Public Involvement in USDA Forest Service Policymaking: A Literature Review

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ABSTRACT

This article provides a brief history of public participation in the USDA Forest Service from 1960 to the present and reviews 25 of the most significant empirical studies on the topic. Twenty-one broadly defined keys to success are identified in the literature and then organized in terms of process design traits, participant traits, and contextual traits. The most frequently cited factors in each category are, respectively, effective facilitation, active participation by agency staff, and support from agencywide policies and administrators. Summarized findings suggest several attributes the agency can look for when selecting individuals to facilitate collaborative planning processes involving multiple stakeholders.

Keywords: cooperative conservation, collaborative stewardship, conflict resolution, consensus, partnerships

For 40 years, the USDA Forest Service has experimented with multiple forms of public participation in agency planning, policymaking, and project implementation. These efforts have received much scholarly scrutiny resulting in approximately 100 journal articles, reports, and book chapters. However, no recent attempt has been made to systematically review and summarize this body of literature. The most notable efforts to date include a congressional report (Office of Technology Assessment (OTA) 1992) and a chapter from the Sierra Nevada Ecosystem Project (Kusel et al. 1996). The goal of this article was to review briefly the history of public participation in the Forest Service and review a sample of the most ambitious empirical studies published since 1990, summarizing their conclusions regarding conditions for success, key challenges, and methods to overcome them.

History of Public Participation in the Forest Service

Perhaps more than any other federal agency, the Forest Service has had a long and tumultuous history of involving the public in policymaking (Lawrence et al. 1997). The modern era of public participation in the Forest Service began with the Multiple-Use Sustained-Yield Act of 1960 (MUSYA), which compelled the agency to openly balance the conflicting interests of various recreational and commercial user groups (Ruth 1996, 148). Because MUSYA instructed the Forest Service to use the "needs of the American people" to guide its management decisions, the law initiated a trend toward holding public agencies accountable to the interests of stakeholders, not just to the norms of the forestry profession (OTA 1992). By 1971 the Forest Service had launched an inventory of roadless areas known as Roadless Area Review and Evaluation (RARE) I, incorporating what at the time was the most extensive public involvement program in American history (Dana and Fairfax 1980); but not until Congress enacted the National Forest Management (NFMA) of 1976 did the agency have clear direction about what it should actually *do* to involve the public. NFMA required the Forest Service to "hold public meetings or comparable processes . . . that foster public participation" in the "development, review, and revision" of forest plans (OTA 1992). Reflecting on MUSYA, NFMA, and the handful of government-wide statutes that affect public participation in the Forest Service such as the National Environmental Policy Act (NEPA) of 1969, Daniels and Walker (1997) conclude "No American agency appears to have a more explicit public involvement mandate."

In interpreting this mandate, the Forest Service has experimented with many varying approaches to public involvement, beginning with a literal interpretation of NFMA's "development, review, and revision" language. In the 1970s public participation in the Forest Service was nearly synonymous with a linear process of issuing a draft plan, asking the public to comment, and then making a final decision (Yaffee 1994, 267); but the public was disenchanted with this limited role. Sensitive to charges that its propaganda and technical expertise inhibited public comment, the Forest Service "adopted a defensive 'listening session' format in which agency personnel were merely to listen to the public while not speaking, explaining the issues, or discussing the options" (Dana and Fairfax 1980).

By the early 1980s, this defensive model was proving ineffective, and the agency reached back to its MUSYA roots and sought to remake itself as an "unbiased arbiter of conflicting interests: the Forest Service

as societal balance point" (Yaffee 1994, 267). According to this view, the agency's success in finding the right balance could be measured by whether the final decision left all sides dissatisfied (Yaffee 1994, 268). More often than not, the agency succeeded, and, eventually, "every major Forest Service decision was appealed by environmental and/or timber harvesting groups" (Sabatier et al. 2005). To compound the public's dissatisfaction further, an exhaustive study of the 227 public meetings that constituted the 1977 RARE II process was unable to detect any evidence that public comments actually factored into the agency's final decisions (Mohai 1987). The public's disenchantment continued to grow throughout the decade until the agency that had once epitomized proud professionalism (Clarke and McCool 1985) was deeply distrusted by all quarters (US General Accounting Office 1997).

