

Ethical implications of democratic theory for U.S. public participation in environmental impact assessment

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ABSTRACT

Traditional mechanisms for public participation in environmental impact assessment under U.S. federal law have been criticized as ineffective and unable to resolve conflict. As these mechanisms are modified and new approaches developed, we argue that participation should be designed and evaluated not only on practical grounds of cost-effectiveness and efficiency, but also on ethical grounds based on democratic ideals. In this paper, we review and synthesize modern democratic theory to develop and justify four ethical principles for public participation: equal opportunity to participate, equal access to information, genuine deliberation, and shared commitment. We then explore several tensions that are inherent in applying these ethical principles to public participation in EIA. We next examine traditional NEPA processes and newer collaborative approaches in light of these principles. Finally, we explore the circumstances that argue for more in-depth participatory processes. While improved EIA participatory processes do not guarantee improved outcomes in environmental management, processes informed by these four ethical principles derived from democratic theory may lead to increased public engagement and satisfaction with government agency decisions.

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1. Introduction

Federal land management agencies in the United States must, by law (e.g., National Environmental Policy Act of 1969; National Forest Management Act of 1976; Federal Lands Policy and Management Act of 1976), solicit and consider public input for most major decisions affecting the environment. Interest and demand for public involvement in environmental impact assessment and policy decisions have grown in the U.S. in recent decades (Carr et al., 1998; Cortner and Moote, 2001; Fisher, 2000; Roberts, 2004), but this involvement is complicated by several factors. For example, the diversity of competing citizen interests, values, and goals, along with the technical complexity and scientific uncertainty of environmental analysis, creates “wicked” or “messy” situations in environmental assessment and planning (e.g., Allen and Gould, 1986; Chapin et al., 2008; Lachapelle et al., 2003; McCool and Guthrie, 2001). Also, agency personnel often focus on the efficiency of participatory processes rather than on public satisfaction with these processes (Stern et al., 2009). Public dissatisfaction with agency participatory processes has long been recognized, and contributes to a lack of trust in government, reduced participation, and increased litigation against agency decisions

(e.g., Blahna and Yonts-Shepard, 1989; Stern and Fineberg, 1996; Wondolleck, 1998),

Shortcomings of traditional forms of public participation have encouraged agencies to spend significant effort and funding to improve participatory processes (Creighton, 1999; Gericke et al., 1992; Sirianni, 2009). Many of these newer approaches emphasize collaboration over traditional NEPA processes as more effective in breaking deadlock, improving communication, reducing polarization, and bringing diverse groups to consensus (Cohn, 2002; Keough and Blahna, 2006; Wondolleck and Yaffee, 2000a). However, collaboration alone may be inadequate because it may not sufficiently focus on building trust and a sense of fairness in the participatory process. Unequal political influence among different participants, a perceived lack of public access to the collaborative process itself, or skepticism about the actual influence of stakeholder participation on agency decisions often leads to mistrust and dissatisfaction with agency outcomes (Cheng and Mattor, 2006; Forester, 1989).

Lawrence et al. (1997: 577) suggest that “procedural justice,” or fairness of the process, serves as “a new conceptual basis for public involvement” to improve citizen satisfaction with participatory processes and an agency’s final decision. Many empirical studies support this assertion. Studying the process used to make a decision about reintroducing moose to New York State, Lauber and Knuth (1999) found that public satisfaction was strongly linked to a belief in the fairness of the participation process, as did Beirele and Konisky (2000) in a study of environmental planning in the Great

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Lakes region. McClaran and King (1999), Webler and Tuler (2000), Hunt and Haider (2001) and Smith and McDonough (2001) discuss the importance—and some qualifications—of fairness in public participation processes. Fiorino (1989a, 1990) and Norton (2003) argue that democratic theory provides an ethical foundation that is both necessary and useful for improving public participation processes. Also, environmental ethicists have explored the relevance of philosophical pragmatism and discourse ethics as a basis for developing greater practical guidance for public participation (e.g., Habermas, 1992; Light and Katz, 1996; Renn et al., 1995; Thompson, 2002).

This paper explores the intersection of democratic theory, social psychology, empirical studies on public participation, and ethics to develop a core set of ethical principles to frame and improve participatory processes. After proposing four ethical principles, we discuss tensions associated with attempts to implement them, and analyze the strengths and weaknesses associated with the NEPA process and collaborative approaches in fulfilling these principles. Finally, we examine the situations that likely will require more in-depth participatory processes to ensure better outcomes.

