

Towards Increased Citizen Influence in Canadian Forest Management

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Abstract

Despite its vast resources, Canada is experiencing a conflict over the use of its forests and facing, some argue, a forest crisis. Growing public concern that traditional forest management is no longer socially acceptable has caused Canadians to view forest management agencies as being unresponsive to their changing values. This paper presents evidence of the change in Canadian forest values and contrasts these with the values of professional foresters, those traditionally charged with managing Canada's Crown (public) forests. It describes how many public participation programs, while broadly soliciting public input, have traditionally received it from unrepresentative and often polarised groups which has led to forest management that is not socially acceptable. Forest management has been about integrating the products of science with forest agency values that emphasise multiple-use and timber production rather than the broader range of values desired by society. The paper argues for the need to effectively integrate societal with professional values to achieve sustainable forest management and outlines how citizens, stakeholders, and communities across Canada are seeking to do so through increased citizen decision-making power and devolution of forest management control to community levels.

En dépit de ses grandes ressources, le Canada vit un conflit concernant l'utilisation de ses forêts, et il fait face, selon certains, à une crise. Le public estime de plus en plus que la gestion traditionnelle des forêts n'est pas socialement acceptable et qu'elle ne s'adapte pas aux changements de valeurs de la société. Les auteurs de l'article font la preuve que ces valeurs ont changé et il mettent en rapport ces nouvelles valeurs avec celles des professionnels traditionnellement chargés de gérer les forêts publiques sur les terres de la Couronne. Ils expliquent comment plusieurs programmes participatifs, tout en sollicitant largement la population, ont traditionnellement véhiculé les valeurs de groupes qui ne sont pas représentatifs de la population et qui sont souvent polarisés, ce qui a mené à une gestion socialement inacceptable. Par le passé, la gestion des forêts a signifié une intégration de la science aux valeurs des organismes forestiers qui mettaient l'accent sur la production de bois d'œuvre à usage multiple et non sur un plus vaste éventail de valeurs préconisées par la société. Les auteurs de l'article soutiennent qu'une gestion durable des forêts requiert une intégration efficace des valeurs de la société et de celles de la profession, et explique comment des citoyens, des parties intéressées et des

communautés partout au Canada cherchent à atteindre cet objectif en augmentant la capacité décisionnelle des citoyens et en attribuant le contrôle de la gestion des forêts aux collectivités.

Keywords:

Forest values, public participation, sustainable forest management, community forestry

Introduction

Canada's role as a forested nation has global environmental significance for regulating climate, air and water quality, and providing habitat for animal, plant, and fish populations and endangered species. In 1997, the World Resources Institute identified that of all the world's remaining large, intact frontier forests, 25 per cent are in Canada's boreal forest region. British Columbia (BC) alone contains more temperate rainforest wilderness than anywhere else in North America (cited in May 1998).

Canada is also a forest nation in the traditional forests-as-timber sense. Logging has long played a major role in Canada's economy. Today, Canada is the world's largest exporter of wood and wood products (\$47.4 billion), and produces one third of the world's newsprint (9.2 million tonnes). Almost 100 per cent of the US's imported softwood lumber comes from Canada, while 93 per cent of US imports of wood pulp comes from Canadian forests. Harvesting the forest and converting it to pulp, paper, chips and lumber employs 373,000 Canadians directly (Natural Resources Canada 2001). Increasingly, our forests also create jobs and wealth through non-timber activities in the forest. Tourism, fishing, hunting, trapping, and other subsistence and gathering activities are dependent on intact and healthy forests and have significant and increasing economic value.

Despite its vast forest resources, Canada is experiencing a forest conflict and facing – some argue – a forest crisis. In BC, Canada's largest logging province, the past decade has witnessed large scale demonstrations and civil disobedience involving cross-sections of the Canadian citizenry in Carmanah Valley, Walbran Valley, Slocan Valley, the Great Bear Rainforest, and most prominently, Clayoquot Sound. In Clayoquot Sound, during the summer of 1993, over 840 people were arrested – more than in any other act of civil disobedience in Canadian history – for standing in the way of logging crews.

This noisy battleground is increasingly replicated in Canada's other major timber producing provinces, Alberta, Ontario, and Quebec, where similar dominant industrial forest management regimes exist. Within this debate, established groups frequently express their ideological opinions in loud and powerful language, and their polarised views are already well known; industrialists and neo-conservative politicians advocating intensified resource development and market-driven economics, and environmentalists and deep ecologists advocating preservation, ecological integrity and spiritual values.

The growing debates on forest management options often overlook or conveniently ignore that Canada's forests are largely owned by the Crown, with only 6 per cent held privately. Crown land is a publicly owned resource,

with jurisdiction over forests vested in provincial governments as representatives of the people. In BC, for example, forests cover 61 million hectares of the province's 93 million-hectare land base, and 95 per cent of forested lands are publicly owned (Natural Resources Canada 1997). Canada's other major timber harvesting provinces contain similar percentages of publicly owned forest (Table 1). As such, Canadians can theoretically exert a proprietary interest over the management of their forests.

