over member tenure arrangements.
- *Flexibility and Adaptability*—in order to remain relevant and to effectively address important forest resource issues, boards, councils and commissions need to be adept at adjusting to changing circumstances (for example, increases in the number and type of issues brought to an entity's attention). If entities become less germane, they are likely to be by-passed in favor of other organizations that are more (or less) suitable to demanding interests.

*Organizational Stability, Member Trust and Familiarity, and Conflict Management Skills Should Be Promoted.*

Conflict within boards, councils and commissions reviewed here tended to decline over time. Leaders of these entities indicated that this decrease was directly attributable to an increased ability to manage conflict, increased trust and familiarity among its membership, and stability in an entity's structure and administration.

*Mission and Goals Should Be Clearly Defined and Agreed to by Important Interests.*

As situational design elements seem to be critical in responding to unique ecological, social, and economic conditions within each state, make sure that the entity is structured to reflect its specific mission and goals. This is also extremely important in measuring entity effectiveness and responding to changing conditions.

*Clearly Defined Roles and Distinct Lines Of Accountability Should Be Established.*

Although specific roles and lines of accountability may differ from state to state, the leadership of the entities reviewed here expressed the importance of making sure boards, councils and commissions understand their responsibilities and to whom they must report. They should focus

only on their legally assigned purpose, concentrate on high priority tasks, report specific and appropriate measures of progress, and assume only a modest number of tasks that can be successfully addressed.

*Important Far-reaching Issues and Long-term Solutions Should be of Paramount Concern.*

Boards, councils and commissions are generally intended to provide advice and counsel on large, long-term issues. The leadership of the entities reviewed here indicated that boards and commissions are typically employed to foster citizen input on issues that state government is often unfit or unwilling to act upon. Such entities should not be in the business of engaging in the day-to-day operation of government, including low-level budgetary decisions and matters involving personnel.

*Periodic Assessment of Procedures and Performance Should be Encouraged.*

The relationship between strategic planning and ultimate effectiveness of an organization has been clearly demonstrated. The leadership of the entities reviewed here indicated that development of a strategic plan and periodic assessment of actions taken to implement such a plan are especially important if an entity is to be well positioned to accomplish its mission and to adapt to changing conditions. When conducting such assessments, it is important to use broadly agreed to criteria which are reflective of the diverse interests represented by members of an entity.

*Positive As Well As Detrimental Effects of Conflict Should Be Acknowledged.*

Conflict has been shown to have both positive as well as negative results for organizations. A board, council or commission should be designed to exploit the positive effects of conflict (such as improved quality of decision-making, creation of new ideas, and improved organizational performance) while minimizing negative consequences (such as impaired personal relationships). Acknowledging positive as well as negative effects of conflict can establish constructive patterns of behavior for future activities of an entity.

## Potential Research

This review was intended to further understanding of state forest resource boards, commissions and councils. During the course of the review, there arose a number of unanswered questions regarding entity purposes and functions, structural and operational characteristics, and their ability to carry-out certain conflict management practices. Conducting the following research would further increase our understanding of state boards, councils, and commissions as they focus on the use and management of forest resources.

- By means of boards, councils and commissions, are individual citizens and organized interest groups better able to pursue the public interest in forest resources than via elected state officials and government agencies? Boards, commissions, and councils are often created assuming that citizens and interest groups are in better positioned to dispense public policy than public agencies. How effective is this delegation of authority in determining broader public interests in forest resources?
- Do boards, councils and commission make the public sector more competent and democratic in addressing matters involving forest resources? If public sector competence

in addressing the latter is the intent of such entities, do they actually function in this regard? In many cases, the members of boards, councils and commissions do not seem to not mirror society as a whole (far from being “average” citizens). Are these entities really positioned to represent the public sector generally?

- What are appropriate measures for judging the effectiveness of a board, council or commission? Although this review utilized a number of measures (most identified from existing literature), which metrics are most suitable for judging the effectiveness of entities focused on forest resource issues and how best can they be implemented and measured?
- Are persons (chairperson, executive director) charged with leading a board, council or commission the most appropriate source for information about the operation and effectiveness of such entities? Might a more accurate and balanced assessment be obtained from individual members of an entity and from individuals or organized interests that are not legally affiliated with a board, council or commission?

