

Strategies and Tools for Effective Public Participation in Natural Resource Management

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Abstract

Public participation is widely recognized as a critical aspect of natural resource management (NRM), and it is a regulatory requirement for a variety of environmental and NRM processes. Research and experience from NRM worldwide has proven that public participation leads to better decisions, by providing local or independent sources of information and by examining alternative management strategies. It can also reduce uncertainties, delays, conflicts, and legal costs. This article seeks to provide an understanding of basic concepts and best practices of public participation, a familiarity with different tools for effective public participation, and an awareness of which tools are appropriate under different circumstances. It aims to address the needs of resource managers who work with communities and First Nations and whose job requires them to engage the public in resource planning and management so as to make sound management decisions.

KEYWORDS: best practices; context; core elements; direct and indirect tools; evaluation; participation continuum; public participation; stakeholders

Introduction

Public participation (PP) is widely recognized as a critical aspect of sustainable development and adaptive management, and it is a regulatory requirement for a variety of environmental and natural resource management (NRM) processes (CCFM 2003). The expectation is that, through citizen participation, the processes and outcomes of natural resource planning and decision-making will be more efficient, equitable, and sustainable (Arnstein 1969).

Research and experience from natural resource management worldwide have proven that public participation leads to better decisions, by providing local or independent sources of information and by examining alternative management strategies (Chambers & Beckley 2003; Parkins & Mitchell 2005). It can also reduce uncertainties, delays, conflicts, and legal costs.

PP is often mandatory. For example, both the Canadian Standards Association and the Forest Stewardship Council forest certification systems require extensive public participation (CSA 2012; FSC 2012). PP is sometimes a civic obligation. For example, 94% of Canada's forests exist as a public trust managed by government licence holders on be-



half of the public. Thus there is an obligation to involve the public in the management of Canada's forests. The need for public participation is particularly relevant in BC as most of the province's forests are on Crown land and many Aboriginal and non-Aboriginal BC communities depend on forest resources. The public in British Columbia and elsewhere will be expected to have, and will expect to have, a greater say in natural resource allocation and land use planning (Booth & Halseth 2011).

Despite PP often being a regulatory requirement, it is not widely used in NRM decision making in BC and elsewhere in Canada. However, NRM practitioners are moving from talking about public participation and controlling dissent towards meaningfully incorporating public values into the planning and implementing process. Despite this, few resource managers have formal training in public participation or professional development opportunities to build their capacity in planning for, and implementing, participatory processes.

Goals

The goals of this article are to assist NRM practitioners to develop:

- an understanding of basic concepts and best practices of participation;
- familiarity with different tools that can be used for effective public participation;
- awareness of which tools are appropriate under different circumstances; and
- strategies to assess the effectiveness of the participatory processes.

The article focuses on answering the following five questions:

- **What** is public participation?
- **Why** do we need to do public participation?
- **Who** should participate?
- **How** do we do it, that is, what tools are available?
- **When** and **where** do we use a specific tool?

The article describes the six “learning” modules of a public participation curriculum (Ambus & Krishnaswamy 2009):

- The many facets of participation
- Benefits, challenges, and best practices
- The context and purpose of participation
- Identifying who participates
- Planning to evaluate
- Tools for participation

Each module is discussed separately in the sections below.

The many facets of participation

The goals of this section are to:

- articulate a clear definition of participation; and
- identify different levels of participation in decision-making processes.

Participation is defined as “various forms of direct public involvement where people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of specific forestry issues” (Food and Agriculture Organization of the United Nations 2000,



cited in Beckley et al. 2005, p. 14). Participation is where individuals, communities, and stakeholder groups can exchange information, articulate interests, and have the potential to influence decisions or the outcome of natural management issues (Means et al. 2002; Australia Department of Sustainability and Environment [DSE] 2005a).

Public participation is a two-way process between the public and experts or managers; it should not be confused with the one-way flow of information in public relations exercises. Participation embodies a willingness to respect and give space to other people's views. PP may not be ideal for many situations, but NRM practitioners should not claim that they are doing participation when in fact they are not doing it or if the situation is not appropriate for participation.