Table 1. Area and percent of publicly-owned forest in major Canadian timber provinces

Province	Area of Forest (ha)	Area of Publicly-owned Forest (%)
Quebec	84,000,000	88
Ontario	58,000,000	88
Alberta	38,000,000	96
British Columbia	93,000,000	95

(Natural Resources Canada 1997)

Canadian public opinion on how Canada's forests should be utilised and managed has changed dramatically over the past twenty years, and the Canadian public is attentive to the changes being wrought by resource management agencies across their nation. A sceptical Canadian public have come to view traditional management agencies as being unresponsive to their changing values (Robinson *et al.* 1997). In accord with the populist belief that people should have opportunities to influence issues and decisions that impact them and future generations, citizens, stakeholders, and communities across Canada are seeking to democratise forest policy processes through increased citizen decision-making power and devolution of management control to community levels. Although sustainable forest management will not result if citizens are uninformed, scientists from diverse disciplines now tend to agree that the users of small to medium-sized natural resources are potentially capable of self-organising to manage these resources effectively, whether jointly with governments or with considerable autonomy (Ostrom and Wertime 1998).

One reason why local users may more effectively manage natural resources than state agencies alone is the immense diversity of local environmental conditions that exist within most countries. Given environmental variety, rule systems that effectively regulate access, use and the allocation of benefits and costs in one setting are not likely to work well in radically different environmental conditions. Efforts to pass legislation establishing a uniform set of rules for an entire country are likely to prove ineffective in addressing the diversity of environmental conditions that exist. A second reason is that the benefits local users may obtain from careful management of their resources are potentially greater when future flows of benefits are taken into account. This occurs however, only when local users have sufficient assurance that they will actually receive the long-term benefits of their own investments (Ostrom and Wertime 1998).

Within the context of forest management in Canada, with particular emphasis given to the province of BC, the purposes of this paper are 1) to present evidence for the changing nature of Canadian forest values, 2) to argue for the effective integration of public values with professional values in forest management, and 3) to portray emerging trends in the increasing power of citizens in Canadian forest management. In this paper, effective integration refers to the ability to integrate diverse values, knowledge, and information in support of sustainable forest management (Cardinall and Day 1998).

Defining Forest Values

Forests exist as physical entities that can be defined somewhat objectively. However, the view of forests as resources is a subjectively defined product of people's values. At the heart of Canada's forest controversy lies a conflict within society over the relative value people assign to forest objects or ideas about forests. A value may be defined simply as a desired end-state, product, service or outcome. Koch and Kennedy (1991) define social values as those goods, services, or ideals that large groups of people will make sacrifices to achieve. All forest values – including commodity, amenity, environmental quality, ecological, public use, spiritual, health, and security values – are social values in that they imply a measure of worth to society. Forest values contribute to social well being, jobs, perceived quality of life, and the satisfaction of society's material needs, and they occur at a wide range of geographic scales, including local, regional, national and international. Inevitably, as people's values interact and change over time, forests are perceived in new and different ways.

Since some social values are more easily identified and measured than others, there is often disagreement about their relative value. For social values that are traded in the marketplace, there is limited dispute. Goods and services are exchanged in markets using an agreed-upon scale to measure relative worth. However, the lack of markets for less tangible non-market social values, such as ecological life support, aesthetic and recreational values, leads to a variety of problems, including how they are distributed across society, how they change in relative importance over time, and how to measure their relative worth vis-a-vis values that are measured monetarily (Stankey and Clark 1991). The difficulty of understanding and measuring many non-market social values has contributed to their traditionally low political profile and to many being unaccounted for in forest management programs in Canada. This may have reflected the lack of importance the public once attached to these values, but at other times values that are important to the public have been ignored because they differed from conventional forest management policy, executive attitudes, or the basis of program funding. The irony is that those non-market social values that have received scant management attention are the very ones that are increasingly important to the Canadian citizenry.

In many public participation programs in Canada, input is broadly solicited but usually received from the narrow foci of unrepresentative and often polarised extremes. Given that traditional participation processes are also more easily accessed and influenced by organised interests, a significant

challenge is to ensure broad, balanced participation by the general public. To determine what the general public believe, one must turn to techniques such as opinion surveys and other research approaches. Responsive forest management policy should serve the outspoken, unspoken, and unborn citizen. The outspoken have generally been well represented. The unborn may best be represented by forest agencies' adherence to sustainable resource management. The unspoken may best be represented through scientific research assessment of their opinions (Shindler *et al.* 1993). The following sections report on the findings of major public opinion surveys of Canadian and BC forest values from the past decade.