2. The basis and value of public participation in democracy

Public participation finds deep roots in the ideals of democratic theory (Dryzek, 1990; Parkins and Mitchell, 2005), which are central to governance in the United States and democracies around the world. Although the details of democratic theory are contested (e.g., Dahl, 1989), at its core democracy embraces the ideal of popular sovereignty, or rule of the people. Because democratic decisions typically reflect the preferences of the majority and place minority rights and interests at risk, democracy incorporates the political philosophy of liberalism, which emphasizes ideals of equality and autonomy.

The first ideal asserts a fundamental equality of persons. Within political arrangements, equality entails each person having an equal right and opportunity to participate in political life (for example, one person-one vote) and equal treatment under the law (Rawls, 1999). Autonomy requires that each person should have the opportunity to define and pursue his or her own vision of the good life. Together, equality and autonomy require that all people be granted the opportunity to participate in decisions that affect them personally as well as in those that concern the public good (Rawls, 1999).

These participatory ideals of liberalism are part of the intrinsic value of public participation. Under autonomy and equality, participation is not valued for the ends it achieves, but because of a fundamental belief that each individual deserves and benefits from the opportunity to take part in collective decisions. Liberalism views individuals as ends in themselves; as such, liberalism values each person's right to participate regardless of whether decisions are directly improved by such participation.

The instrumental value of participation is largely based on the sociopolitical benefits derived from involving the public in the decision-making process. By incorporating diverse perspectives, for example, participation may raise points that would otherwise be overlooked and thereby generate better decisions (Brody, 2003). John Stuart Mill (1947) argues that we are more likely to arrive at truth by promoting free and open speech than by suppressing it. In addition to providing diverse perspectives, participation fosters trust and understanding, forming the basis for civic friendship between the public and the government (Halvorsen, 2003; Huff, 1998; Rawls, 1999). In this way, participation may reduce conflict and avert the backlash that can result when people feel excluded. This in turn may facilitate more efficient and cost-effective EIA participatory processes, along with improved public support for process outcomes.

Although democratic ideals support the participation of individual citizens in these processes, the form of participation and extent of decision-making authority ultimately rests with government agency

personnel who communicate with members of the public, receive public input, and consider that input. The ethical principles we develop therefore emphasize the relationship between individual citizens and agency staff engaged in EIA participatory processes.

3. Ethical principles for public participation in EIA

Liberal democratic theory points to public participation as a linchpin to fulfilling western political ideals. Yet public participation can take a variety of forms (O'Faircheallaigh, 2010), and evaluating participation processes requires specific criteria. What are the goals of public participation? What standards should participatory processes meet?

Public participation is often evaluated based on its practical efficiency rather than in ethical terms, and is sometimes seen merely as an instrument to achieve support for agency actions. In such cases, agency officials may view the public as “an obstacle to overcome” (Fiorino, 1989a: 532) and participation as “merely procedural compliance” (Stern and Predmore, 2011: 272) in the decision-making process. On the other hand, Beirele (1998: 3) broadens goals for public participation to include “educating and informing the public,” “incorporating public values into decision making,” “improving the substantive quality of decisions,” and “increasing trust in institutions.” Similarly, Fiorino (1989a: 536–539) describes a “participatory ideal” in which: (1) members of the public are treated “as citizens rather than subjects,” (2) citizens have opportunities for direct participation, (3) citizens have some decision-making authority, (4) participation provides opportunities for deliberation, and (5) citizens and technical experts share “a basis of equality.” Our analysis synthesizes previous recommendations (e.g., Laird, 1993) and clarifies connections between public participation and fundamental democratic values. We propose four concise principles—equal opportunity to participate, equal access to information, genuine deliberation, and shared commitment—that can be used by citizens and agency staff to evaluate and improve existing EIA participatory processes.

3.1. Equal opportunity to participate

Modern democratic theory establishes the ideal of equality and therefore the principle of equal opportunity to participate in political life (Fishkin, 1991; Rawls, 1999). This principle extends to government agency decisions involving public lands. The principle of equal opportunity to participate is violated by privileging opportunities for some individuals or groups while denying such opportunities to others. This compromises not only the ideal of equality, but also the ideals of popular sovereignty and autonomy.

Equal opportunity to participate does not imply, however, that each individual holds equal decision-making authority. Some individuals—such as legislators and agency officials—serve in roles within democratic systems that grant them greater power than others in certain realms. Regardless, the principle of equal opportunity to participate includes the opportunity to attend meetings, put forward and challenge points of view, and influence decisions (Renn et al., 1995).