Participatory approaches are often classified along a continuum (Arnstein 1969; Beckley et al. 2005; IAP2 2007a; Auditor General of British Columbia 2008). Figure 1 describes the different stages in the continuum of public participation and lists examples of tools that are suitable for each stage. The "continuum" spanning nominal participation (e.g., information exchange) to full participation (e.g., co-management) helps conceptualize the level of participation expected when using a particular tool. The NRM practitioner should be aware where their participatory experience or approach is along the continuum. This awareness will enhance the transparency of the participatory process. It will also help the practitioner select tools suitable for a specific participatory process.

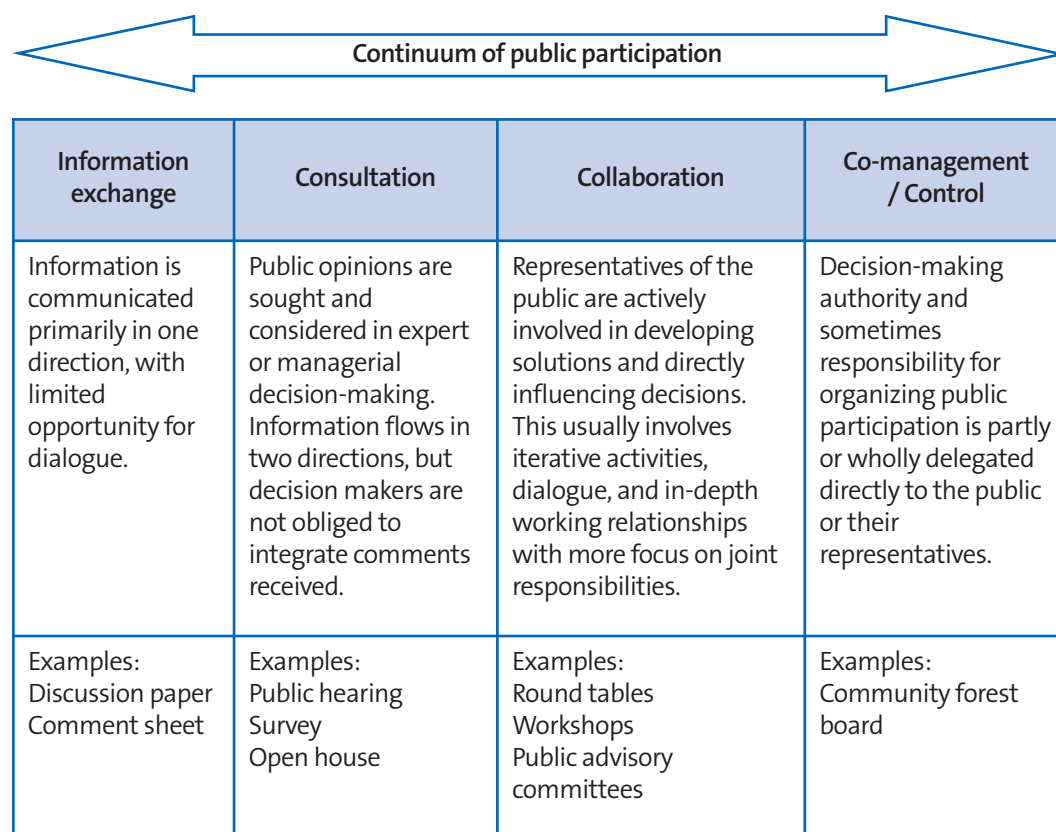


FIGURE 1: Continuum of public participation. Source: Adapted from Beckley et al. 2005, p. 25.

Participation encompasses a variety of approaches, processes, and tools. There is no one correct way to "do" participation; it is an art and a craft and requires practice. Nevertheless, there are some principles and best practices that help to devise effective participatory processes; these are discussed in the next section.



Benefits, challenges, and best practices

The goals of this section are to:

- recognize the benefits and common challenges of participation; and
- identify best practices of participation in natural resource management.