Canadian Forest Values

In 1993, the Angus Reid polling firm reviewed Canadian polls of the previous ten years and concluded that a fundamental and lasting change in Canadian values toward the environment had occurred (CCME 1993). This shift in values is paralleled in forest surveys over the past decade.

Forestry Canada conducted a scientifically representative national survey in 1991 (Forestry Canada 1992), which demonstrated the public's concern over forest mismanagement and over-cutting, their lack of faith in government agencies and industry, and their desire for forest management and planning that effectively integrates a wider range of ecological and non-timber values. A 1996 forest social valuation survey also endorses these as social trends. As a component of the Federal Model Forest Program, established to demonstrate sustainable forest management, the 1996 Canadian Forest Survey (Robinson *et al.* 1997) assessed national, BC and local community opinion on forest values and forest management preferences. Results are considered to have a 95% level of confidence (with ± 0.05 margin of error) of representing the views of Canadians (Salant and Dillman 1994). The following section reports on the results of the national public opinion survey and summarises the values and forest management preferences of Canadians.

Canadians strongly value citizen participation in forest policy processes. Seventy four per cent of respondents endorsed citizen participation in setting management goals for public forests, preferring a level of citizen participation where the public acts as a full and equal partner with forest professionals. Respondents ranked government natural resource agencies seventh out of nine options in terms of which group forest managers should be most responsive to (Table 2), indicating that these agencies are viewed as inappropriate sources of management goals or perhaps lacking in credibility. Canadians felt that primary consideration in forest management should be given to locally affected communities (Table 2), and that access to forest resources should be assigned primarily to locally owned operations rather than to large scale corporations (Table 3). Contrary to existing provincial licensing and tenure systems, only six per cent of respondents felt that most of the wood supply should be assigned to large-scale corporations.

Respondents indicated that they value their forests more for ecological reasons than for economic wealth and jobs (Table 4), replicating the ordered rankings of the Forestry Canada 1991 survey. Together the 1991 and 1996

findings indicate Canadians consistently value their forests for ecological before economic reasons.

Many Canadians feel that logging should not dominate to the detriment of non-timber uses of the forest. Seven per cent of respondents in the 1996 survey felt that forests should be managed only to produce and harvest timber, and 93 per cent felt that forests should be managed for a wide variety of benefits and uses rather than for a dominant single use (Table 5). Only 8 per cent of respondents felt that maintaining the economy of logging communities is as important as preserving the forest for other uses and values. More than half of the respondents felt that the present rate of logging is too great to sustain the forest for other non-timber values and uses.

Table 2. Public Opinion of Canadians Regarding Responsiveness of Forest Managers

What Interest Group Should Forest Managers Be Most Responsive to When Setting Forest Management Goals	Mean Response* N=747
Local affected communities	2.61
Local environmental interest groups	4.08
Local affected First nations groups	4.41
Provincial or national environmental groups	4.78
Provincial public opinion	4.79
Local affected industry	4.85
Government natural resource agencies	5.25
National public opinion	6.13
International public opinion	7.97

*Respondents ranked this list from 1 to 9 where 1 = "most important interest group," and 9 = "least important interest group."

Source: Robinson *et al.* 1997

Table 3. Public opinion of Canadians regarding allocation of wood supply

Allocation of Wood Supply	Percent Agree or Strongly Agree* N=747
Most of the wood supply should be assigned to locally owned operations	60
Most of the wood supply should be assigned to large scale corporations	6
The wood supply should be assigned equally between locally owned operations and large scale corporations	39

*Respondents replied to each statement as follows: "strongly agree," "agree," "disagree," "strongly disagree," "don't know."

Source: Robinson *et al.* 1997

Table 4. Public Opinion of Canadians Regarding Preferred Uses of Canadian Forests

Type of Forest Use	Mean Response* N=747
For protection of water, air and soil	2.71
For maintaining the global ecosystem	2.86
For wilderness preservation	2.52
A place for a variety of animal and plant life	3.43
A source of economic wealth and jobs	4.43
A place for recreation and relaxation	4.60

*Respondents ranked this list from 1 to 6, where 1 = "most important forest use," and 6 = "least important forest use."

Source: Robinson *et al.* 1997

Table 5. Public opinion of Canadians regarding forest management priorities

Forest Management Priorities	Percent Agree or Strongly Agree* N=747
Forests should be managed for a wide variety of benefits and uses rather than for timber production alone	93
Forest management should try to minimize impacts on traditional rural ways of life (e.g. hunting and fishing for food)	75
Forest management should try to create more jobs through commercial recreation and commercial tourism	67
The present rate of harvesting trees is too great to sustain the forest for other values and uses	53
Forest management should try to create more jobs through the harvest of plant and animal products	36
Forest management should try to create more jobs through mining	23
Forest management should try to create more jobs through dam building	11
Maintaining the economy of logging communities is more important than preserving the forests for other uses and values	8
Forest should be managed only to produce and harvest timber	7

*Respondents replied to each statement as follows: "strongly agree," "agree," "disagree," "strongly disagree," "don't know."