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## Appendix A: State Natural Resource Related Boards, Councils, and Commissions

(Excludes entities focused on the following interests: waste management, historical, health and wellness, and economic development entities)

### Alabama

Board of Registration for Foresters  
Forestry Commission  
Soil and Water Conservation Committee

Scientific Advisory Commission  
State Soil Conservation Board  
Water Conservation Board  
Water Quality Control Commission  
Wildlife Commission

### Alaska

Board of Agriculture and Conservation  
Board of Fisheries  
Board of Game  
Board of Forestry  
Forest Stewardship Coordinating Committee  
Natural Resource Conservation and Development Board  
Urban and Community Forestry Council

### Connecticut

Acquisition Review Board  
Council of Environmental Quality  
Forest Practices Advisory Board  
Greenways Council  
Natural Area Preserves Advisory Committee  
Natural Heritage, Open Space, and Watershed Land  
River Protection Advisory Board  
State Tree Protection Examining Board

### Arkansas

Forestry Commission  
Game and Fish Commission  
Natural Heritage Commission  
Pollution Control and Ecology Commission  
Soil and Water Conservation Commission

### Delaware

Advisory Council on Natural Areas  
Council on Environmental Control  
Council on Forestry  
Council on Game and Fish  
Council on Greenways and Trails  
Council on Soil and Water Conservation  
Environmental Appeals Board  
Parks and Recreation Council

### California

Air Resources Board  
Biodiversity Council  
Board of Forestry and Fire Protection  
Boating and Waterways Commission  
Coastal Commission  
Commission on Parks and Recreation  
Fish and Game Commission  
Pacific Fisheries Management Council  
Pacific Marine Fisheries Commission  
Recreational Trails Committee  
Scientific Advisory Panel on Acidic Deposition  
State Lands Commission  
Water Commission  
Water Resources Control Board  
Wildlife Conservation Board

### Florida

Environmental Regulation Commission  
Fish and Wildlife Conservation Commission  
South Atlantic Regional Fishery Management Council  
Soil and Water Conservation Council

### Georgia

Board of Natural Resources  
Board of Registration for Foresters  
Environmental Advisory Council  
Forest Research Council  
Forestry Commission  
Soil and Water Commission

### Colorado

Air Quality Control Commission  
Board of Land  
Board of Parks and Outdoor Recreation  
Forestry Advisory Board  
Ground Water Commission  
Natural Areas Council  
Pollution Prevention Advisory Board  
Regional Air Quality Council

### Hawaii

Board of Land and Natural Resources  
Commission on Animal Species  
Commission on Water Resource Management  
Council on Hawaii Fisheries Coordination  
Land Use Commission  
Natural Areas Reserve Commission

**Idaho**

Clean Lakes Coordinating Council  
Fish and Game Commission  
Forest Practices Advisory Committee  
Forest Products Commission  
Keep Idaho Green Committee  
Land Board, State  
Park and Recreation Board  
Rangeland Resources Commission  
Soil Conservation Commission  
Water Conservation Task Force  
Water Quality Programs Advisory Committee  
Water Resource Board

**Illinois**

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

**Indiana**

Forest Stewardship Coordinating Committee  
Natural Resources Commission  
Natural Resources Foundation  
Water Quality Advisory Board

**Iowa**

Clean Air Act Compliance Advisory Panel  
Environmental Protection Commission  
Natural Resources Commission  
Preserves Advisory Board  
Soil Conservation Committee

**Kansas**

Conservation Commission  
Water Authority Advisory Committee  
Wildlife and Parks Commission

**Kentucky**

Advisory Committee to the Land and Water  
Best Management Practices Board  
Biodiversity Council  
Conservation Fund  
Clean Air Act Implementation Task Force  
Environmental Board  
Environmental Education Council  
Environmental Quality Commission  
Fish and Wildlife Resources Commission  
Forest Products Council  
Nature Preserves Commission  
Soil and Water Conservation Commission