Equal opportunity to participate is most important when agency decisions will have broad and long-term environmental effects. A decision about whether to temporarily close a wilderness trail to horse use, for example, does not qualify on this count. Such a decision reasonably could be undertaken with relatively minimal and local public involvement. On the other hand, decisions about long-term management of entire national forests, or about the recovery plan for a threatened or endangered species such as the gray wolf or the grizzly bear, are important to a significant proportion of the American public and have long-term and potentially irreversible consequences. On such issues, federal agencies should make a strong effort to notify citizens throughout the country of their plans and to provide ample opportunities for input.

3.2. Equal access to information

Relevant and meaningful information aids the deliberative process of public participation by helping participants understand the potential implications of their own preferences and goals, different options available to land managers, and potential consequences of these options (Laird, 1993; Rawls, 1999). Subsequent to agency decisions, this principle requiring equal access to information also extends to citizens' right to know what laws have been passed, what policies are being implemented, and whether execution of the laws is following legislative intent. An informed citizenry is a prerequisite for a successful democracy, and popular sovereignty relies on citizens' understanding how certain government actions will affect them and society as a whole. Autonomy depends on having information regarding how decisions meet or fail to meet individuals' conceptions of the good life, and equality requires that information is equally available to everyone.

Access to information is especially important in decisions involving disparities between the values and goals of agency personnel and those of the public. Information becomes critical to bridging these gaps and promoting better understanding of alternative perspectives. Equal access to information is also crucial in situations in which the possession of certain types of knowledge confers significant power. Such situations exacerbate a lay-expert tension, and have the potential to generate mistrust and resentment. Access also requires educating citizens on how to better locate, interpret, and effectively utilize this information.

3.3. Genuine deliberation

Citizen participation and popular sovereignty are rendered meaningless and ineffective without genuine deliberation (Fiorino, 1990). Deliberation should be genuine in two senses. The first is the requirement that deliberations proceed carefully and with a depth appropriate to the issues under consideration. In a large and complex democracy like the United States, collaborative deliberations may devolve into shallow, uninformed public discussions centered on sound bites and media images (Fishkin, 1991; Ryfe, 2005). Studies of successful collaboration have shown that public land management decisions often require conversations of depth and subtlety to generate good solutions (Abelson et al., 2003; Beirele and Cayford, 2002; Lauber and Knuth, 1998).

The second requirement of genuine deliberation involves the earnest effort by participants to engage perspectives different from their own. Deliberation complements political equality (Fishkin, 1991) and popular sovereignty by facilitating the development of reflective positions. Agencies should foster deliberations in which participants engage in thoughtful dialogue and are encouraged to think beyond their own individual preferences, examining short- and long-term consequences, local and broader impacts, and diverse stakeholder perspectives (Lauber and Knuth, 1998). Genuine deliberation embodies the idea that public involvement improves decisions as well as the conviction that individual citizens should develop their capacities to participate in political life in ways that transcend the pursuit of individual interests.

3.4. Shared commitment

Fundamental to any meaningful deliberative process is a shared commitment by those involved to the success of the process itself (Beirele and Konisky, 2000). An ethically-sound process involves more than mechanically following a protocol. Instead, participants and administrators must commit to trust one another as well as the deliberative process. Communication, consideration, and respect are key elements of this commitment. Agency decision-makers need to

listen to and sincerely consider public input. Public citizens need to engage constructively in agency decision-making processes.

Without shared commitment, citizens and agency personnel may grow to regard one another with distrust and unwillingness to consider alternative perspectives, particularly where the relationship between government managers and citizens has historically suffered from a lack of trust, or where divergent interests among different constituencies threaten to derail constructive dialogue and thoughtful decision-making (Ansell and Gash, 2008; Hunt and Haider, 2001; Smith and McDonough, 2001). Under these circumstances, agency personnel need to make a special effort to win the public confidence and to take public input seriously. If agency officials treat participation as a formality or an obstacle, they undermine both its intrinsic value to liberal democracy and its instrumental value in building public support for agency actions. Likewise, if citizens use legal requirements for participation merely as bureaucratic tripwires to provide a basis for legal challenges, then agency personnel may also grow cynical and lose faith in the process. Trust and commitment are mutually reinforcing, and when both citizens and agency personnel value public participation, processes that provide equal opportunity to participate, access to information, and genuine deliberation are easier to achieve.