Source: Robinson *et al.* 1997

In summary, this research demonstrates that Canadians' view public forest management agencies as inappropriate sources of management goals, support locally-owned over large scale corporate access to wood supply, support multi-value/ecosystem management over single-value/timber management and believe forest managers should be more responsive to local resident values than the values of more distant groups.

Need to Integrate Public Forest Values

Against the evidence reviewed on Canadian forest values, Canada's provincial bureaucratically-driven forest policy processes have been ineffective in producing information that leads to forest management and planning that best reflect Canadian societal values. A comparison of public forest values with those of forest professionals further highlights this issue. For example, consider the Canadian public's responses to a nation-wide public opinion poll of forestry issues compared to the responses of professional foresters on the same issues (Forestry Canada 1992). While the Canadian public shared the view of professional foresters that there is a growing scarcity of timber in Canada, their views differed markedly on several key issues as indicated in Table 6. A similar situation seems to exist in the U.S., where Vining and Ebreo (1991) found that resource managers tend to espouse a standard, multiple use philosophy with an emphasis on timber production, whereas the public place far more value on things like wildlife and scenery, and less value on timber. Significantly, these managers were also naive about the differences that exist between their own views on forest values and the quite disparate views held by the public.

Historically, forest management professionals have been trained to understand and respond to the social value communicated by the economic system as the primary means of current generations expressing their forest values. Because of this, various authors (for example Brunson 1992, FEMAT 1993, Magill 1995) argue that foresters have not been well-prepared by education to understand and respond to the many social and political expressions over changing forest values of the latter half of the 20th century. Although the philosophy and practice of forestry recognises the importance of social and biological concerns, conventional forestry thinking has relied heavily

Table 6. Public perception versus the perceptions of foresters

Statement	Public (% in agreement)	Foresters (% in agreement)
Chemicals used in forest management pose a hazard to human health and the environment	81.0	37.0
Most old growth forests in Canada should be protected	86.0	25.0
Clear-cutting is a poor forest management practice	79.0	21.0

Source: Forestry Canada (1992)

on traditional economics in studying social questions. For instance, in *The Practice of Silviculture*, Smith (1986) states that:

The implicit objective of forestry is to make forests useful to society. Since all management is therefore aimed at economic objectives, it is almost impossible to separate the biological from the economic (Smith 1986:2).

The values of forest management professionals have also developed from personal experience or long associations with clients, and have grown out of a professional culture that has shaped the way resource managers have learned to think about natural resources (Brunson 1992). Forest managers have often provided a rationale for action by couching their intentions in terms which seem to be anchored in science but which are often ill defined judgements of value. The shibboleth of 'integrated resource management' serves as an example. According to Carrow (1994: 19), former Dean of Forestry at the University of Toronto, integrated resource management, in Canada is generally "planned and practised as timber management with constraints" and "does not reflect the values and priorities of the public owners of the forest." With regard to management responsiveness, Carrow (1994: 20) states: "Surprising as it may be, the industry, despite convincing and consistent surveys of Canadian public opinion, still does not generally acknowledge the substantial non-timber values of the forest environment."

Lack of responsiveness on the part of forest managers may be bred by their frustration with what they see to be the public's lack of understanding of forest issues. Managers talk of bias, the public's refusal to accept the facts, and the need to educate the public about forest systems and forest economics. Yet, research by Fortmann (1990) indicates that members of the public often hold scientifically grounded, well-informed arguments on technical and economic issues. The public is not a homogeneous group who are generally ignorant of, or without opinion on, forest issues. Providing more technical information to the public will not necessarily make them agree with forest managers' decisions. Rather, disagreements often reflect fundamental differences between the values of forest managers and those of the public owners of the forest. As such, forest management conflicts are not a function of insufficient scientific understanding, and are not amenable (even with sufficient time, money, and skills) to scientific solution. Rather, they are inescapably social problems that demand social solutions which address fundamental questions about the values that we seek to satisfy (FEMAT 1993). Tempered with caution, resource managers may use the products of science to guide and support management in resolving issues and achieving desired forest conditions, but ultimately the products of science and technology must become integrated with the public's social values. Even if resource managers do not share the same values as the publics they represent, competing publics do share some similar visions of the future (Brunson 1992). A common vision will not be identified by focusing on narrow technical issues or peripheralising the owners of the forest, but by broadening the realm of debate and increasing the role of the public in forest management and planning.