There are both benefits and challenges to participation (Australia DSE 2005a; Beckley et al. 2005). Practitioners should be aware of these when planning for participation in natural resource management. In terms of benefits, public participation:

- promotes decisions that are more inclusive of different perspectives and values;
- can result in better, more informed decisions;
- can generate durable and sustainable solutions; and
- lends legitimacy and encourages compliance with decisions.

Some of the challenges involved in participatory processes are:

- participation takes more time, effort and resources;
- participation may achieve “lowest common denominator” results;
- if poorly done, participation can exacerbate existing conflicts; and
- a stakeholder-driven public participation process often responds to organized interest groups and may not lead to the same results as a more transparent and organic process.

These are some of the fundamental challenges to developing a participatory approach that informs stakeholders, considers stakeholders’ interests in the decision-making process, and achieves good results.

To help overcome these fundamental challenges to effective public participation practitioners, scholars have identified some principles and best practices for participation based on experience and analysis of case studies (Australia DSE 2005a). The International Association of Public Participation (IAP2 2007b) has identified some core values of public participation. According to the IAP2, public participation:

- is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process;
- includes the promise that the public’s contribution will influence the decision;
- promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers;
- seeks out and facilitates the involvement of those potentially affected by or interested in a decision;
- seeks input from participants in designing how they participate;
- provides participants with information they need to participate in a meaningful way;
- communicates to participants how their input affected the decision.

The International Association of Public Participation (2010) also has a code of ethics for its members, which reads as follows:

- **Purpose** We will support public participation as a process to make better decisions that incorporate the interests and concerns of all affected stakeholders and meet the needs of the decision-making body.
- **Role of Practitioner** We will enhance the public’s participation in the decision-making process and assist decision-makers in being responsive to the public’s concerns and suggestions.
- **Trust** We will undertake and encourage actions that build trust and credibility for the process among all the participants.



- **Defining the Public's Role** We will carefully consider and accurately portray the public's role in the decision-making process.
- **Openness** We will encourage the disclosure of all information relevant to the public's understanding and evaluation of a decision.
- **Access to the Process** We will ensure that stakeholders have fair and equal access to the public participation process and the opportunity to influence decisions.
- **Respect for Communities** We will avoid strategies that risk polarizing community interests or that appear to “divide and conquer.”
- **Advocacy** We will advocate for the public participation process and will not advocate for interest, party, or project outcome.
- **Commitments** We will ensure that all commitments made to the public, including those by the decision-maker, are made in good faith.
- **Support of the Practice** We will mentor new practitioners in the field and educate decision-makers and the public about the value and use of public participation.

NRM practitioners should sincerely endeavor to incorporate this code when facilitating a public participation process. Elements of this code could be used as “ground rules” for participatory processes. Stakeholders should be clear about the ground rules at the start of a process to ensure transparency and accountability.

The context and purpose of participation

The goals of this section are to:

- recognize the variety of contextual factors in which public participation occurs; and
- emphasize the importance of developing clear objectives for effective public participation in natural resource management planning and decision-making processes.

Effective participation requires careful planning and a clear understanding of why you are participating. Why is participation called for and in what context? The proponent of a participatory process needs to ask the following framing questions before starting a participatory process (Australia DSE 2005b):

- **Why?** What is the situation that calls for or has produced the need for public participation?
- **What?** What are the objectives or desired outcomes of public participation?
- **Who?** What is the profile of potential participants—their interests, experiences, values, etc.?
- **How?** What approach, tools, and methodology are to be used?
- **When?** What is the timeframe for public participation?
- **Where?** What is the site or sites for public participation?

Numerous factors affect participation (e.g., social, political, cultural, economic, and personal), all of which should be recognized when developing an effective public participation process. The historical, legal, and policy context needs to be taken into account when developing a participation program for natural resource management. Usually, this includes a consideration of Aboriginal rights and title, and recent court rulings in BC (Joseph 2006; Auditor General of British Columbia 2008).

Booth and Halseth (2011) state that in the planning processes of British Columbia's Commission on Resources and Environment (CORE) and Land and Resource Management Plan (LRMP), trust and power relationships between those sitting around the public engagement tables, played a significant role in the success or failure of those processes.