A transformation of the Forest Service's relationship with the public began in the mid-1980s when, exhausted by an onslaught of litigation and appeals, the agency set its sights on another new benchmark: conflict resolution. The Forest Service began exploring the use of more interactive, collaborative, nonlinear approaches to public involvement, such as interest-based negotiation (Fisher and Ury 1981) and Alternative Dispute Resolution (Manring 1998a). Such approaches typically use a professional, neutral facilitator to guide the parties through brainstorming and joint fact-finding exercises with the goal of inventing mutually satisfactory policies.

The early 1990s also saw ecosystem management and adaptive management become the dominant principles guiding Forest Service planning. Ecosystem management "emphasizes collaborative decision-making to deal with a landscape owned by many individuals and organizations with different values, interests and capabilities" (Yaffee et al. 1996, Ecosystem Management Initiative 2004). Adaptive management rejects the linear planning model in favor of a circular one in which policies are treated as experiments to be tested in the field, and then redesigned accordingly (Shindler et al. 1999).

Watershed councils were another advent of this period that the Forest Service embraced willingly (Doppelt et al. 2002). Watershed councils are an egalitarian model of public involvement in which federal agencies, to varying degrees, relinquish their priv-

ileged role as the ultimate guardian of the public interest on federal lands, and assume a seat at the table as an equal partner with local community groups, and state and local governments (Leach et al. 2002).

In 1997, Forest Service Chief Michael Dombeck advocated "Collaborative Stewardship" as the agency's unofficial motto (Wondolleck 1997) and pledged to change employee performance standards to include a demonstrated commitment to collaborative, community-based stewardship (Forest Service 1997).

Although it is too early to reflect on the history of public participation in the current decade, several recent initiatives of the Bush administration suggest that another sea change is underway. For example, in Aug. 2004, President Bush (2004) issued an executive order instructing the major federal natural resource agencies to promote "cooperative conservation," which among other things, "properly accommodates local participation in Federal decisionmaking." Farming and ranching organizations have applauded the order (B. Stallman, president, American Farm Bureau Federation, Aug. 27, 2004), but its emphasis on property rights and "public health and safety" worries environmentalists (The Associated Press 2004). The order also has raised objections from some professional mediators, noting that participants in an August 2005 White House Conference would be barred from striving for "collective judgment or consensus advice or deliberation."

The greatest change under the current administration has been the December 2004 release of new regulations governing forest planning under NFMA. Since 1979, agency regulations required preparation of an environmental impact statement (EIS) under NEPA whenever forest plans were developed or revised. Accordingly, NEPA's provisions on public involvement governed forest planning. Under the new rule, an EIS will not be prepared for each forest plan. Forest plans "will describe the desired social, economic, and ecological conditions" for each administrative unit but will not outline specific projects (Forest Service 2005, 35). Because the plans will be "merely strategic rather than prescriptive," the agency reasons, forest plans "typically will not have environmental effects" and therefore an EIS is not required. The new rule still calls for public participation during plan development, but the local forest supervisor has "discretion

to determine the methods and timing of public involvement opportunities" (Forest Service 2005, 144).

Methods

Of the 100 recent publications on the topic of public participation in the Forest Service, this review covers 25 of the most significant empirical studies that reached conclusions regarding keys to success. The review includes only empirical studies based on original field research. The review also is restricted to those studies that identify keys to success and excludes studies focusing on other topics such as the costs and benefits of public participation, the history of public participation, or the legal underpinnings of public participation. In selecting a manageable number of studies to review, studies published after 1990 were favored over earlier literature, and studies that involved extensive data collection efforts were favored over more modest studies. The approach taken in this review is modeled after a review of watershed partnerships (Leach and Pelkey 2001).