4. From theory to reality: tensions in EIA participatory processes

Several tensions may arise as managers and citizens pursue participatory processes that are consistent with these ethical principles. While these principles shed some light on these tensions, they cannot fully resolve them. Ultimately, successful public participation processes depend on the experience, attentiveness, and judgment of citizens and agency personnel to fill the gaps between theory and practice.

4.1. Local versus national interests

In our framework, the first principle for an ethical public process is equal opportunity to participate. Yet in a large democracy, what does it mean to have an equal opportunity to participate in environmental impact assessment concerning public lands? Should people living in Washington DC have an equal influence on the management of Glacier National Park as those living in West Glacier, Montana? And if so, what type of process can provide both populations equal opportunities to participate in national park management? At face value, the principle of political equality suggests that local people have no more say than those living far away—and if this principle holds, federal agencies face the challenge of providing an equal opportunity for participation to all citizens regardless of location.

The local/national dichotomy exemplifies that environmental decisions have different effects at different spatial and temporal scales. For both ethical and practical reasons, the federal government should make a special effort to consider the views and interests of those whose health, lifestyles, and livelihoods will be most influenced by a certain course of action. Equal opportunity to participate is not, strictly speaking, equivalent to equal weight or authority in the decision-making process. Nonetheless, preferential weighting of certain viewpoints and interests requires ethical justification. An ethically-grounded participation process, therefore, should explicitly address the local/national tension as part of the decision-making process.

4.2. Processes versus outcomes

Although this paper emphasizes procedural issues in public participation, it is largely the outcomes of these deliberations that determine quality of life and the integrity of ecological systems. Both processes and outcomes deserve ethical scrutiny, and ideally, an

ethical public process will lead to fair and ethical solutions. But even a well-designed process cannot guarantee good outcomes, so procedural considerations must include substantive requirements for these outcomes.

Ethical obligations from liberal democratic theory provide some normative “boundaries” or constraints on the outcomes of decision-making processes. First, decisions should protect basic human rights, a condition Fishkin (1991) calls “nontyranny.” This condition stems from the liberal ideal of autonomy, which seeks to preserve each person’s opportunity to pursue a life according to his or her own values. Two additional requirements for environmental decisions are that these decisions comply with existing laws and policies and they take into account the public good. If citizen participants recommend an action that contradicts existing law, an agency would be wrong to dismiss the law outright and move forward. Similarly, agency staff should consider the long-term consequences of environmental impact assessments and the effects of these decisions on all citizens, not just those who participate.

4.3. Experts versus laypeople

In determining an appropriate role for the public in environmental decisions, government agencies must navigate the tension between experts and laypeople. Environmental impact assessment may involve a large degree of technical analysis and uncertainty that may be difficult for many people to access or understand (Daniels and Cheng, 2004; Lach et al., 2003). How can we take advantage of expertise without excluding citizens? Rawls (1999: 205) asserts that we routinely entrust experts with substantial responsibility, and suggests that we are right to do so: “The passengers of a ship are willing to let the captain steer the course, since they believe that he is more knowledgeable and wishes to arrive safely as much as they do. There is both an identity of interests and a noticeably greater skill and judgment in realizing it.” Yet how do we know that an “identity of interests” exists between experts and laypeople? In the environmental arena, expert-driven decisions can compromise public deliberation about goals, priorities, and the values underlying them. An ethical public process needs to address this tension explicitly.

Furthermore, work in risk assessment and environmental analysis has highlighted the fact that even “technical” models and assessments rely on substantive value judgments—to determine the types and magnitudes of risks that will be considered, for example—and that the public should have a role in these judgments (Chilvers, 2008; Fiorino, 1989b; Shrader-Frechette, 1993; Stern and Fineberg, 1996). To integrate the public into these processes, ecologists, hydrologists and other specialists have begun to involve the public in the design and application of environmental models (e.g., Korfmacher, 2001). Innovations like these, along with effective knowledge sharing between scientists and the public, and open consideration of the values implicit in the work and presentations of experts, can help alleviate the expert-lay tension.

4.4. Individual interests versus the common good

Concern for the common good may sometimes obligate agencies to make choices inconsistent with individual participants’ preferences. A favored recreational use of public lands may be restricted, for example, if it undermines the overall sustainability of the land for all people. One purpose of a deliberative public process is to encourage citizens to think beyond their personal interests and identify a course of action that takes each person’s rights as well as the good of others into account (Fishkin, 1991).