A critical step in planning for effective participation is identifying what you want to achieve. Before initiating a participatory process, managers should identify “SMARRT” objectives: Strategic, Measurable, Achievable, Relevant, Realistic, and Time-bound (Australia DSE 2005b).

Identifying who participates

The goal of this section is to identify different interest groups, stakeholders, and citizens and how they may affect (or be affected by) natural resource management decisions.

Planning for effective public participation requires identifying who should be involved. This may include engaging both the general “public” and organized interest groups. The general “public” encompasses diverse values and potentially conflicting perspectives. Though it may not be feasible to involve the entire general public, the process should be as inclusive as possible and not deliberately exclude certain groups.

Stakeholders in a participatory process are persons or groups that affect or are affected by issues, decisions, or outcomes (Krishnaswamy 2004). Groups and individuals who have a formal or informal stake in resource management decisions include tenure holders, resource users, local community groups, non-governmental organizations (NGOs), and research institutions. Because of Aboriginal title and rights, First Nations usually do not consider themselves as stakeholders, but as partners on the land base, so their involvement may need to be treated differently from that of other stakeholders.

Stakeholders need information regarding how they will benefit by participating. Reasons that could be used to explain benefits from participating include

- Having ownership in design, process, and decisions
- Learning and enhancing knowledge through participation
- Building relationships and networks
- Bringing in diverse perspectives
- Reducing conflict
- Increasing the chances of success of the decision or solution

The proponent of a participatory process may need to conduct outreach to attract and engage stakeholders, raise the visibility and transparency of the process, and inform stakeholders about progress and results. They also need to build common understanding and trust (Krishnaswamy 2004). Building trust is a necessary stage at the beginning of a participatory process. Building common understanding may involve different stakeholders agreeing to a shared vision. Building trust and common understanding takes a lot of time and patience, thus a participatory process can be long and complex.

For effective participation, people need to recognize and respect that others may view the same issue from different perspectives. An effective participatory process recognizes and respects diverse values. The process may also involve identifying and connecting with leadership of local First Nations. One of the core values of participation is to be as inclusive as possible (Auditor General of British Columbia 2008). However, sometimes this is easier said than done. Despite best efforts, some participatory processes are not broadly inclusive.

In addition to trust and inclusiveness, it is also important to consider the following with regard to stakeholders: the level of influence different stakeholders have over the process and its outcomes, stakeholders’ perspectives on issues involved in the process, and their past experience with participatory processes (Crosby 1992). The Australia Department of Sustainability and Environment (2005c, p. 87) suggests using a stakeholder analysis matrix to help identify which stakeholders are the most important to involve in



natural resource management decisions. This matrix plots the level of “importance” of stakeholders against their level of “influence.”

The person and organization responsible for developing the participation process should also be aware of their own interests, biases, and personal involvement in the process (Australia DSE 2005c).

Planning to evaluate the participatory process

The goal of this section is to emphasize the need to evaluate the effectiveness of participatory processes. One critical, yet often missing part of planning for participatory processes is follow-through. A best practice of participation is to plan to evaluate to “close the loop” and generate valuable feedback and learning. This includes reporting back to participants to identify how their contributions have been included in the decision-making process.

In developing a plan to evaluate whether the participatory process (or evaluation framework) was successful, the following questions could be considered:

- What is the purpose of the evaluation?
- Who wants to know what? Will different individuals and organizations be interested in different parts of the process?
- What information will you collect, and how will you go about gathering it?
- What resources (e.g., time, funding, and expertise) will you need to conduct the evaluation?

The Australia DSE (2005c) “SMAART” objectives described in module 3 could be used to develop an evaluation framework for a participatory process.