For each study, the primary conclusions about the factors that govern success in public participation processes were recorded. Although identifying the main conclusions for each publication was somewhat subjective, most studies stated their conclusions plainly, often enumerating them in bullet form. The procedure was to read each article and to paraphrase the main conclusions. When subsequent studies reached the same conclusion, this was noted in a table (available from the author), with one axis being a list of conclusions and the other axis being the list of studies. In all, the 25 studies identified 351 conclusions (an average of 14 per study, with a range of 1–60 per study). After adjusting this figure for nearly identical conclusions reached by two or more studies, there are 185 distinct conclusions about what makes public participation succeed and fail. To simplify the presentation, similar conclusions were grouped together, resulting in 21 groups or themes. Although grouping the conclusions into themes was a subjective process, the resulting histogram (Figure 1) provides a reasonable portrait of the current understanding of public participation involving the Forest Service, as revealed by the existing body of empirical research.

Collecting and tabulating binary data for each study incurs two risks. One risk is
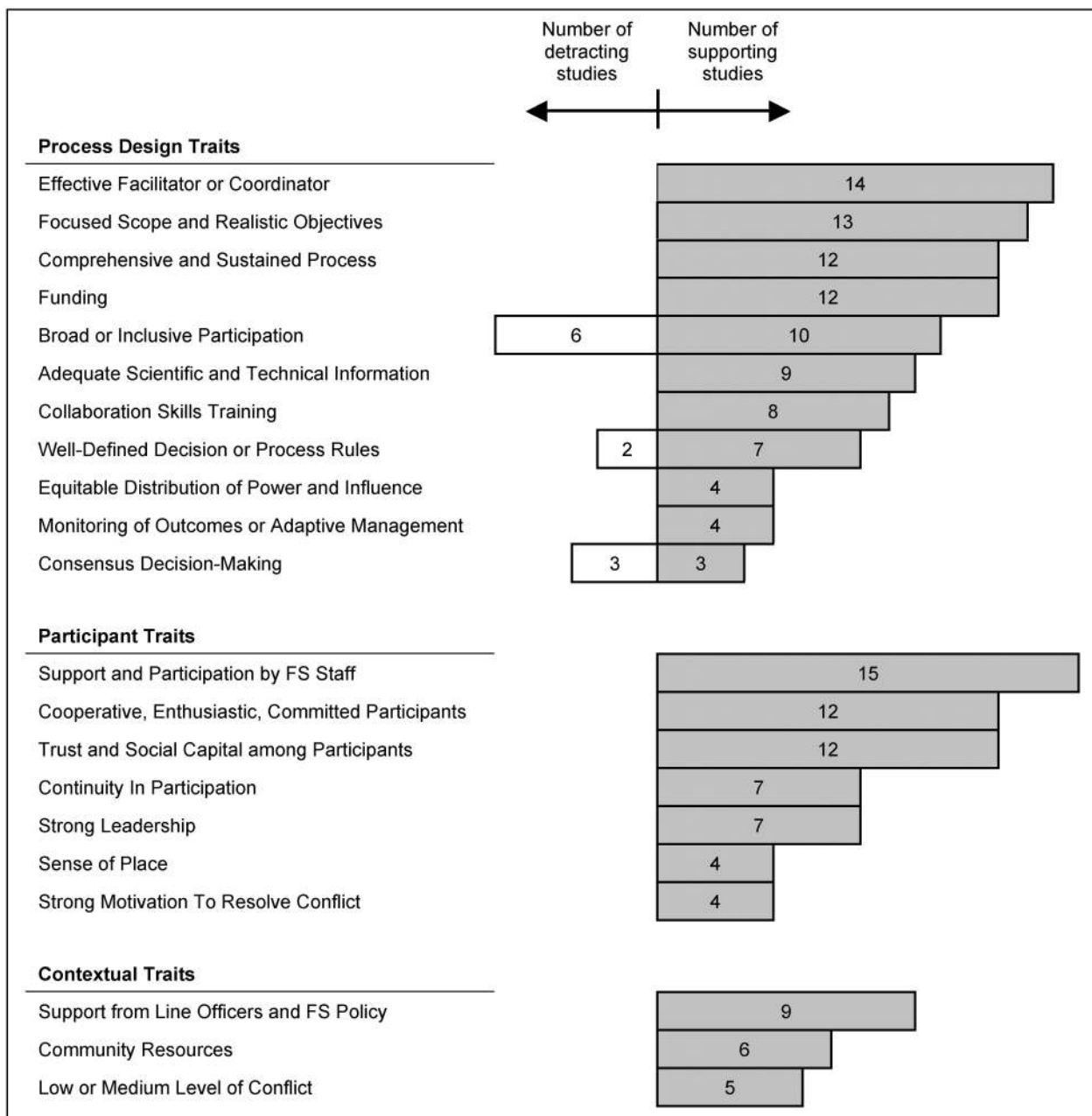
Figure 1. Number of studies (n = 5) supporting and contradicting the importance of various keys to success in Forest Service public participation.