**Louisiana**

Forestry Commission  
Soil and Water Conservation Committee

**Maine**

Arborist Advisory Council  
Arborists Examining Board  
Atlantic Salmon Board  
Atlantic States Marine Fisheries Commission  
Board of Environmental Protection  
Board of Licensure of Foresters  
Environmental Priorities Council  
Inland Fisheries & Wildlife Advisory Council  
Interagency Task Force on Invasive Aquatic Plants and  
Land for Maine's Future Board  
Land Use Regulation Commission  
Marine Resources Advisory Council  
Natural Areas Advisory Board  
Outdoor Heritage Fund Board  
Recreational Fishing Advisory Council  
Salmon Aquaculture Advisory Council  
State Conservation District Advisory Council  
Submerged Lands Advisory Board

**Maryland**

Acid Deposition Advisory Committee  
Agricultural Education and Rural Development  
Agriculture Commission  
Air Quality Control Advisory Committee  
Aquaculture Advisory Committee  
Assistance Board  
Black Bear Task Force  
Clam Advisory Committee  
Coastal and Watershed Resources Advisory Committee  
Coastal Bays Fishery Advisory Committee  
Commission on Economic Growth, Resource Protection,  
and Planning  
Commission on Environmental Justice and Sustainable  
Communities  
Commission of the Maryland Geological Survey  
Commission on State Parks  
Forest Advisory Commission  
Fur Resources Advisory Committee  
Greenways Commission  
Land Reclamation Committee  
Migratory Waterfowl Advisory Committee  
Non-Lethal Wildlife Management Task Force  
Park Advisory Commission  
Rural Legacy Board  
Scenic and Wild Rivers Review Board  
Soil Conservation Committee  
Sport Fisheries Advisory Commission  
Statewide Water Conservation Advisory Committee  
Tidal Fisheries Advisory Commission  
Water Monitoring Council  
Water Quality Advisory Committee

Wetlands Restoration Steering Committee  
Wild Turkey Advisory Committee  
Wildlife Advisory Commission

**Massachusetts**

Environmental Management Advisory Board  
Forestry Committee

**Michigan**

Board of Foresters  
Environmental Science Board  
Environmental Advisory Council  
Natural Resources Commission  
Natural Resources Trust Fund Board  
Water Resources Commission  
Waterways Commission

**Minnesota**

Advisory Committee on Genetically Engineered  
Organisms  
Board of Water and Soil Resources  
Citizens Advisory Committee - Environmental and  
Natural Resources Trust Fund  
Council on MN's Coastal Program  
Environmental Quality Board  
Forest Resources Council  
Great Lakes Commission

**Mississippi**

Board of Registration for Foresters  
Commission on Environmental Quality  
Commission on Marine Resources  
Commission on Wildlife, Fisheries, and Parks  
Environmental Quality Permit Board  
Forestry Commission  
Soil and Water Conservation Commission  
Water Resources Advisory Council

**Missouri**

Advisory Committee on Chip Mills  
Air Conservation Commission  
Clean Water Commission  
Conservation Commission  
State Park Board

**Montana**

Environmental Review Board  
Fish, Wildlife, and Parks Commission  
Grass Conservation Commission  
Rangeland Resource Committee  
Resource Conservation Advisory Council

**Nebraska**

Carbon Sequestration Advisory Committee  
Environmental Trust Board  
Games and Park Commission

Natural Resources Commission

**Nevada**

Advisory Board on Natural Resources  
Advisory Board on Water Resources  
Conservation Commission  
Environmental Commission  
Land Use Planning Advisory Council  
Wild Horse Commission  
Wildlife Commission

**New Hampshire**

Advisory Committee on Shore Fisheries  
Air Resources Council  
Board of Natural Scientists  
Conservation Committee  
Council on Natural Resources and Development  
Fish and Game Commission  
Forest Advisory Board  
Foresters Board  
Invasive Species Committee  
Pesticides Control Board  
Public Water Access Advisory Board  
Rivers Management Advisory Committee  
Water Council  
Water Resources Council  
Wetlands Council