Public involvement typically elicits both broad-minded deliberative recommendations and expressions of personal preferences. Individual preferences deserve consideration, but preferences should be distinguished from fundamental rights (O’Neill and Walsh, 2000;

Perhac, 1998). While rights should be protected, agencies cannot expect to satisfy each person’s preferences (Gillroy, 1994). Additionally, agency officials should be aware of their duty to serve all citizens, even those who do not actively participate in a particular decision-making process. The decision-maker’s challenge is to weigh public input and to identify a course that is both procedurally and substantively consistent with ethical principles.

5. Participation in practice: NEPA and collaborative approaches

In this section, we briefly review and then examine strengths and weaknesses of the NEPA process and collaborative approaches in terms of the four ethical principles we discuss above. We then discuss different factors that influence what type(s) and how much participation is needed to fulfill these ethical principles for a particular management decision.

The NEPA process is required for all federal land management decisions with significant environmental impacts (42 U.S.C. Se. 4332). Under NEPA, an agency conducts “scoping” to give citizens the opportunity to suggest issues and submit written and oral statements during an environmental analysis. The agency considers this input as it develops its decision and must provide a substantive response to each concern. NEPA has vastly increased public participation in environmental decisions (Scardina et al., 2007; Solomon et al., 1997). Nonetheless, the NEPA process has drawn criticism for its standard, one-size-fits-all approach (Solomon et al., 1997), and for being treated by the agencies as a bureaucratic hurdle rather than a genuine opportunity for deliberation.

Agencies often adopt collaboration where controversy over environmental decisions has led to stalemate. Collaboration takes diverse forms (Blumenthal and Jannink, 2000; Margerum, 2008). It may be place-based, involving primarily local people, or policy-based, bringing together geographically scattered parties with interest in a common issue. These processes may focus on information sharing, partnerships, or agreement seeking (Hummel and Freet, 1999), and emphasize trust, legitimacy, and mutual learning (Hummel and Freet, 1999; Selin et al., 2007; Wondolleck and Yaffee, 2000b). Collaboration has been criticized, however, for placing too much emphasis on consensus and participant satisfaction (Coglianese, 2003), for not representing all parties impacted by agency decision (Marshall and Jones, 2005), as well as for ceding too much responsibility to laypeople or rural interests (Coggins, 1999).

The traditional NEPA process and collaboration differ in scope and format, and their effectiveness in serving various constituencies (Table 1). They also differ in their ability to effectively address the ethical principles described earlier.

5.1. Equal opportunity to participate

In theory, NEPA processes have the ability to provide equal opportunity for all citizens to participate in federal environmental decisions

Table 1
Key elements of NEPA and collaboration.

	Traditional NEPA process	Collaboration
Scope	National, with more intensive local Processes	Local/regional (place-based) National (policy-based)
Who	All interested citizens	Smaller group with intense interest and commitment
What	Published documents; open houses; Hearings; written and oral testimony	Small group meetings and information sessions
When	Primarily during the planning process	Can continue through all stages of management (information gathering, planning, implementation, monitoring, assessment)

(Table 2). Notices of agency actions are published in the Federal Register, which is available online and at federal repository libraries. Environmental analysis documents (Environmental Impact Statements and Environmental Assessments) can be requested from federal agencies, and interested citizens can join agency mailing lists to receive notices of projects. Throughout the process, citizens have multiple opportunities to comment, orally and in writing.

In practice, the process often deviates from this ideal (Moote et al., 1997). Not all citizens understand the process or how to get involved, even in local issues with the potential to directly affect them. In a nominal sense, the NEPA process satisfies the principle of equal opportunity to participate because any citizen could submit comments on a project, but realistically, some citizens lack the means to fully utilize this opportunity. This disconnect between theory and practice suggests that additional work—such as better public education about mechanisms of citizen involvement—is needed to bring NEPA processes closer to meeting the ideal of equal opportunity to participate.

While NEPA processes have the theoretical capacity to provide equal opportunity to participate, collaboration almost inevitably fails to deliver on this count. By nature, collaborative processes require intensive time commitments and face-to-face meetings that are difficult to engage in from afar. Collaboration often only involves select local people who can attend such meetings on a regular basis and/or professionals from industry, non-profit organizations, or the government, whose expenses and time are covered as part of their jobs. This was a primary criticism of the Beaverhead–Deerlodge Partnership (BDP), a collaboration between conservation groups and timber companies to create a forest management plan for the Beaverhead–Deerlodge National Forest in Montana. The process used by the BDP was criticized as giving “priority and a privileged voice to self-selected interests in managing national forests” because of the generally exclusive nature of stakeholder deliberations (Nie and Fiebig, 2010: 40).