There are several fundamental reasons why the public (owners of the forest) should have access to forest policy processes and forest management (FEMAT

1993). A central tenet of democratic governance is that people should have opportunities to influence issues and decisions that impact them and unborn generations. This is of particular relevance given that intact forests in Canada are rapidly dwindling resources that are publicly owned. Given the emerging importance of many of the values associated with forests – such as biodiversity, recreation, employment – the opportunity to participate in decisions that affect these values is crucial. Public participation also represents one of the major sources of information on societal values. Our understanding of public values, such as what they are, who holds them, and how they are affected by management actions, is typically limited. The view of public participation as a major source of data, critical to the planning effort, rejects the view of public participation as mere evidence of procedural compliance. Instead, public input becomes crucial and central to the heart of any planning process. Public participation programs can also help participants to understand, and recognise as legitimate, the diverse perspectives and values held by others. While understanding does not constitute agreement, it is an essential part of effective resource management. Resistance to public participation is often based on the notion that it is costly in terms of both money and time. While this may be true, the failure to engage the public early, honestly, and in an on-going fashion, will merely delay these costs. It is also likely to lead to deepening frustration and distrust, and increased public reliance on alternative decision-making avenues such as civil disobedience, the courts and legislatures.

Where We Are and Where We May Be Going: Emerging Trends in the Democratisation of Forest Management in Canada

For any profession to survive and prosper, it must align its self-definition with that of the general public (Kanowski 1998). Canadian society desires ecologically driven, effective multi-value forest management incorporating increased citizen decision-making, and the societal imperatives driving these demands are not expected to diminish. This social trend is very much a reflection of social responses, in broad qualitative terms, to the increasing relative scarcity of natural forests and the values associated with them (Kanowski 1998). And while much of the knowledge and many of the practices of traditional forest management are critical to meeting societal demands, there is a need for alternative approaches that incorporate a broader range of values in forest management (FEMAT 1993). Seeking to better align forestry with their publics and democratise forest policy and planning, progressive elements of the profession are attempting to redefine forestry for the twenty-first century. The following depicts emerging trends and identifies options for forest management and planning in Canada.

Towards ecosystem-based management

There are many versions of the emerging ecosystem-based management paradigm. The version used here is based on the notion that humans cannot manage ecosystems but only the human behaviour that impacts and is impacted by the ecosystems in which humans are embedded. Consequently, while ecosystem health is primary, ecosystem-based management is about

developing adaptive social processes – such as public involvement – that resolve the conflicting human definitions and values that are part of ecosystem management (Romm 1993).

According to Kimmins (1997), Canada is presently in a stage of ecological or scientific forest management, which is generally successful in sustaining a variety of desired social values but unsuccessful at maintaining the aesthetics of stands and landscapes, achieving biodiversity, or sustaining spiritual values of old growth forest. Kimmins argues that social pressures require the development of social forestry suitable for a post-industrial society. The essence of social forestry is a multiple objective approach that respects nature, sustains biodiversity, minimises ecosystem disturbances, and maintains the aesthetic and spiritual values of stands and landscapes essentially unchanged. In Canada, growing public and professional concern that traditional forest management has failed to address the public's changing conceptions of forests has led to the development of sustainable forest management, also known as ecosystem management, and Canada's Model Forest Program. The evolution of ecosystem-based forestry involves the development of an approach to forest use that:

...protect[s] forest functioning at all scales through time as the first priority, and then seeks to sustain, within ecological limits, a diversity of human and non-human uses across the forest landscape. In other words, ecosystem-based approaches focus first on what to leave and then on what can be taken without damage to ecosystem functioning (Silva Forest Foundation cited in Burda et al. 1997: 8).

In ecosystem-based approaches production goals are based on multiple objectives, and the holistic interests of ecosystem-based forestry – including ecological, cultural, recreational, economic interests – can be contrasted with the single economic interest of existing sustained yield forest management. The shift in paradigm recognises explicitly that a much greater suite of forest values, both tangible and intangible, should be sustained beyond timber harvesting (Kanowski 1998).

Since the production of goods and services takes place within ecosystem constraints, ecosystem-based management will have the effect of substantially reducing the volume of timber extracted from the forest. Ecosystem-based approaches will therefore require broad changes to management and production if significant economic activity and employment is to be maintained in the face of substantial reductions in harvested timber. Within provincial resource ministries across Canada, the debate gradually shifts from arguing against the imposition of ecosystem management to worrying about its implementation. However, while the challenge facing government agencies across Canada is the need for structural reform necessary to allow the broad scale implementation of ecosystem-based forestry, a larger political and economic vision and commitment is also central to the adoption of an ecosystem-based approach (Burda et al. 1997).

Towards multiple purpose and effective public participation

Carrow (1994: 19) emphasises the role of the public in the identification of

social values and the critical need to involve the public in the "integration of planning, decision-making and management for *all* values." Implicit in Carrow's approach to forest management is the recognition that decisions should not be made through votes in the political arena or bureaucrats in isolation, but rather in conjunction with effective public participation mechanisms at all levels of the planning process.