Booth and Halseth (2011) state that public participation in NRM or land-use planning is generally assumed to be inherently good, or at least a political necessity, but few studies have examined the experiences of the public or examined perceived failures from the public’s perspective. They studied the planning processes of British Columbia’s Commission on Resources and Environment (CORE) and Land and Resource Management Plan (LRMP), which were intended to be participatory. They described successes and failures of public participation as identified by residents of six communities that participated in these processes. According to Booth and Halseth, the public in five of these communities were largely disillusioned by the CORE or LRMP processes in which they participated. The researchers identified several reasons for this result, including lack of trust in the process, uneven power equations between the participants, lack of access to trusted data, lack of time, and inadequate outreach and public education about the process.

Tools for participation

The goal of this section is to identify various participation tools that can be used to achieve different levels of participation and then present guidelines to select participation tools appropriate for particular situations.

The choice of the right tool is critical to the participatory process. Sheppard (2005, p. 1516) states that in Canada, participatory processes in NRM have had limited value due to the preferred use of more “traditional” tools of public engagement, such as open houses and public comment periods, which result in low public satisfaction with process and outcome. However these “traditional” tools can be effective in certain situations and stages of a participatory process (Beckley et al. 2005).

Choosing the appropriate tool (or bundle of tools) for participation will depend on the purpose for participation. The selection of tool(s) will also vary according to:



- management goals, objectives, and desired outcomes
- community profile and the socio-political context
- project size, budget, timeline, and resources allocated
- skills and availability of management team

Beckley et al. (2005) classify tools as: 1) indirect (non-face-to-face), 2) direct (face-to-face), and 3) emerging. Indirect tools include comment sheets, toll-free lines, referenda, and surveys. Direct tools are further divided into those useful for small and large groups. Direct tools for small groups include public advisory committees, focus groups, workshops, round tables. Direct tools for large groups include open houses, town hall meetings, and public hearings. Emerging tools are usually electronic or Web-based and are designed to convey information quickly or widely, or present technical details visually. Examples of these are social media, community-based mapping with GIS, 3-D visualization software, and television-based participatory tools (Beckley et al. 2005).

The distinction between direct and indirect tools of public participation can be related to the continuum of public participation (Figure 1). The more collaborative participatory stages of the continuum tend to be associated with face-to-face techniques (direct tools). This general distinction, however, is starting to break down with “emerging” computer-based, “remote” participatory tools such as social media and Web-dialogue techniques.

Usually, a suite of tools will be employed in the different stages of a public participation process, stages starting with outreach to stakeholders, building common understanding by defining a shared vision and goals, through to evaluating and decision-making. Hislop and Twery (2001) produced a matrix that classified different tools appropriate for the various stages of a participatory process. Beckley et al. (2005) presented a simplified version of this classification of tools into different stages in the public participation process.

In planning for participation, especially choosing suitable tools, it is helpful to evaluate how different tools perform based on criteria and indicators of a successful participatory process. In the context of evaluating a public participatory process, “criteria” can be broadly defined as values that are inherent in a successful participatory process. “Indicators” measure aspects of criteria and are used to evaluate the success and appropriateness of tools used in a participatory process to reach desired outcomes or sound decisions.

Table 1, adapted from Beckley et al. (2005:21), classifies criteria and indicators to evaluate participation tools into three core elements: breadth, depth, and outcomes. The core element “breadth” addresses the degree to which a process adequately incorporates a broad range of public values into the decision-making process (Beierle & Cayford 2003). It also addresses how accessible a process is to all public interests so that they can have a meaningful input (Tuler & Webler 1999). The “depth” of public participation measures the quality of participation and addresses the levels of exchange between participants in a participatory process. The third core element, “outcomes,” relates to the goals of the participatory process—how well the process influenced and improved decisions, and how well it met the shared vision or goals identified by the participants. Often, agencies sponsor a participatory process with specific goals and expectations. This core element measures the extent to which the process meets those goals and expectations. Beckley et al. (2005) have a reference guide that evaluates a variety of direct and indirect public participation tools against these criteria and indicators.