**New Jersey**

Board of Certified Tree Experts  
Community Forestry Council  
Clean Air Council  
Soil and Conservation Committee

**New Mexico**

New Mexico Water Quality Control Commission  
Environmental Improvement Board  
Soil and Water Conservation Commission  
State Game Commission

**New York**

Fish and Wildlife Management Board  
Forest Practices Board  
Freshwater Wetlands Appeal Board  
Soil and Water Conservation Committee

**North Carolina**

Agriculture and Forestry Awareness Study Commission  
Atlantic State Marine Fisheries Commission  
Board of Registration of Foresters  
Coastal Resources Commission  
Environmental Management Commission  
Forestry Advisory Council  
Marine Fisheries Commission  
National Park, Parkway, and Forests Development  
Council

North Carolina Fisheries Association  
Sedimentation Commission  
Soil and Water Conservation Commission  
Wildlife Resources Commission  
Watershed Protection Advisory Council

**North Dakota**

Air Pollution Advisory Council  
Community Forestry Council  
Game and Fish Advisory Board  
Natural Resources Trust Board  
Soil Conservation Committee  
Water Commission  
Water Pollution Control Board  
Wetlands Trust Board

**Ohio**

Environmental Review Appeals Commission  
Water Resources Council  
Advisory Council on Forestry

**Oklahoma**

Air Quality Advisory Council  
Board of Registration for Foresters  
Conservation Commission  
Environmental Protection Authority  
Environmental Quality Board  
Forestry Advisory Council  
Forestry Cost-Share Advisory Committee  
Scenic Rivers Commission  
Task Force on Wildlife Funding  
Water Quality Management Advisory Council  
Water Quality Monitoring Council  
Water Resources Board  
Wildlife Conservation Commission

**Oregon**

Board of Forestry  
Environmental Justice Advisory Board  
Environmental Quality Commission  
Fish and Wildlife Commission  
Governing Board of the Department of Geology and Mineral Industries  
Historic Trails Advisory Council  
Land Board  
Land Conservation and Development Commission  
Land Use Board of Appeals  
Natural Heritage Advisory Council  
Pacific States Marine Fisheries Commission  
Parks and Recreation Commission  
Public Lands Advisory Committee  
Salmon and Trout Enhancement Program Advisory Committee  
Soil and Water Conservation Commission  
Water Resources Commission  
Watershed Enhancement Board

**Pennsylvania**

Conservation Commission  
Fish and Boat Commission  
Game Commission  
Citizens Advisory Council (Environmental Protection)  
Conservation and Natural Resources Advisory Committee  
Environmental Quality Board  
Hardwoods Development Council

**Rhode Island**

Advisory Council on Environmental Affairs  
Air Pollution Operating Advisory Committee  
Coastal Resources Advisory Committee  
Coastal Resources Management Council  
Northeastern Forest Fire Protection Commission  
Greenways Council  
Governor's Land Use Task Force  
Marine Fisheries Council  
Natural Heritage Preservation Commission  
Rivers Council of Rhode Island  
Scenic Roadways Board  
Water Resources Board  
Water Resources Coordinating Council

**South Carolina**

Advisory Council on Erosion and Sediment Reduction  
Environmental Certification Board  
Forestry Commission  
Interagency Council on Natural Resource Policy

**South Dakota**

State Conservation Commission  
Game, Fish, and Parks Commission  
Board of Water and Natural Resources  
Water Management Board

**Tennessee**

Forestry Commission  
Commission on Wildlife Resources

**Texas**

Board of Soil and Water Conservation  
Commission on Environmental Quality  
Natural Resource Conservation Commission  
Parks and Wildlife Commission  
Water Development Board

**Utah**

Air Quality Board  
Blue Ribbon Trout Fisheries Advisory Council  
Board of Parks and Recreation  
Board of Water Resources  
Fish Health Policy Board  
Forestry, Fire, and State Lands Advisory Council  
Habitat Council

Heritage Trees Advisory Committee  
Pesticide Committee  
Recreational Trails Advisory Council  
Riverway Enhancement Advisory Council  
Soil Conservation Commission  
Water Quality Board  
Wildlife Board  
Wildlife Heritage Advisory Committee