Effective public participation processes are necessary for four main purposes:

1. *Capturing and incorporating the highest valued social uses of the forest resource.* The values of forest resources in any society are a function of socio-cultural appraisal, and, as such, the meaning and values of forests change over time and space. The future success of forest managers across Canada will be determined in no small part by how well they are able to translate changing social values into management plans that accommodate a broad and diverse set of forest values. Social valuations of public forests, such as those of the Forestry Canada 1991 Survey (Forestry Canada 1992) and the 1996 Canadian Forest Survey (Robinson *et al.* 1997) as discussed above, must be realised as a regular and integral aspect of forest planning.
2. *Identifying socially acceptable forest practices that manage for the highest valued social uses of the forest resource.* In Canada, the issue of social acceptability of forest management practices and conditions has attracted little systematic attention until very recently. Studies indicate that purposes 1 and 2 are iterative. For example, the Canadian public has identified ecosystem values to be of primary importance, and is generally against the practice of clearcut logging because of its perceived ecological and aesthetic impacts (Forestry Canada 1992, Robinson *et al.* 1997). Those forest management practices and conditions that society judges unacceptable, by whatever criteria, simply cannot continue in the long run. This is true, despite the fact that the given practice or condition might be based on sound science, or capable of producing significant economic returns (FEMAT 1993).
3. *Sharing in the responsibility of strategic land use planning.* To date, this purpose has received scant attention across Canada, with recent exceptions being Ontario's Lands For Life process and BC's shared decision-making Commission on Resources and the Environment (CORE) and Land and Resource Management Planning (LRMP) processes. Increasingly, shared decision-making is recognised as a crucial condition since forest values are socially derived and resource and land use allocation decisions require trade-offs between various members of the public.
4. *Delegated control and management of forested lands to local communities.* Limited experiments in community forests have been undertaken in Canada. Most, however, have been severely limited in scope because they have been envisioned within existing industrial tenure systems that deny communities the opportunity for self-determined innovation. Devolution of power to local communities is the most far-reaching purpose of public participation and currently the most controversial in BC because of its potential impact on an entrenched industrial tenure system.

Towards increased citizen decision-making power and community management

Public participation can, and should, occur at a variety of participation levels. The choice of level depends on an array of considerations such as: how controversial the issue is; whether the decision involves choices between important social values; the level of public interest; the importance of public support for a proposed action or decision; the impact on environmental, social or economic interests; the time and resources available; the discretionary power of the decision-maker; and the adequacy of information available. In an analysis of the gradations of citizen participation levels, McMillan and Murgatroyd (1994) categorize public participation approaches into three main levels: directive, consultative and collaborative. Adopting these three levels as a framework, the following provides an interpretation of where Canada is in terms of the level of citizen power in forest policy and management.

1. *Directive public participation processes*, the lowest level, usually involve an agency consulting with, or seeking input from, a community but making decisions internally. This agency-driven top-down approach holds no assurance that public input will be incorporated in the final decision. Unfortunately, with only a few recent exceptions, this closed-door or "decide-announce-defend" approach has traditionally dominated public participation processes in most areas of resource management across Canada. During the last decade, this type of pseudo-process aimed at persuading, educating or informing the public (Arnstein 1969) has fostered across Canada a frustrated and cynical public and – particularly in BC – a public who now demand a level of participation that far exceeds directive participation.

2. *Consultative public participation processes* involve significant exchanges of ideas and opinions, but the agency, while committed to incorporating input into the final decision, retains major discretionary power over the final decision. For example, Ontario's Lands for Life process was a low level consultative process that was framed within traditional structures in which decision-making is dominated by forest industry and political elites. Round Tables were created to make land use recommendations to the provincial government for 46 million hectares of public lands. The role of the general public was restricted to a 30-day period in which to respond to the 242 recommendations of the Round Tables. While prominent environmental groups eventually joined with industry and government after mustering broad public opposition to Round Table recommendations, the new Ontario Forest Accord (OFAB 2001) was negotiated in a closed-door political forum without the participation of the general public and aboriginal groups.

In negotiation-based consultative public participation processes, the agency and the public (or their sectoral representatives) share in decision-making responsibility and hold joint voting power, and – while the agency maintains discretionary decision-making authority – the expectation is that a consensus decision will be implemented by the decision-maker. Public participation in Canada was brought to a new and higher level with BC's Commission on Resources and the Environment (CORE), a provincial land use planning process. A several-years long participatory planning process in four regions of

the province, the consensus-based CORE process, was hailed as a new way of making decisions outside of the old closed-door political forum. CORE encountered deep polarisation between sectoral representatives, and none of the four processes resulted in consensus. Backed with neither sufficient financial resources nor real political authority to make binding decisions or to empower new groups, the process encountered a forest industry – both corporate and labour – that largely bided its time in the negotiations, blocked consensus, and then waged an old-style political campaign to influence Cabinet in its decision-making after the CORE reports came out (M'Gonigle 1997b, Wilson 1998). However, the importance of CORE should not be under-estimated: it set a shared decision-making precedent in BC and Canada, aptly demonstrated the strengths and weaknesses of such a process, and not least of all promoted better understanding of perspectives between traditional adversaries that created opportunities for eventual compromise.