Despite these limitations and characterizations, collaborative processes may facilitate equal opportunity to participate if used in advance of the decision process to identify issues of concern to the public. Collaboration could be used as a type of “focus group” process, and information gleaned from this process may help agencies decide how to publicize upcoming decisions in ways that speak to citizens’ concerns and foster broad public involvement. Small group discussions might also bring previously unrecognized concerns or constituencies to the attention of agency officials.

5.2. Equal access to information

One challenge in making information accessible to the public involves a tradeoff between formal and substantive accessibility. Formal accessibility is met when the relevant information is available to members of the public, for example, via agency websites or government documents. However formal accessibility may fall short of substantive accessibility if the public is unaware of how to access these

resources, or if the information is presented in a form that is highly technical and impenetrable to non-experts. NEPA and collaboration have different strengths and weaknesses with respect to formal and substantive access to information, reflecting a tradeoff between breadth and depth.

In theory, NEPA provides an excellent framework for dissemination of information relevant to environmental decisions (Table 2). Environmental analysis documents are publicly available and can be obtained by any interested individual. While these environmental analyses may be physically available, they may not be practically accessible to the public. Often these documents are long and loaded with technical terms that can intimidate non-experts (Karkkainen, 2002). Also, the availability, timing, and format in which information is offered all play a role in determining whether citizens truly have equal access.

In contrast to the NEPA process, the mechanisms of information sharing associated with collaboration typically reach fewer individuals in greater depth. Collaboration, in and of itself, does not fulfill the principle of equal access to information unless it incorporates specific mechanisms for disseminating information about the project as well as the proceedings of the collaborative group. The BDP made extensive efforts to provide information about their strategy and proposed management plan by “conduct[ing] outreach to numerous county commissions, recreation groups, business interests, conservation groups, watershed groups, civic organizations, organized labor, and state and federal government representatives” (Fellman, 2009: 94). However, criticism over the closed-door nature of meetings between collaborators suggests an implicit link between the opportunity to participate and access to certain kinds of information.

Collaboration does offer important informational benefits. In general, members of a collaborative initiative have access to information and opportunities to educate themselves as well as ask questions about technical issues. For these participants, collaboration may provide better information access than a traditional NEPA process. Because collaborative processes do not necessarily inform and educate citizens more broadly, they should be supplemented with traditional NEPA-style information dissemination. The partnership between NEPA and collaborative processes might be further strengthened if participants engaged in collaboration reached out broadly to educate interested citizens about the issues.

5.3. Genuine deliberation

The NEPA process lacks an explicit focus on deliberation, and this is one of its weakest elements from an ethical point of view (Table 2). The absence of a deliberative element is perhaps one of the primary reasons that traditional participatory processes can lead to polarization and deadlock. While NEPA requires agencies to produce and disseminate information related to the environmental effects of proposed management actions, the law requires little else (Karkkainen, 2002).

Collaborative processes, designed with deliberation in mind, can help fill the gap left by more typical approaches to NEPA (Table 2). The small group setting of most collaborations and the establishment of specific ground rules and expectations help to promote deliberation by making people feel comfortable expressing their views. Additionally, collaboration provides the opportunity for in-depth conversations and exploration of creative solutions to environmental problems. The strengths of collaboration in using deliberative processes to generate innovative solutions to seemingly intractable problems may in some cases be fruitfully partnered with NEPA processes.

For example, in the planning process for grizzly bear reintroduction into the Selway–Bitterroot Wilderness areas of Montana and Idaho in the early 1990s, one of the alternatives included in the Environmental Impact Statement was generated through a collaborative process between two national environmental advocacy groups

Table 2
Ethical evaluation of NEPA and collaboration.

Ethical principle	Does the process follow the principle?	
	NEPA process	Collaboration
Equal opportunity to participate	Yes, in theory	Probably not
Equal access to information	Yes, in theory	Yes for participants, not necessarily for others
Genuine deliberation	Probably not	Yes
Shared commitment	Possibly, but process does not necessarily promote commitment	Likely, because process promotes commitment

and two timber organizations (Fischer and Roy, 1998). Although the grizzly reintroduction plan was ultimately put on hold, collaboration contributed to the NEPA process by broadening the range of alternatives under consideration, and by incorporating deliberation into the participation process, if only among a limited group of people. Similarly, while the BDP proposal was not considered as a separate alternative for the latest Beaverhead–Deerlodge National Forest plan revision, it was partially addressed in the adopted forest plan (Nie and Fiebig, 2010).