conveying an undue sense of precision. As discussed in greater detail in the following paragraphs, the numerical tabulations should be viewed as only rough approximations of the relative importance of the various themes in the literature because the histogram was generated through an admittedly subjective coding of each publication and no attempt has been made to insure intercoder reliability. Moreover, the results of individual studies are subject to each researcher's choice of methods, which in all cases strays far from the idealized controlled experiment. The histogram and the underlying table are used here simply to help

manage and summarize the huge amounts of information contained in the 25 studies. Second, by paraphrasing and then categorizing the 185 keys to success, much of the nuance and insight contained in the original manuscripts has been lost. What remains is a catalog of the *most unequivocal* and *most contested* conclusions from the literature. Figure 1 shows the number of studies that reached each conclusion. In four cases, a given conclusion was supported by some studies and contradicted by others. These studies are represented on the same bar of the histogram for comparison.

Touchpoints: The Process, the Participants, and the Context

Figure 1 organizes the 21 themes into three broad categories: (1) process design traits, (2) participant traits, and (3) contextual traits. Process design refers to those traits that a convener or facilitator can directly influence or control. Participant traits refer to the key attitudes, behaviors, and relationships that participants bring to the process. Conveners and facilitators may be able to influence these traits indirectly by selecting participants who display the traits

or by helping participants learn and practice them. Contextual traits are those factors beyond the control of the people at the table. Before investing time and energy in public participation processes, stakeholders may wish to assess whether each of these contextual conditions is satisfied.

As is evident in Figure 1, more than one-half of all the conclusions from the studies pertain to process design. It is tempting to conclude, therefore, that process design traits are the most important traits to consider. More likely, however, is that empirical studies have tended to focus on designs traits simply because (1) these are the most easily observable traits of a public participation process and (2) interviews with facilitators and conveners are one of the primary data sources that inform the studies, and facilitators and conveners focus on design traits precisely because these are the factors they control. Participant traits are the next most frequently cited factors, accounting for one in three conclusions. Contextual factors account for about one in nine conclusions, probably because context often is invisible to the participants and difficult for the researcher to measure.

Process Design Traits

The presence of an *effective facilitator and/or coordinator* is one of the most frequently cited keys to success. Less clear is whether the facilitator ought to be a professional third party who is independent and objective (e.g., Carr et al. 1998) versus a stakeholder in the dispute who is trusted by the other parties. Doppelt et al. (2002) suggest that successful facilitators can be either neutral outsiders or Forest Service employees, whereas Wondolleck and Ryan (1999) argue that if a Forest Service official facilitates the group, then a separate official should assume responsibility for advocating the agency's interests during group meetings.

Another dominant set of conclusions relates to having a *focused scope and realistic objectives.* Representative recommendations include having a clear purpose and objectives (Schuett et al. 2001), focusing on measurable goals (Doppelt et al. 2002), a manageable number of projects (Daniels and Walker 1996), a well-defined geographic scope, and compelling problems to sustain the participants' motivation (Wondolleck and Yaffee 1997). Other studies point to the tractability of the dispute. For example, Walters et al. (2003) cautions that the dis-

putes driven exclusively by value conflicts are not suitable for negotiation. Early in a process, it may be useful to focus on a few easily attainable goals to build momentum, confidence, and reputation (Wondolleck and Yaffee 1997) and to celebrate each milestone achieved (Forest Service 2000).