A several-years long participatory planning process, the negotiation-based Land and Resource Management Planning (LRMP) processes were conceived as sub-regional components of the BC land use strategy being developed by CORE. From 1992 to 1998, public participants had been involved in 18 LRMPs in four of the six regions of BC. To date, the five LRMPs that have been completed all reached consensus, and other processes are in their final stages. Although the experiences of participants have not been without shortcomings, both public participants and government representatives have assessed the LRMP process as a success (Duffy *et al.* 1998). Evaluations of various LRMP processes suggest a major difference between these and the CORE tables, in that government officials were central players in the former rather than remaining in background advisory roles. Strong leadership and independent facilitation were seen as keeping negotiations focused on interests, rather than positions (Wilson 1998). The LRMPs were seen by participants as being fair and open public processes that were generally successful at incorporating the broader public's interests and values.

Trend setting in their application, strengths and weaknesses of the CORE and LRMP processes have been identified, and together they provide useful blueprints for future public participation endeavours in land use planning. The relative successes of the CORE and LRMP processes, as well as broad support from the BC public and agency officials, have provoked an expectation on the part of the public that future land planning processes will involve similar or higher levels of public participation.

3. *Collaborative public participation processes* involve significant exchanges of ideas and opinions between citizens and public officials, but communities are involved in the entire decision-making process and citizens have the dominant decision-making authority over a particular plan or program. In Arnstein's (1969) classic study of citizen participation this equates to the highest levels of delegated power and citizen control. As forest dependent communities across Canada continue to experience economic instability due to rationalisation, a declining timber supply and external market forces, many are seeking opportunities to diversify their local economies through the implementation of alternatives to corporate-based single-commodity forest management. While negotiation-based consultation has allowed communities

to engage in processes which seek consensus about community expectations on land use allocation, a growing number of communities are looking to gain control of their local forest resources through the development of community forest models. For communities to control forest management responsibilities and the generated benefits, the development of legislation, that which devolves a range of powers to local bodies are representative of a community's diverse interests, is required.

In BC, several First Nations and non-native communities have developed community forest models that are ecologically oriented and that seek to foster a long-term, value-added and diverse local economy. To date, these models could not be implemented because of existing tenure arrangements which favour large-scale corporations and dictate a minimum volume of timber cut. While community forests do currently exist in three BC communities – Mission, Revelstoke and North Cowichan (see Duinker *et al.* 1994, Burda *et al.* 1997) – they are held as forest licenses (FLs) or tree farm licenses (TFLs). These licenses limit a community's decision-making authority and require adherence to standard legislative practices designed for industrial tree production, including the volume-based annual allowable cut (Burda 1998). Non-replaceable short-term forest licenses are not conducive to long-term ecological and economic planning. As of late 1997, 13 communities in BC were in various stages of applying for FLs in their regions, including one First Nations community.¹ While these initiatives seek greater community control of local resources and related benefits, the volume-based constraints, a limited time frame (15 years) and the lack of a defined or permanent land-base imposed under FLs means that the proposals do not meet the objectives of ecosystem-based management (Burda *et al.* 1997). Similar situations occurred in Ontario, where four community forest demonstration projects² were established without grants of special tenures. Rather, communities were required to enter into partnerships with forest companies and the Ontario Ministry of Natural Resources (OMNR). Communities have no real responsibility or opportunity to manage a forest according to their own visions, and projects generally undertake minor activities such as tree planting and pre-commercial thinning (Burda *et al.* 1997). According to Beckley (1998), while these types of initiatives are based on the objective of community stability, they focus on community persistence rather than community sustainability. Beckley defines the difference:

Persistence is about capturing government subsidies, lobbying for resource allocations that will maintain a certain level of base employment, and other strategies that allow forest-dependent communities to endure in the short-term. Sustainability is about determining the level of human activity that a given forest ecosystem can support and nourish in the long-term (Beckley 1998: 35).

To date, a lack of legislation or government policy has denied communities

¹ These include the Gwa'sala'nakwaxda'xw Band in Port Hardy, and the communities of Malcol Island, Alert Bay, Creston, Kaslo, Lake Cowichan, Port Alberni, Prince George, Merritt, Princeton, Gold River/Tahsis/Zeballos and Quesnel.

² Geraldton Community Forest Corporation, Woodlands in Keeping With Our Youth, Kapuskasing Community Forest Board, and the Elk Lake Partnership Committee.

across Canada the opportunity to implement community-based ecosystem management plans. A recent acrimonious example is the Slocan Valley in BC, where an ecosystem-based management plan initiated and undertaken by the community was proposed to create a community-based forest economy predicated on a non-industrial approach to forest use (Silva Forest Foundation cited in Burda *et al.* 1997). Despite the support of 79 per cent of local citizens for the plan, the BC Ministry of Forests deemed that corporate tenure rights in the area remain unchanged. The Slocan Valley has since become the scene for large-scale public demonstrations and civil disobedience to protest a lack of participatory democracy (Educational Bulletin 1996).