#### **Vermont**

Environmental Board  
Endangered Species Committee  
Forests, Parks, and Recreation Board  
Fish and Wildlife Board  
Natural Resources Conservation Council  
Trails and Greenways Council  
Water Resources Board

#### **Virginia**

Board of Air Pollution Control  
Board of Conservation and Recreation  
Board of Forestry  
Board of Game and Inland Fisheries  
Coastal Land Management Advisory Council  
Cave Board  
Land Conservation Foundation Board of Trustees  
Marine Resources Commission  
Reforestation Board  
Soil and Water Conservation Board  
Water Control Board  
Water Resources Center Statewide Advisory Board

#### **Washington**

Anadromous and Marine Resources Sport Fishing  
Commission on Conservation  
Community Forestry Council  
Fish & Wildlife Commission  
Forest Fire Advisory Board  
Forest Practices Appeals Board  
Forest Practices Board  
Forest Products Revolving Loan Fund Advisory Board  
Forest Stewardship Coordinating Committee  
Land Bank Technical Advisory Committee  
Natural Heritage Advisory Committee  
Natural Resources, Board of  
Salmon Recovery Funding Board  
State Parks and Recreation Commission

#### **West Virginia**

Air Quality Board  
Environmental Quality Board  
Forest Management Review Commission  
Natural Resources Commission

#### **Wisconsin**

Board of Environmental Education  
Board of Land and Water Conservation  
Council of Forestry  
Land Council  
Natural Resources Board

#### **Wyoming**

Agriculture and Natural Resources Mediation Board  
Air Quality Advisory Board  
Environmental Quality Council  
Fire Advisory Committee  
Forestry Advisory Committee  
Game and Fish Commission  
Ground Water Advisory Committee  
Land Quality Division Advisory Board  
Parks and Cultural Resources Commission  
Water Development Commission

## Appendix B: State Forest Resource Boards, Councils, and Commissions\*

Alabama Forestry Commission (1924)	New York State Forest Practice Board (1980)
Alaska Board of Forestry (1978)	New Hampshire Forest Advisory Board (2000)
Arkansas Forestry Commission (1931)	North Carolina Forestry Advisory Council (1973)
California Board of Forestry (1885)	Ohio Forestry Advisory Council (1976)
Colorado Forestry Advisory Board (2000)	Oregon Board of Forestry (1911)
Connecticut Forest Practices Advisory Board (1991)	South Carolina Forestry Commission (1927)
Delaware Council on Forestry (1969)	Tennessee Forestry Commission (1985)
Georgia Forestry Commission (1949)	Utah Forestry, Fire, and State Lands Advisory Council (1985)
Idaho Forest Practices Act Advisory Committee (1974)	Vermont Forest, Parks, and Recreation Board (1955)
Illinois Forestry Development Council (1983)	Virginia Board of Forestry (1986)
Indiana Forest Stewardship Coordinating Committee (2000)	Washington Forest Practices Board (1974)
Kentucky Best Management Practices Board (1998)	West Virginia Forest Management Review Commission (1987)
Louisiana Forestry Commission (1944)	Wisconsin Council of Forestry (2002)
Massachusetts Forestry Committee (2004)	Wyoming Forestry Advisory Committee (1984)
Minnesota Forest Resources Council (1995)	
Mississippi Forestry Commission (1926)	

\*Number in parentheses is actual or approximate date of establishment.

## **Appendix C: State Forest Resource Boards, Councils, and Commissions: Example Entities**

The structure, function and management of state forest resource boards, commissions, and councils can be more fully appreciated by examining specific examples. The descriptions which follow focus on the California Board of Forestry and Fire Protection, the Minnesota Forest Resources Council, and the South Carolina Forestry Commission. Their selection was based on such divergent characteristics as function, decision-making authority, diversity interests represented, type of issues addressed, occurrence and management of conflict, and member and stakeholder satisfaction. The information used to describe the example entities was obtained from a variety of print and web-based sources, personal contacts with the staff of each entity, and information obtained from the survey form that was sent to the leadership of all 30 entities reviewed here.