A participatory process should not be thought of as a single event or application of a single tool but as a long-term process integrating a series of appropriate tools. Specific



Table 1: Core evaluation criteria and indicators of successful participation tools

Core Elements	Criteria and indicators
Breadth	Representation Incorporate a wide range of public values.
	Accessibility Be available to all public interests.
	Renewal Allow for new participants over time.
	Anonymity Protect participants' identities when necessary.
Depth	Listening and Dialogue Foster a two-way flow of information.
	Flexibility Be flexible in scope.
	Deliberation Provide opportunities for frank and open discussion.
	Transparency and Credibility Promote and make available in a clearly understandable form independent input from scientific and other value-based sources.
	Relationship Building Promote positive personal and institutional relationships.
Outcomes	Relevance Influence the decision-making process.
	Effectiveness Improve the quality of decisions.
	Mutual learning Contribute to all participants' knowledge.
	Reciprocity Reward or provide incentives.
	Cost-effectiveness Output or outcome is cost-effective relative to inputs.

Source: Adapted from Beckley et al. 2005, p. 21

public participation tools may not rate highly for every criteria and indicator. For example, indirect methods, such as surveys, provide little opportunity for participants to learn more about an issue. But they are often cost-efficient, anonymous, and more representative of the broad public and thus rank higher in most criteria for breadth. Conversely, direct methods such as workshops and round tables provide great opportunities for learning, for establishing dialogue between individuals with diverse values, and for identifying workable solutions and therefore tend to rank higher in most criteria for depth. Emerging tools have the potential to simultaneously address criteria for breadth and depth. Social media tools such as Facebook, Twitter, and LinkedIn cannot only convey information quickly and widely (breadth), but can also be quite interactive (depth).

Conclusion

This article provides an overview of participatory processes in natural resource management: its benefits and challenges as well as the tools and skills required to implement successful participation. Its aim is to address the needs of resource managers who work with communities and First Nations, and whose job requires them to engage the public in resource planning and management. These resource managers may include practitioners working for, or with, local government, First Nations, or small tenure holders as well as university-based researchers, consultants, or provincial government employees working in operations or policy.

In Canada, despite all the talk about public participation, there has not been much synthesized information on tools that natural resource managers can use. Utilizing the tools introduced in this article could help move natural resource decision-makers from talking about public participation and controlling dissent towards meaningfully incorporating public values into the planning process.



There are several fundamental challenges to implementing an effective participatory process, some of which are described in this article. An additional challenge could be stakeholder skepticism resulting from an earlier planned participatory process that ended by some participating communities feeling that their interests were not included, as mentioned in Booth and Halseth's (2011) study. Challenges such as this emphasize the need for an effective participatory process that informs stakeholders and includes their voice in the decision-making process. Despite the many challenges, there are successful cases of organizations in BC implementing effective public participatory processes, such as the Okanagan Basin Water Board (K. Porter, senior facilitator, Summit Environmental Consultants Inc., personal communication, March 2012).

One of the anonymous reviewers of this article commented that participation is "not going through the motions, fitting the approach into a rubric [of participation]," but should be "*participation that matters*." "Doing" participation effectively is more of an art than a technical skill that can be taught. Many practitioners "do" participation every day, but many do not have the opportunity to reflect on their practice or to contemplate ways to do it better. This article was designed to offer this opportunity and to provide practitioners with useful knowledge and tools to help them engage communities and the public to make sound management decisions.

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Test Your Knowledge

How well can you recall the main messages in the preceding article?
Test your knowledge by answering the following questions.

Strategies and tools for effective public participation in natural resource management

1. Which one of these three statements is incorrect?
 - a) Different public participation tools are used at different stages of a participatory process.
 - b) Public participation means co-management.
 - c) Public participation takes more time, effort, and resources.

2. Beckley et al. (2005) identified three core elements to evaluate the effectiveness of public participation tools. Which of these three choices is not a criteria of the core element “breadth”?
 - a) Listening and dialogue
 - b) Accessibility
 - c) Representation

3. Which one of these three statements is incorrect?
 - a) Direct “face-to-face” tools such as workshops are used to address the core element of “depth.”
 - b) Emerging tools such as social media can address the core elements of “breadth” and “depth.”
 - c) Direct tools are always better than indirect tools such as surveys in addressing the core element of “outcomes.”

