

Role of Public Involvement in the Limits of Acceptable Change Wilderness Planning System

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Abstract—Implementation of the LAC within politicized contexts requires that managers/planners involve the public in ways significantly different from the traditional rational-comprehensive paradigm of natural resource planning. In politicized contexts, the lack of clear agreement about goals and disagreement among scientists about cause-effect relationships requires planning to be collaborative and learning oriented. LAC makes the value-laden nature of protected area management decisions explicit; involving the public ensures that the variety of values involved are revealed. Transactive planning is an approach, based on dialogue and mutual learning, that provides an effective framework for developing LAC-based plans.

The LAC planning system represents a rational, science-based planning process articulated in the implementation of indicators, standards, and monitoring applied across different opportunity classes within Wilderness. As originally conceived, LAC was concerned primarily with resolving the conflict between the mutually competing goals of preserving wilderness conditions while ensuring unrestricted access to high quality wilderness recreation experiences. It was the epitome of a rational-comprehensive approach to planning in protected area settings in that it presented a process based on a specific sequence of steps, much of the information for which came from scientific and technical sources. LAC was broadly representative of how natural resource management agencies approach planning. In actual practice, however, the application of the LAC process has been deeply intertwined with substantial public involvement. In this paper, we give the rationale for the elevated role of public involvement in the LAC process and outline how public involvement has become integrated with protected area planning.

Traditional natural resource agency approaches to public participation have often been constructed upon procedural and adversarial views of the process. Public participation is a requirement of the National Environmental Policy Act, the National Forest Management Act, and for studies of wilderness suitability, the Wilderness Act. Such legislation imposed upon land management agencies a duty to inform the public, identify issues, and gather responses to agency

defined alternatives. Often, this duty was carried out in a series of informational meetings that regularly led to confrontation over proposed actions. The public tended to be leery of agency-led meetings, many of which were engineered to comply with procedural requirements but left little opportunity for interaction and discussion. While the public often voiced its views, the public was not part of the planning process.

In a real sense, with this conception of planning as engineering, the public was not qualified to engage as an equal participant in the process because it did not hold technical competencies to proceed or contribute in a constructive way. Planning had been captured by technocrats, and was viewed as a set of procedures or protocols for developing the best route to a desired end. When planning is conceived as engineering or modeling, only those with the relevant credentials may engage.

This model of planning had several other distinctive drawbacks, one of which is that such approaches to planning often led to stalemates and a lack of action—a problematic paradox if planning is viewed as “linking knowledge to action” (Friedmann 1987). If planning is viewed as a series of interventions into anticipated history, gridlock is catastrophe. A second effect was to discount and neglect experiential knowledge held by the public. Such knowledge comes in the forms of anecdotes, emotions, and informed “common sense.” Experiential knowledge can inform the planning process of what issues and questions are socially relevant and the political acceptability of alternatives. It may complete gaps in knowledge about specific places. Its presence may increase the quality of discussion. Science alone is not an adequate basis for social action. Such action requires that society understand and accept the technological guidance suggested by science, and find that it is not only socially acceptable but culturally appropriate and economically feasible. Such findings require the “working through” that Yankelovich (1991) suggests is fundamental to generating informed public judgment.

The approach to planning and public participation for the first full application of LAC was paradigmatically different from past forms. LAC was married with a transactive approach to planning (Friedmann 1973) that involved using a citizen task force to interact on equal footing with agency managers and scientists to produce the plan (McCool and Ashor 1984; Stokes 1990). Transactive planning is built upon the concepts of dialogue and mutual learning as prerequisites to effective societal action—the plan. Friedmann designed transactive planning as a response to the failures of traditional rational-comprehensive planning in urban settings. Transactive planning is built upon the assumptions

In: McCool, Stephen F.; Cole, David N., comps. 1997. Proceedings—Limits of Acceptable Change and related planning processes: progress and future directions; 1997 May 20–22; Missoula, MT. Gen. Tech. Rep. INT-GTR-371. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

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that (1) action in society requires multiple actors in multiple roles and (2) both scientific (processed) knowledge and personal (experiential) knowledge are required for effective action. However, the difference in perspectives and knowledge held by scientists and various publics leads to a “gap in knowing” that can only be overcome through a series of face-to-face interactions (transactions). Friedmann envisioned small working groups of individuals facilitated by professional planners developing solutions to neighborhood issues and problems to clear this gap.