Another frequent conclusion from the studies concerns the relative advantages of *comprehensive and sustained* public involvement. Shindler and Neburka (1997, 18) call for "full group interaction," noting one participant's dissatisfaction when "the Forest Service talked to us, we talked to them, but we citizen members never talked to each other." One of the most compelling empirical arguments for highly deliberative processes is Gericke and Sullivan's (1994) finding that public participation in small-groups with two-way communication is more effective at heading off forest plan appeals relative to one-way processes in which the agency simply seeks to educate the public or receive comments. Germain et al. (2001) find that participants are most satisfied when they are involved in predecisional scoping, rather then simply commenting on fully formed policy proposals. Similarly, Manring (1998b, 287) suggests using conflict management process as early as possible. Yaffee et al. (1997) suggest the process should span several phases including problem setting, direction setting, and implementation. Several studies conclude that successful collaboration takes time, as participants learn to focus on their underlying interests, not simply their stated policy positions. Accordingly, Doppelt et al. (2002) warn against judging collaborative processes prematurely.

Funding could arguably be listed under process design traits, participant traits, or contextual traits. Convening agencies can improve the likelihood of success by funding various startup costs such as retaining skilled facilitators or conducting situation assessments or public outreach (Wondolleck and Yaffee 1994). Success requires that agencies earmark funding to support consistent staff attendance (Frentz et al. 2000) and ultimately project implementation (Forest Service 2000). Funding is a contextual factor in that Congress and political appointees influence the amount of money the Forest Service can appropriate for collaborative planning (Wondolleck and Yaffee 1994).

Broad and inclusive participation is desirable according to several studies. Some studies suggest participation should be open to anyone who wishes to participate (Con-

sensus Building Institute (CBI) 2003), anyone who is potentially affected by the decisions (Forest Service 2000), or anyone who could potentially challenge the decisions (Schuett et al. 2001). Selin and Chavez (1994) emphasize having the right *mix* of participants to ensure compatible personalities and a diversity of skills and resources. Some studies urge holding meetings at a convenient time and place to involve more local citizens or small landowners (Tuler and Webler 1999, Smith et al. 1999). Others proscribe focusing on local concerns to the exclusion of national interests (Forest Service 2000).

Notably, six studies argue that participation should be restricted. One concern is that the number of individuals should be manageable (Wondolleck and Yaffee 1997, Forest Service 2000). Another concern is that participants be decisionmakers within their organizations or, at a minimum, should be able to accurately represent the views of their organization (Selin and Myers 1995, Yaffee et al. 1997). Floyd et al. (1996) report an inverse correlation between the number of parties and the perceived efficiency and equity of the outcomes. Shindler and Neburka (1997) find value in ground rules that restrict participation to individuals who have a solid understanding of the issues and who can commit to a year's worth of meetings. Their research also supports the practice of excluding new members from joining established planning groups (to avoid the instability and delays of bringing new members up to speed). Shindler and Neburka (1997) caution against drawing attention from national interest groups, which often stake out their positions early and publicly and may try to take control of the local group's agenda. Striking a similar note, Wondolleck and Yaffee (1994) suggest avoiding involvement by journalists and elected officials during the early stages of collaboration.

Adequate scientific and technical information is critical to success, according to nine studies (e.g., Walters et al. 2003). Process design choices can influence how well the participants avail themselves of available information. For example, Tuler and Webler (1999) assert that conveners should solicit both expert knowledge and local knowledge, the latter being frequently overlooked and undervalued. Shindler and Neburka (1997, 18) recommend handpicking participants who are knowledgeable about the issues. Daniels and Walker (1996) advo-

cate using a "systems approach" to help participants collaboratively assess the underlying causes of focal problems. Yaffee et al. (1997) emphasize securing appropriate technology for communications and decision support—from Internet access to Geographic Information Systems.