### **California Board of Forestry and Fire Protection**

The California Board of Forestry, later expanded to include fire protection, was founded in 1885 by the governor of California. Initially acting only in an advisory and educational capacity, the Board's authority was strengthened by the Forest Practices Act of 1948. In 1973, with the passage of the Zberg-Nejedly Forest Practice Act, the board was reorganized and its powers and responsibilities were expanded considerably to include the power to adopt and enforce forest practice rules (Arvola 1976; Martin 1989; California Board of Forestry and Fire Protection 2004). The California Board of Forestry and Fire Protection (CBFFP) current mission is "to provide policy leadership and to generate public interest and support in those matters key to the future of the state's forests and rangelands" (California Board of Forestry and Fire Protection 2004).

The CBFFP serves a number of roles and functions. It is responsible for authorizing the adoption of regulations and rules, serving an advisory role to agencies and decision-makers, and indirectly overseeing the activities of the state Department of Forestry and Fire Protection. The Board consists of nine members representing various: five from the general public, three from forest industry, and one from range interests. All the members are appointed by the governor, confirmed by the state senate, and serve four year terms. Members receive a small stipend and are reimburse for expenses incurred due to their position. The CBFFP currently operates with a \$413,000 annual budget which is appropriated directly from the state's general fund. The majority of the Board's finances are dedicated to personnel (executive director and a small staff) and Board operating expenses.

The CBFFP deals with a large variety of issues, the number of which increased substantially over the period 2000 through 2004. Issues that have consumed the most of the Board's time involve the regulation of forest practices on private forestland, forested watershed management, and timber harvesting activities generally.

Conflict within the CBFFP occurs somewhat frequently and has increased moderately over the period 2000 through 2004. More than 25 percent of the Board's operating time is devoted to conflict management. Conflict among members of the CBFFP has had a somewhat positive

effect on personal relationships between members but has had a strongly negative influence on the Board's overall performance (time and emotional energy, public image, delays in implementing decisions). The Board utilizes unassisted negotiation and facilitation techniques to manage conflict, although these approaches are considered to be somewhat ineffective. While the size of the Board and the cohesiveness of its member are seen as positively contributing to the management of conflict, the scarce finances available to the Board are seen as very negative affect the ability to manage conflict. Despite the many negative effects emanating from conflict and ineffective processes used to manage conflict, the level of conflict involving forest resource issues in California would most likely be greater without the CBFFP.

Overall, the CBFFP is viewed as being moderately ineffective in accomplishing its mission and only moderately effective in influencing the application of forestry management practices. Especially significant obstacles to organizational effectiveness are: excessive time devoted to trivial matters, short-term outlook, unnecessary time spent reviewing and reworking established past actions, and trying to accomplish too many things. Virtually all major stakeholder groups (namely, forest industry, nonindustrial private landowners, forestry professionals, local units of government, environmental groups) are frequently in opposition to many of the actions taken by the California Board of Forestry and Fire Protection.

### Minnesota Forest Resources Council

The Minnesota Forest Resources Council (MFRC) was legislatively established in 1995, largely in response to the results of a generic environmental impact statement (GEIS) and the report of a roundtable charged with recommending means of implementing the findings of the GEIS. The council's mission is to "ensure the sustainable management, use and protection of the state's forest resources to achieve the state's economic, environmental, and social goals."

The Minnesota Forest Resources Council (MFRC) is principally an advice-giving body focused on public and private forest within the state. Principal audiences for the Council's advice are the governor, executive agencies and the state legislature. The council administers a number of programs, including the development and monitoring of timber harvesting and forest management guidelines, conducting landscape-level forest resource coordination and planning, coordination of statewide forestry research programs and activities, and promotion of continuing education opportunities for professional resource managers.

