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Public Involvement Tools in Environmental Decision-Making: A Primer for Practitioners

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Abstract

Practitioners are often asked to engage the public with limited resources at their disposal. While scholars encourage the use of more deliberate public participation mechanisms, resource constraints often require practitioners to utilize more limited public involvement tools. This article summarizes the strengths and weaknesses of three public involvement tools: citizen surveys, public hearings/meetings, and stakeholder interviews. This assessment should provide preliminary guidance in utilizing the appropriate public involvement tools when resource and time constraints do not allow for an extensive public deliberation process.

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Introduction

Scholars have advocated the use of participatory techniques to further the involvement of scientists and other technical experts in collaborative environmental decision-making (Hinkey, Ellenberg, & Kessler (2005). While the involvement of technical experts is one component of successful collaborative partnerships, it is not the sole participatory dilemma faced by Extension professionals and other practitioners. These professionals must also determine how and to what extent to involve the general public in environmental decision-making.

A process driven solely by technical experts based on sound science fails to recognize and integrate the diverse values of non-technical stakeholders (Day, Gunton, & Frame, 2003). The involvement of lay people provides a richness of context, historical knowledge, and perception of risk often not found with technical experts (Beierle, 1999; Fiorino, 1990; Isaacson, 1986; Armour, 1993).

While public involvement scholars have begun to recognize the contribution made by those outside the scientific community, debate and confusion remains regarding the role of non-experts, the intensity of their involvement, and what involvement techniques should be employed. Given their extensive history and commitment to public issues education (PIE) (Patton & Blaine, 2001; Hahn, 1990), Extension professionals are ideal participants in efforts to educate and involve lay people in environmental decision-making.

Extensive Public Deliberation

Scholars often posit "more is better" when discussing public involvement and the benefits of extensive public deliberation. In practice, resource limitations and time constraints often require practitioners to choose among a set of more limited public involvement tools. This article provides a brief overview of the strengths and weaknesses associated with three broad types of public involvement tools: citizen surveys, public hearings/meetings, and stakeholder interviews. This assessment should provide preliminary guidance in utilizing the appropriate public involvement tools when resource constraints do not allow for extensive public deliberation.

Citizen Surveys

Assuming they are properly constructed and administered, citizen surveys are a relatively inexpensive and quick technique for measuring public opinion. Because of the lower cost and avoidance of upfront lengthy public processes, scholars have advocated some degree of use for surveys as a public involvement tool (MacRae & Whittington, 1997; Milbrath, 1981; Schaeffer, 1990). Unlike public hearings and more deliberative techniques, surveys also capture opinions not heard in more involved processes requiring greater motivation, time, and resource commitments (Milbrath, 1981). Also, properly designed and administered surveys allow researchers to draw inferences about a broader citizen population (Davis & Whittington, 1998; Arnstein, 1969).

While surveys capture public opinion, their lack of citizen engagement is a primary limitation (King, Feltey, & Susel, 1998). Reliance on typically closed-ended questions is also problematic in that it may fail to adequately capture people's true opinions (English, Peretz, & Manderschied, 2002). Surveys also pose numerous problems when the public lacks adequate information to provide informed opinions on technical environmental issues (Darnall & Jolley, 2004; Morgan, Fischhoff, Lave, & Fischbeck, 1995). The public may be unable to respond to technical questions or respond without adequate understanding of the science supporting environmental proposals.

Public Hearings and Meetings

Public hearings and meetings are traditional means for government to solicit feedback on proposed regulatory changes affecting local residents. Public hearings allow for citizen responses to a host of regulatory change within a community. More formalized public hearings required by statute involve a brief presentation on the proposal and a period of formal oral and written comment by citizens. Extension agents may also engage in public meetings to solicit feedback on new programs within a community. Less formalized public meetings may provide an opportunity for citizens to engage in limited dialogue with elected officials and technical experts.

While a public hearing may satisfy statutory obligation, its use as a public involvement tool is limited. Formalize public hearings recording citizen comments may not allow for dialogue or immediate answers to citizen questions. The structure may be more confrontational in nature, making it difficult for practitioners to engage in public issues education (PIE).

Public hearings are also likely to occur at predetermined points in a development or rule change process, and alternatives may have already been eliminated from consideration prior to citizen input. Public hearings are often dominated by those with economic interests in the outcome (Checkoway, 1981; Checkoway & Van Til, 1978), and participants are generally more affluent and active than the general population (Godschalk & Stiftel, 1981). Finally, public hearings generate reactive responses to proposed alternatives rather than proactive early involvement. This reactive format may encourage participants to take extreme positions, which reduces opportunities for consensus (Beierle, 1999).

From a citizen's perspective, public hearings require a moderate degree of commitment in the form of attending a meeting. In some instances, citizens can submit written comments without attending a public hearing. Public officials utilize the citizen comments to generate alternatives, identify problems, and determine feasibility of a project based on community concerns. Perceived transparency concerns often exist as public officials process these comments outside of public view.