Collaboration skills training is another frequent theme in the literature. As a convening agency, the Forest Service is urged to train participants in communication, outreach, leadership, and collaborative problem solving skills (e.g., Frentz et al. 2000). Selin and Chavez (1993) suggest the agency should better publicize success stories and training tips.

Well-defined decision rules and process rules are cited as key traits in seven studies. Representative suggestions include clearly articulated rights and responsibilities of all participants from the outset (Schuett et al. 2001), effective process rules or bylaws (Selin et al. 1997), a predictable schedule of meetings (Wondolleck and Yaffee 1997), and clear duration of the process (Forest Service 2000).

By contrast, two studies suggest that flexible or informal process rules can work well. Selin and Chavez (1994, 58) describe the benefits of informal protocols and a "homey atmosphere." Selin and Myers (1995, 43–44) found a negative correlation between participants' assessment of the group's effectiveness and the adequacy of its structure and organization.

Four studies call for an *equitable distribution of power and influence* (Forest Service 2000, Selin et al. 2000) or cultivating a sense of fairness, equity, and burden sharing (Yaffee et al. 1997, CBI 2003).

Four studies cite the importance of monitoring and evaluation. Schuett et al. (2001) discuss the use of progress reports and other evaluation tools to ensure the accountability of the process. Selin and Chavez (1993, 7) describe the need for "quality control over partnership outcomes." Doppelt et al. (2002) suggest that collaborative planning processes should be treated as experiments and learning opportunities.

The merits of *consensus-based decisionmaking* is a topic on which there is little consensus in the literature, with one study supporting consensus (Schuett et al. 2001), one study urging caution (Tuler and Webler 1999), and two studies presenting evidence both pro and con (Forest Service 2000, Wondolleck and Yaffee 1994).

Participant Traits

Active support and participation by Forest Service staff is the dominant recommendation pertaining to participants. Several studies suggest this support should come from the highest possible levels of the agency (e.g., Yaffee et al. 1997). Shindler and Neburka (1997) report that regular attendance by the forest supervisor or district ranger helps legitimize the group and conveys to participants that their suggestions will be taken seriously. Manring (1998b) argues for incorporating collaborative planning into normal decisionmaking, not just the most complex or intractable disputes. Some studies suggest the Forest Service must be willing to cede authority to the collaborative process itself (e.g., Smith et al. 1999). Others assert the agency must be willing to implement negotiated agreements (Schuett et al. 2001) and avoid backpedaling from specific commitments (Wondolleck and Yaffee 1997). Selin and Chavez (1994, 55–56) note that effective collaboration often requires Forest Service staff to bend rules or take other professional risks.

Another frequent theme is the value of having *cooperative, enthusiastic, and committed participants.* Personal qualities that are especially valued in collaborative settings include honesty and humility; perseverance; a community spirit; and a willingness to take risks, to compromise, to listen and learn from others, to keep an open mind, to take criticism gracefully, to respect those with differing opinions, and to avoid attacking others personally. Steelman and Maguire (1999) emphasize the importance of articulating desired future conditions rather than simply airing grievances. Another trap to avoid is assigning blame for past losses (Forest Service 2000). Schuett et al. (2001) caution participants to avoid cutting side deals outside the collaborative process.

The importance of *trust and social capital* is supported by 12 studies. Schuett et al. (2001) suggest creating opportunities for social interaction among participants outside regular meetings. Selin and Myers (1995) emphasize cultivating a group identity. Wondolleck and Yaffee (1994) argue that a well-defined geographic scope helps foster a sense of community and social norms. Tuler and Webler (1999) highlight the importance of participants' trust in the process itself. Smith et al. (1999) emphasize that private sector participants must trust their government partners.

Seven studies mention the importance of *continuity in participants* over time (e.g., Selin et al. 2000). This issue is particularly salient for the Forest Service, which has a longstanding policy of rotating personnel between forests to guard against co-option of rangers by local business interests (Clarke and McCool 1985). In cases where personnel changes are unavoidable, the success of an ongoing collaboration hinges on the new personnel emulating or exceeding their predecessors' commitment to the process (Wondolleck and Yaffee 1997, Tuler and Webler 1999).