5.4. Shared commitment

Despite limitations in terms of personal contact, the NEPA process does provide avenues for communication that could lead to shared commitment. The agency can explain potential actions, rationales, and potential consequences, and citizens can respond to agency proposals. The resulting dialogue may generate understanding between the government and the public and help the agency better address public concerns. In many situations, however, this doesn't happen, especially if the agency takes a “decide, announce, defend” approach, treating the public comment process as a formality rather than as a true opportunity to hear and respond to public input (Duane, 1997). The appearance of the process and the outward attitudes of agency officials can be crucial to avoiding the perception that participation and shared commitment is merely pro forma. Processes should therefore be designed to respect citizen input and to show how such input is given consideration in the decision-making process.

Collaborative processes may be more successful in generating shared commitment because they explicitly acknowledge the importance of honesty, trust, and thoughtful dialogue among diverse citizens and between citizens and agency staff. For example, the formation of the Blackfoot Challenge collaborative in Montana played a critical role in transforming formerly adversarial relationships between stakeholders into ones characterized by an emphasis on shared values and a common vision of a restored and protected landscape (Weber, 2009).

Because collaboration involves small groups of individuals who often know one another personally, it avoids the anonymity and sense of powerlessness that can be associated with NEPA processes. Participants in collaborations typically have a sense of accountability to one another and an investment in and commitment to the process. On the other hand, the close personal interactions involved in collaboration can make the process susceptible to disruption by one or a few individuals (Yaffee, 1998). The success of collaboration therefore depends on the establishment of shared procedural ground rules, and on the participants' open-mindedness and mutual respect.

In situations where trust is lacking, collaboration and NEPA may complement one another. A well-designed and inclusive collaborative process in which a wide range of interests and constituencies are represented may demonstrate the agency's commitment to public involvement and in turn facilitate more constructive dialogue as part of the NEPA process. This may increase citizens' commitments to working with one another and with the agency in search of a mutually-acceptable decision. Where trust is lacking, collaborative processes—which tend to involve a select group of individuals—will be under particularly intense scrutiny. Agency officials therefore need to be cognizant of the risk that such processes will be viewed as an end-run around broader public participation, or as an attempt to co-opt powerful constituencies to win support for a preexisting plan.

6. Participation in practice: what type(s) and how much?

In choosing public involvement strategies, it is helpful to consider that participation varies both quantitatively and qualitatively. Agency managers therefore need to examine both what type(s) of participatory processes to use and how much to involve the public in a given

decision. Extensive public participation of the wrong kind, or too little participation of the right kind, may each fall short on the ethical grounds outlined here and also fail to generate viable solutions.

Understanding the procedural and substantive risks of environmental decisions may help clarify the types and amount of participation needed in a given situation (Fig. 1—determining appropriate level of public participation). A significant procedural risk is that the failure to involve the public sufficiently or in the right way will undermine citizens' faith in the legitimacy of the agency and its decisions, reduce trust in government officials, and alienate the public from government. To assess procedural risks, agencies can ask: Will public trust be lost without intensive participation? What processes will engage the public in ways that maintain and build positive relationships between citizens and agency personnel? Even if the agency believes that it knows the right answer, the goals of healthy democratic processes and trust in government justify public involvement.

Substantive risks involve specific threats to the environment and human health. To evaluate substantive risk, agencies can ask: What risks does a particular action pose to the environment, human health, and citizens' diverse values? How serious and how uncertain are these risks? When substantive risks are high or unknown, intensive public participation is needed to ensure fairness, protect autonomy, and clarify the public interest.

Identifying and characterizing the nature and potential of these risks can help agencies select an appropriate level of public involvement. Routine decisions, carrying low risk and low uncertainty, clear policy direction, and a high level of agreement require less public involvement, particularly if their consequences are short-term or reversible (Table 3). Major decisions, characterized by greater risk and uncertainty, ambiguous policy direction, a departure from past practices, or irreversibility, demand more intensive participation, especially where significant disagreement exists regarding the best course to take (Table 3).