Each individual representing a specific interest, brings to the process a particular type of expertise and knowledge that is required for effective action. Through the dialogue that is fundamental to mutual learning, plans are crafted that incorporate a series of compromises and collaborative solutions (mutually accepted transactions). This approach was initially tested in an outdoor recreation planning situation by both McLaughlin (1977) and Stokes (1982), and since has been used successfully in a number of wilderness management plans (see McCoy and others 1995). In each case, working groups of citizens, managers, and sometimes scientists, collaborated to produce a recreation management plan for the wilderness. This type of planning represents a level of public involvement not generally found elsewhere in the Forest Service or other Federal land managing agencies. The question arises, why has such a systematic, science-based process as LAC become intertwined with an apparently ambiguous, often-times controversial process as public involvement and transactive planning using citizen working groups?

The answer is threefold. The need for public involvement, beyond complying with procedural requirement of various environmental legislation, is shaped by (1) the nature of the problems confronting wilderness managers, (2) the changing societal situations that affect virtually all areas of natural resource planning, and (3) the value-laden and judgmental character of decisions involved in protected area planning.

Nature of the Problem LAC Addresses

LAC was conceived as a process to resolve conflict between the goal of providing unrestricted opportunities for wilderness recreation use and the goal of preserving wilderness conditions. In practice, we have learned that these goals are neither clearly understood nor is there, commonly, clear agreement about them. Their interpretation is open to a host of definitions and their potential resolution is likewise not straightforward. That is, the original authors of the LAC planning system assumed that the desired conditions of wilderness (pristine conditions, freely functioning natural processes, no intergroup conflict, no access or behavioral restriction, and so forth) were so obvious that there was no need to state these desired conditions explicitly. In reality, the Wilderness Act of 1964 is a product of compromise hammered out over 8 years of political wrangling; much of the act’s language (such as, “outstanding opportunities for primitive and unconfined experiences”) is still subject to different and conflicting interpretations by a variety of

interest groups when discussing management of individual Wilderness areas.

Debate over the ultimately constraining goal—how wild should the Wilderness be?—characterizes many wilderness planning processes. The potentially varying interpretations of this goal require that they be brought into the dialogue so that learning may occur. While the presence of dialogue may seem to make the task of writing standards for the ultimate constraining goal (wildness) difficult, it is only so because an attempt is being made to identify values explicitly during the LAC process (so they can be consciously appraised) rather than following publication of draft alternatives where the only recourse may be judicial review. The disagreement over goals suggests that science may play a significantly different role in planning than in settings where there is agreement. In settings of disagreement over goals, the primary planning approach will be one of negotiation and compromise (Thompson and Tuden 1987); science is limited in its capacity to indicate the most appropriate goal.

To complicate matters, many protected area management organizations face planning settings where there is not only little agreement about goals, but often scientists disagree about cause-effect relationships (Thompson and Tuden 1987). For example, there is often widespread disagreement over whether stocking game fish, or even recreational harvesting of fish, has a detrimental effect on the naturalness of wilderness conditions. Similar disagreement exists over goals and over cause and effect relationships concerning the use of pack stock, technical climbing (using bolts), airplane and powerboat access and their effects on biophysical attributes and conditions. In these situations, problems confronting managers are more “wicked” (Allen and Gould 1986) than “tame” (King 1993). Many of these problems could be termed “messes” (after Ackoff 1974) because they represent systems of interrelated problems. Messes and wicked problems demand more in the way of public participation and learning in their resolution (because resolution of the problem is more a function of negotiation than data collection and analysis) than tame problems, where rational-comprehensive approaches excel. Rational-comprehensive approaches work well for tame problems because there is usually only one goal for which a consensus exists, and solutions are a function of engineering not negotiation.

Societal Context in Which LAC Planning Takes Place

The second rationale for the need for public involvement in LAC planning results from the social and political context within which planning takes place. We make the proposition here that most wilderness planning takes place within politicized contexts, that is, social systems where a variety of groups vie and compete for power to implement actions they feel are needed for the broader social interest. Government agencies in this context play the role of carrying out actions that interest groups feel are needed, once those actions receive a Congressional or legislative sanction. In a politicized setting, the bestowed legislative power or authority to conduct planning and make decisions on what courses of action are preferred is distinct from the political power or

authority to implement plans. In essence, interest groups and individuals outside the agency hold veto power over plan implementation.

Historically, wilderness management agencies (Bureau of Land Management, National Park Service, USDA Forest Service, and U.S. Fish and Wildlife Service) have held monopoly power over both planning and plan implementation. The New Deal model of government instituted in the Roosevelt era was that government agencies represent the public interest (McGarity 1990) in planning and implementation of social programs. However, because of mismanagement (both real and perceived), changing social conditions, shifts in demands from government, increased social fragmentation and conflict, the legal powers to conduct and implement plans have not only become distinct, they have separated. In these situations, two conditions are required for effective planning. First, a technically sound planning process is required for explicitness and facilitates the search for reasonable alternatives by systematically stepping through a logical sequence. Such a process is also based on accepted objectives and is understandable. LAC provides this framework.