Seven studies highlight the value of *strong leadership* throughout the partnership, not just among those in formal leadership positions.

Four studies conclude that public participation is easier to sustain when the stakeholders share a strong *sense of place*—an affection for and commitment to a geographic location such as a watershed or town.

Similarly, four studies conclude the participants must have a *strong motivation to resolve the conflict.* This motivation can stem from a significant resource problem or crisis or from a shared recognition that the participants' interests are interdependent (Yaffee et al. 1997, Selin and Myers 1995). Motivation also is heightened when participants perceive a political stalemate in which they each lack viable alternatives to the collaborative process (Forest Service 2000). Daniels and Walker (1997) caution that the Forest Service must strive to truly resolve the issues, not simply settle for a compromise that splits the difference between two opposing positions.

Contextual Traits

Support from line officers and agencywide policies is the dominant contextual factor in the reviewed studies. Several studies conclude that agency culture and performance standards should evolve to value collaboration skills on par with technical skills related to timber harvest or resource management. Similarly, staff workloads must be adjusted to accommodate the time demands of collaborative planning (Manring 1998b).

Community resources of various kinds influence the likelihood of success, according to six studies. Doppelt et al. (2002) identify communitywide social capital, competence, and civic engagement as conducive to success. Valuable resources include external support from the community (Schuett et al. 2001), public interest and pressure (Yaffee et

al. 1997), and local models of successful collaboration (Forest Service 2000). Given the importance of community resources, Frentz et al. (2000) recommend that the Forest Service works to enhance collaborative capacity and leadership in communities bordering national forests.

Five studies find that success is more likely for disputes characterized by *low or medium levels of initial conflict* (Forest Service 2000) or by participants who share common goals, values, or ideology (e.g., Wondolleck and Yaffee 1994). Floyd et al. (1996, 30–32) developed a metric for the "resource conflict continuum" and showed that it correlates inversely with six measures of planning effectiveness and efficiency.

Conclusions

One way to encapsulate the dozens of findings from the literature is to review the guidance they provide for Forest Service staff or stakeholders who are choosing a facilitator for a collaborative planning process. The balance of evidence suggests that, depending on the circumstances, both neutral third parties and Forest Service employees can serve effectively in the roll of facilitator. In the case of highly localized planning processes, where the participants are familiar with one another, Forest Service employees with a reputation for fairness and objectivity may gain the confidence of the group faster than could a professional facilitator brought in from outside. The services of a professional, third party may be necessary for collaborative planning processes that are larger, more complex, more contentious, or highly visible.

Regardless of whether the facilitator is in-house or an outside consultant, the literature suggests that this individual or team should be conversant in the "process design traits" identified in Figure 1 and specifically should be able to

• Design a collaborative process with suitably focused scope and tangible objectives, yet comprehensive and flexible enough to address root causes of the manifest conflict.

• Accurately estimate funding needs for facilitation and administration of the process.

• Assemble a representative and knowledgeable roster of participating stakeholders.

• Train stakeholders in collaboration skills or communication skills.

• Help stakeholders define decision rules and other procedural rules, without overly structuring the process and smothering the creative energy that often flourishes in an atmosphere of informality.

• Demonstrate sufficient knowledge of (and willingness to work within) the legislative, scientific, and political constraints of the agency.

• Demonstrate sufficient technical savvy to help participants achieve a common understanding in areas of scientific uncertainty and to help them design protocols for monitoring and evaluating outcomes.

Relative to the other federal agencies, the Forest Service appears to be particularly well positioned to take advantage of the latest findings from research on collaborative planning. Two of the agency's most valuable assets are its 40 years of experience and experimentation with various public involvement paradigms and its long history of operating under the multiple-use doctrine, which has forced the agency to accommodate competing interests. The agency's multiple and often conflicting legislative mandates create ambiguity that, ironically, can work in the agency's favor if it is recognized as a source of discretion. By using its discretion to support collaborative planning strategies, the Forest Service can help its constituents invent creative policy solutions that satisfy each party's fundamental interests.

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