7. Conclusion

To pull together the many strands in our argument, it may be helpful to consider how the ideas discussed here may contribute to more effective and rewarding forms of public engagement. First, and foremost, it will be helpful if both managers and citizens understand and keep in mind the goals of public participation. If we understand participation as fundamentally grounded in the shared democratic ideals of equal opportunity to participate, equal access to information, genuine deliberation, and shared commitment, we may be able to reduce the extent to which agency staff view participation as an

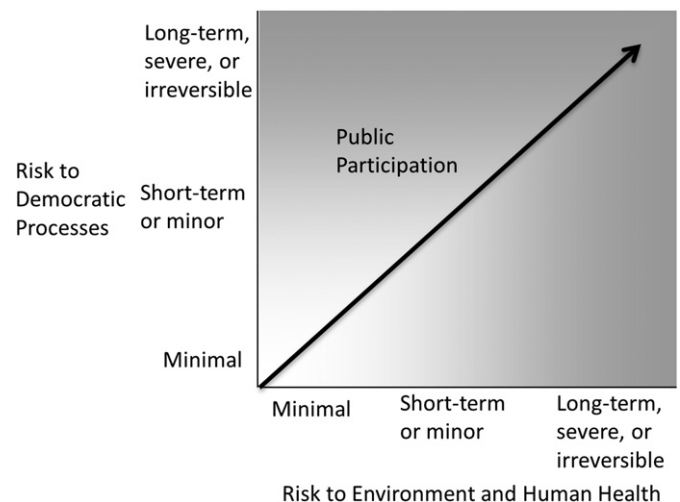


Fig. 1. Risk to environment and human health.

Table 3

The characteristics of a decision that determine whether a decision is “routine” or “major” and the appropriate level of public involvement.

Level of public involvement		
	Low	High
Type of decision	Routine decisions—e.g., design of trail signs, campsite restoration and monitoring	Major decisions—e.g., fire plan, wilderness plan, plant or animal reintroduction
Characteristics of decision	Low risk Clear policy direction Little change from past practice High certainty of outcomes Reversible High level of agreement	High risk Ambiguous policy direction Major shift from past practice Uncertain outcomes Irreversible Significant disagreement

obstacle to efficient action and the extent to which members of the public view participation as a means to promote their own narrow interests. Keeping these ideals in view may also help contain the influence of special interests who seek to monopolize the conversation (violating the principle of equal opportunity), control the flow of information (violating equal access to information), and promote their own agendas regardless of other points of view (violating genuine deliberation and shared commitment).

The discussion above also highlights the fact that there is no simple recipe for effective public participation that can be applied in all cases. The specific combination of strategies and approaches that are most appropriate will depend on the situation. This may be seen as frustrating, liberating, or both. It can be frustrating because it means that participation processes need to be tailored to context, and this requires foresight, careful planning, and good judgment. On the other hand, it can be liberating because it suggests that public participation need not be limited to following the standard NEPA framework. NEPA, of course, establishes basic requirements for participation, but there is substantial room to improve the ways in which NEPA processes are accomplished or to creatively design supplementary modes of engagement that make participation more effective. The context-dependent nature of appropriate participation processes is also liberating because it may help the public and agency staff better allocate their efforts. Small-scale, local projects that affect relatively few people in relatively minor ways warrant minimal participation; large-scale, controversial, and high-risk projects with significant effects warrant extensive participation. Projects that involve complex, technical issues and significant uncertainty warrant different kinds of processes than projects lacking these elements. If common recognition of and adherence to basic ethical principles are achieved, then members of the public may be better prepared to trust agency expertise and judgment on more mundane issues, reserving their most intense engagement for those decisions for which substantial public involvement and extensive deliberation are truly warranted. One hopeful outcome, then, of recognizing and honoring the principles we've outlined, is that this shared foundation may help restore trust in and appreciation for public participation, improving relationships between land managers and the public and generating more effective decisions in the end.

In designing public participation strategies, the ethical principles outlined here can serve as a guide. However, as emphasized above, environmental decisions have complex ecological, social, economic, and political dimensions, so no simple formula can be used to select appropriate participation processes. Frequently, meeting ethical and practical goals for participation will require multiple avenues for citizen involvement. Often, traditional NEPA processes are conducted in parallel with collaboration or other more innovative, intensive participation techniques (e.g., Cestero, 1999). These approaches offer promise because they give both breadth and depth to public participation, providing opportunities for all interested parties to participate, and facilitating deliberative discussions. Experimentation is

needed to learn how NEPA processes can be integrated with collaboration in ways that are both practical and meet the ethical principles outlined here.

Liberal democratic theory provides an important touchstone for participation. Better ethical and democratic participatory processes, however, cannot be built on theory alone. To refine and improve public participation in environmental impact assessment, both agency managers and citizens must be open to new approaches (Buchy and Hoverman, 2000; Stern and Fineberg, 1996). Sharing and documenting these experiences can improve public participation in environmental decisions, allowing us to make better decisions while simultaneously moving closer to our democratic ideals.

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