Yet the above condition is only a necessary, but not sufficient, condition for effective planning. We now know that we also need a consensus among those affected by the plan about the proposed course of action. This second need is essential in politicized settings. In politicized settings, the values in conflict are often well articulated, expressed, and pursued by the various contending groups. The arena of conflict expands, contracts, shifts, and moves, but encompasses the agency and its perceived mission. One or several groups may in reality hold the power of implementation rather than the planning agency. This power, held in the political realm, may be termed “the power of veto.” There may not be recognition of this by planners: “We have the legal authority, so let’s do it.”

Because interests are well defined, wilderness plans will likely negatively impact some value or interest represented by an articulate and outspoken group—one that often holds veto power. Good plans—those that specifically state objectives and standards—may thus create more in the way of disagreement than agreement because the process of establishing standards and identifying actions makes explicit their effects on one’s interest. As a result, the planner and wilderness manager become frustrated that politics comes in the way of rational planning, that decisions are motivated more by political considerations than by purely biological or philosophical ones, or by considerations of fairness, equity, or any number of other idealized values they would hope would guide the management of publicly held natural resources. The citizen, on the other hand, is equally frustrated at the significant effort going into planning that results in no change, or in plans not addressing the needs of a particular interest, or because plans are unrealistic, costly, or result in significant, long-lasting environmental and social impact. In a sense, there is a breakdown in the linkage between knowledge and action forming the basis for Friedmann (1987).

The only way around this situation is to (1) establish a dialogue that allows participants to learn (Stankey and others in press) and ensure their interests are represented

early in the process, (2) deliberate on controversial topics so that informed judgments can be made (Yankelovich 1991), and (3) create a consensus about proposed courses of action among those affected by it and those who have veto power over implementation. Consensus (defined as “grudging agreement” at worst) is needed because power to implement is not held by the planning agency but instead is wielded by some group or groups of citizens with special interests. We emphasize that this approach is designed to *create* a consensus rather than to *seek* a consensus. Seeking consensus implies that the planner identifies like-minded citizens who can agree with the planning decision and form the nucleus of support for a consensus to occur. Creating consensus implies that the planner must work together with diverse constituencies and interest groups to develop solutions which, although not necessarily preferred, can be accepted and agreed upon by those who hold and can exercise veto power. Seeking consensus seems to be a technique that imposes, while creating a consensus is one that is derived from interaction. From our perspective, it implies that public involvement processes and techniques will be required to create the atmosphere and opportunity for those with different opinions to carry on a dialogue in a nonthreatening environment so that they can learn from each other and work together to identify mutually agreeable solutions. Arguably, these are the only decisions that will eventually be implemented on the ground.

Value-Laden Nature of Steps in the LAC Process

Many of the decisions made in protected area planning reflect values, norms, and preferences in addition to biophysical data and technical concepts. The LAC process forces explicitness through a variety of *public* decisions made in such steps as identifying important area values and features, setting standards, proposing management actions, and allocating land to different opportunity classes. These decisions are intrinsically subjective and political. Scientists and managers bring to planning particular, and mostly abstract, values and preferences that have no intrinsic advantage over those held by affected publics. To ensure that values and preferences are revealed in the decision-making process, the variety of publics involved in the planning identify and debate these decisions and the beliefs upon which they are founded. The resulting dialogue not only forces explicitness in the process but results in enhanced learning as different participants reveal their own value systems.

Throughout the LAC planning process (and we note any protected area planning process) there are numerous occasions where values play directly in the decision-making process. One decision concerns identification of the purpose and goals of the specific wilderness. A number of questions confront wilderness managers when addressing this question. What unique values or distinctive features and characteristics of the wilderness area should be perpetuated? Does the area contain outstanding ecological, scientific, recreational, educational, historic, or conservation values that warrant special attention? Does the area provide critical

habitat for threatened or endangered species? Do land uses on contiguous areas represent situations requiring special management attention? Are there existing or potential non-conforming uses in the area that will require special attention? How does the wilderness ecosystem and recreation opportunities fit in the regional context of natural resource management? What are the legislative acts, related legal guidelines, and organizational policy that constrain management direction? These questions are important when identifying desired conditions, yet go beyond inventory of features. Statements of desired conditions reflect a particular vision of the future; such choices are inherently value laden and subjective.