Stakeholder Interviews

Because surveys and public hearings generally lack dialogue and may not allow for nuanced and detailed responses, interviews may be used as an alternative public involvement technique. Extension professionals can conduct interviews with both expert and non-expert stakeholders affected by a particular natural resources proposal. As with surveys, stakeholder interviews are a relatively inexpensive and quick tool for assessing public concerns (Gray et al., 1996). In most communities, experts and community leaders are easily identifiable and interviews can be conducted at minimal financial cost.

However, stakeholder interviews are not without shortcomings. As with surveys, non-expert respondents may lack the proper knowledge to respond to questions concerning natural resources policies or problems. Interviewed technical experts and non-technical experts may also have differing perceptions of the risks associated with various environmental problems and how to best address those problems (Darnall & Jolley, 2004), and interviews alone offer no dialogue for reconciling these differences.

Conclusion

Table 1 summarizes the respective tradeoffs associated with public deliberation and the less involved public involvement tools of citizen surveys, public hearings/meetings, and stakeholder interviews. These tradeoffs should serve as guidelines in selecting an appropriate public involvement tool when resources are limited.

Table 1.

Summary of Public Involvement Tools Tradeoffs

Public Involvement Tools	Degree of Citizen Commitment	Opportunity for Dialogue	Cost
Citizen Surveys	Low	None	Moderately Low (depending on sample size and survey methods)
Public Hearings/Meetings	Moderate	Low (depending on structure)	Low
Stakeholder Interviews	Moderate	Moderate (depending on survey structure)	Moderately Low
Public Deliberation	High	High	High

References

- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of American Institute of Planners*, 35, 216-224.
- Armour, A. M. (1993). Risk assessment in environmental policymaking. *Policy Studies Review*, 12(3/4), 178-196.
- Beierle, T. J. (1999). Using social goals to evaluate public participation in environmental decisions. *Policy Studies Journal*, 3(4), 75-103.
- Checkoway, B. (1981). The politics of public hearings. *Journal of Applied Behavioral Science*, 17, 566-582.
- Checkoway, B., & Van Til, J. (1978). What do we know about citizen participation? A selective review of the research. In Langton, S. (Ed.), *Citizen participation in America*. Lexington, MA: Lexington Books.
- Darnall, N., & Jolley, G. J. (2004). Involving the public: When are surveys and stakeholder interviews effective? *Review of Policy Research*, 21(4), 581-593.
- Davis, J., & Whittington, D. (1998). 'Participatory' research for development projects: A comparison of the community meeting and household survey techniques. *Economic Development and Cultural Change*, 47(1), 73-94.
- Day, J. C., Gunton, T. I., & Frame, T.M. (2003). Towards environmental sustainability in British Columbia: The role of collaborative planning. *Environments*, 31(2), 21-38.
- English, M. R., Peretz, J. H., & Manderschied, M. J. (2002). Building communities while building plans: A review of techniques for participatory planning processes. *Public Administration Quarterly*, 26(3), 503-540.
- Fiorino, D. J. (1990). Citizen participation and environmental risk: A survey of institutional mechanisms. *Science, Technology, and Human Values*, 15(2), 226-243.
- Godschalk, D. R., & Stiftel, B. (1981). Making waves: Public participation in state water planning. *Journal of Applied Behavioral Science*, 17, 597-614.
- Gray, P. C. R., Wiedemann, P. M., Schulz, H., Hallman, W. K., Feldman, D., & Turner, R. (1996). The nature and challenges of environmental decision making: Case studies for policy improvement. Knoxville, TN: National Center for Environmental Decision-making Research, NCEDR/96-03.
- Hahn, A. J. (1990). Issues-oriented public policy education. *Journal of Extension* [On-line], 28(1). Available at: <http://www.joe.org/joe/1990spring/a3.html>
- Hinkey, L. M., Ellenberg, K. T., & Kessler, B. (2005) Strategies for engaging scientists in collaborative processes. *Journal of Extension* [On-line], 43(1) Article 1FEA3. Available at: <http://www.joe.org/joe/2005february/a3.shtml>
- Isaacson, P. (1986). Pollution regulation and public sensibility. *Environmental Impact Assessment Review*, 6, 229-232.
- King, C. S., Feltey, K. M., & Susel, B.O. (1998.) The question of participation: Toward authentic public participation in public administration. *Public Administration Review*, 58(4), 317-26.

MacRae, D., & Whittington, D. (1997). *Expert advice for policy choice*. Washington, DC: Georgetown University Press.

Milbrath, L. W. (1981). Citizen surveys as citizen participation mechanisms. *Journal of Applied Behavioral Science*, 117, 478-496.

Morgan, M. G., Fischhoff, B., Lave, L., & Fischbeck, P. (1995). A proposal for ranking risk within federal agencies. In J. C. Davies (Ed.). *Comparing environmental risks* (pp. 111-147). Washington, DC: Resources for the Future.

Patton, D. B., & Blaine, T. W. (2001). Public issues education: Exploring Extension's role. *Journal of Extension* [On-line], 39(4). Available at: <http://www.joe.org/joe/2001august/a2.html>

Schaeffer, N. C. (1990). Principles of justice in judgments about child support. *Social Forces*, 69(1), 157-179.

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