The MFRC consists of 17 members representing a variety of interests: environmental (two), game management (one), conservation (one), forest products industry (one), commercial logging (one), tourism (one), academic and research (one), large nonindustrial landowner (one), small nonindustrial landowner (one), state department of natural resources (one), county land commissioner (one), USDA-Forest Service (one), labor (one), secondary wood products (one), Native American (one), and the Council's chairperson. The governor appoints 16 of the 17 members, while the Minnesota Indian Affairs Council appoints the member representing Native American interests. Members are appointed to four-year terms and receive a small stipend plus reimbursement of expenses involving Council activities. The MFRC current budget is approximately \$700,000. The latter is appropriated directly from the state's general fund and is used for expenses related to personnel, board operations, and programs. The MFRC employs an executive director and a small staff (Minnesota Forest Resources Council 2004).

The MFRC addresses a large number and wide variety of issues. The most common issues addressed involve timber harvesting, forest planning, and variety of statewide policy initiatives which the Council is asked to review and to make recommendations. The number of issues addressed has increased moderately during the period 2000 through 2004.

Conflict occurs somewhat frequently within the MFRC, although it has decreased moderately over the period 2000 through 2006. Less than one-quarter of the Council's operating time is devoted to conflict management. Conflict has had an especially positive effect on the Council's ability to develop effective forest resource policies and has sharpened consideration of innovative policy approaches. Conflict within the Council has had a somewhat negative effect on personal relationships among members. The cost hereof has been substantial in terms of time, money, emotional energy, and delay in implementing decisions, although it apparently has had little effect on public image of the MFRC.

The MFRC employs a number of methods to manage conflict, including unassisted negotiation, facilitation, and delegation to subcommittees. The ability to manage conflict is considered to be somewhat effective. The cohesiveness of its members and its legal mandates were indicated as contributing very positively to the management of conflict, whereas the size of the MFRC was indicated as having a somewhat negative impact. It was also felt that external conflict regarding forest resource issues would moderately increase without the existence of the Council.

The MFRC is viewed as being moderately to very effective in accomplishing its mission of influencing state forest resources policy, forest land use decisions, forest management practices, securing financial resources, and obtaining public support for its mission. Few administrative obstacles deterred the Council from carrying out its mission, although when they occur they were considered to be of moderate concern, namely mission too broad, too much time spent on the trivial, and trying to accomplish too many things. Most stakeholders were at least somewhat supportive of Council's programs and actions, with the forest industry, public forestry officials, and environmental groups being the most supportive.

### South Carolina Forestry Commission

The South Carolina Forestry Commission (SCFC) was established in 1927 in response to the poor condition of its forest resources. The latter had been heavily cut over and (in combination with poor farming practices) were contributing to excessive erosion and severe water pollution. The mission of the Commission is "to protect, promote, enhance, and nurture the forest lands of South Carolina in a manner consistent with achieving the greatest good for its citizens." (South Carolina Forestry Commission 2004).

The SCFC's main function is to oversee the state agency of the same name. The Commission also acts as an advisory body generally for forestry issues throughout the state. The Commission consists of nine members: five chosen from the general public, two lumbermen, one landowner / farmer, and the dean of Clemson University's school of forestry. The members are appointed by the governor with the two public members requiring approval by the state Senate. Members are appointed to six-year terms with the exception of the representative from Clemson University. Commission members receive a small stipend and are reimbursed for expenses incurred while

conducting activities involving the Commission. Used solely to pay for Commission operations, the SCFC has a very small budget—\$10,000—which is appropriated from the state’s general fund.

Conflict within the SCFC is viewed as occurring very infrequently and requires less than a quarter of the Commission’s operating time. As seldom as conflict occurs, unassisted negotiation was the sole method reported for managing it. Supported by various structural and operational characteristics, the Commission overall was viewed as managing conflict somewhat effectively. Conflict over the use and management of forest within the state would probably remain the same regardless of whether or not the Commission existed.

The SCFC is considered to be moderately effective in accomplishing its mission and in influencing the application of forest management practices, but is viewed as very ineffective at influencing the development of statewide forest resource policies. Most stakeholders groups are at least somewhat supportive of the Commission’s activities, especially forest industry. Timber harvesters, local units of government, and environmental groups are seemingly neutral regarding the Commission’s programs and activities.