Creating a statement of desired future conditions, even in general terms, can be difficult and time-consuming and often reveals both values that are shared and values that are in opposition among and between the interest groups and the agency. For instance, in writing a statement of the desired future conditions for the Frank Church—River of No Return Wilderness, the managers wanted to eliminate all reference to natural fire regimes because they had recently approved a comprehensive fire management plan; they also wanted to eliminate reference to the anadromous fisheries because National Marine Fisheries Service was in control of managing salmon recovery. Both natural fire and salmon population are critical components of the ecosystem. (The tendency to compartmentalize decisions represents a significant institutional barrier—see Stankey, this proceedings.) The public and the citizens LAC working group, on the other hand, were insistent that a statement be included to the effect that both fire and anadromous fish would be returned to their natural role in the Wilderness.

Another step in the LAC process where public values play an essential role is in identifying and prioritizing issues and concerns. A statement of desired conditions and important wilderness values provides the “corral” (USDI National Park Service 1997) for limiting managerial discretion, while issues and concerns identify the barriers to achieving desired conditions. Addressing these barriers is a major task of planning and ensures that it occurs in real time (Friedmann 1993). In addition, understanding the problems is a prerequisite to moving on to solutions. Identification of issues and concerns and developing agreement on them can be conducted only through dialogue and discussion with affected publics and ensures that socially important issues are addressed rather than ones for which data collection is easy. Essentially, such dialogue focuses on “what is broke” to emphasize the need for remedial action. Without agreement on what is broke, agencies find difficulty in gaining the public support needed to allocate resources to the “fixes.” In some cases, lack of understanding of issues can lead to outright opposition to plans. Learning-oriented public involvement may also uncover issues and concerns unknown to managers, a particularly important aspect in an era where the funds for management and monitoring are difficult to come by.

Throughout most of the remaining steps in the LAC process there are explicit, yet subjective, decisions where public involvement is not only needed but will also much more likely be accepted and implemented if focused public involvement is utilized. For instance, selecting indicators of resource and social conditions has proven a thorny (or

wicked) problem. First, there is little “science” that documents what indicators work well to detect change in physical and social characteristics of wilderness conditions. (For example, there is scant research to tell us what indicator to use to monitor trampling impacts caused by recreation pack stock. Should we measure soil compaction? Increased or decreased surface roughness? Depth of hoof prints? Area covered? Plant damage? Seedling damage?) Likewise, indicators of social conditions are often ambiguous, at best. If the experts (scientists and managers) do not have a clear understanding of what indicators to select, what role can the lay public play in selecting indicators? Our answer lies in the learning of the important concerns and interpretations of wilderness held by members of the public: these help stimulate additional questions and research designed to address socially relevant questions.

Setting of standards (the minimally acceptable biophysical and resource conditions in wilderness) is another important area for public participation. The notion of acceptability implies judgments about trade-offs—in this case, a compromise between maintaining wilderness conditions and amounts of recreational access. Such judgments reflect the relative weight of different values, and can only be implemented in politicized settings following dialogue, learning, and consensus. Through dialogue and mutual learning, people (citizens and planners) will better understand the nature and cause of impacts, the strengths and limitations of various indicators and measurement techniques, and will be much better able to select realistic (or implementable) standards. By more adequately understanding through working through issues, questions, science, and trade-offs, informed public judgment results (Yankelovich 1991).

Both managers and academicians have expressed fears that in such a collaborative, consensus-driven process, people would surely be motivated to perpetuate current conditions and thus would choose the most lenient indicators and standards, effectively allowing the wilderness conditions to degrade to the lowest common denominator. In actual practice, all wilderness LAC plans that used a collaborative planning approach resulted in setting standards that were more stringent than current conditions and required actions that would improve the physical and social conditions in the wilderness. Such processes have also led to more complete implementation of the LAC process (McCoy and others 1995).

We note that there are significant institutional, philosophical, and practical barriers to applying transactive planning to LAC (Stankey and others in press; Stankey, this proceedings). Overcoming these obstacles is neither easy nor fun, and even when well designed, transactive planning may not be completely successful in implementation of plans.

Conclusions

While the Limits of Acceptable Change planning system originally was designed in the tradition of a classical rational-comprehensive planning process, there are powerful reasons for involving the public throughout its implementation. Early public involvement, built upon principles of dialogue and learning, and involving a broad spectrum of

interests, cannot only assist planners in developing more effective plans, but also resolve some issues in a more timely fashion. We note that the theory of transactive planning is an approach to planning different from rational-comprehensive planning with public involvement. In transactive planning, the public essentially conducts the planning and bureaucrats serve to facilitate the planning process through technical knowledge and data analysis techniques.

The LAC process helps structure public involvement by identifying what information is needed when, thus providing the setting for constructive dialogue. Early involvement also sets the stage for development of responsibility for the plan among the affected publics—an important measure of successful natural resource planning (Guthrie 1997). By carefully considering the context of planning, the contributions of the public and scientists, managers can design LAC-based planning processes that will lead to implementation.

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