In 1997, the Forests in Trust report (Burda *et al.* 1997) proposed an alternative tenure option for BC. The report proposed a new body of legislation to devolve to the community level the powers and responsibilities to administer, manage and regulate community-based tenures based on ecosystem principles. The proposed vehicle, a Community Forest Trust Act, would move Crown forest into an ecological trust for those communities that sought it. As each community opted into it, the transition would be both radical and gradual. A community would enter into the trust only with the support of the majority of its citizens, who would be responsible for defining the interests of the community and applying them to the management of the trust area. Existing tenures rather than being repealed, would be required to update operations to comply with the objectives and criteria determined by the community. The community forest would be managed by a Community Management Authority, which would move beyond an advisory role to being responsible for all forest uses within a watershed area as well as, all planning, zoning and management, and protection of ecosystems and biodiversity. Most existing and proposed models favour a mixture of elected and appointed officials to avoid dominant representation by one interest group (Burda 1998, Burda *et al.* 1997, M'Gonigle 1997a).

While the proposed Community Forest Trust Act received broad support from communities and allied groups across the province, provincial government response was mute. Rather, the BC Minister of Forests appointed an advisory committee to design and pilot a new community forest tenure to increase the direct participation of communities and First Nations in the management of local forests. By early 1998, 80 communities had expressed interest in the pilot project. Legislation necessary to implement and pilot community forest agreements was passed in mid 1998, and 27 communities submitted formal proposals. In June 1999, four communities³ were selected to test the community forest tenure. Aimed at giving communities the flexibility to plan how to allocate and maximise a wider range of local forest resource values for local benefits, the new tenure is intended to be long-term in duration, provide the opportunity to manage for resources beyond timber, and to allow timber harvest rates to be based on the community's management objectives rather than on provincial criteria for the Allowable Annual Cut determination. A positive initiative, this project takes the first step towards a collaborative level of decision-making

³ Bamfield/Huu-ay-aht Community Forest Society, District of Fort St. James, Village of Burns Lake, and Esketemc First Nation.

that allows communities to make choices that reflect their changing values. Given the huge expression of interest from BC communities, if successful, the pilot project may prompt the BC government to address the structural reform necessary to further respond to the BC public's desire for radical changes to the province's sustained yield industry-dominated tenure system.

Summary and Conclusions

Social valuations of Canada's public forests in the 1990s demonstrate that Canadians view agencies as inappropriate sources of management goals, support locally-owned over large scale corporate access to wood supply, support a multi-value/ecosystem management over a single-value/timber management approach to forest management and believe that forest managers should be more responsive to local resident values than the values of more distant groups. As Canadian societal values have shifted toward the maintenance or restoration of ecological well being and the provision of a broad array of environmental services, unresponsive forest management agencies have increasingly found themselves in conflict with a cynical and frustrated public.

Insufficient management attention to non-commodity values has also generated alternative social means of communicating forest values by increasingly influential and aggressive elements of society. For example, the influence of national (e.g. Greenpeace Canada) and regional (e.g. the Sierra Club of BC) environmental coalitions has grown dramatically at the international level with the development of certification processes for sustainable forest management after increasing boycotts of Canadian forest products throughout the 1990s. Consider also the changing nature of education and training for resource managers at Canadian institutions – such as the University of Northern BC where an interdisciplinary resource management program integrates forestry, fisheries, recreation/tourism and wildlife – and the creation of an Eco-Research Chair in Environmental Law and Policy, at the University of Victoria, which seeks among its objectives to identify alternative forest policy options for BC. The past decade has also witnessed significant attempts to increase public participation in forest policy processes across Canada (see Duinker 1998) – although most have been directive or consultative processes dominated by industry and political elites. Signs of an emerging democratisation of forest management and planning also begin to appear in the form of experiments in negotiation-based participatory processes, a shift in emphasis from 'resistance to' towards 'how to implement' ecosystem-based management regimes reflective of Canadian forest values, and recent initiatives in BC to identify and publicise policy alternatives. In sum, these radical changes suggest that Canada is moving away from the post-Second World War model of exploitation, where the state provides the infrastructure for resource extraction and shares the proceeds with forest companies, towards a new model of exploitation dominated by concern over the impact of the resource economy on the environment and communities (Wilson 1998).

Within this new politic, the most radical challenge facing provincial forest management agencies is structural reform required to permit the broad based implementation of community-based ecosystem management regimes. At

their highest level, these collaborative processes require a move from a centralised (corporate and bureaucratic), hierarchical and rule-based framework of existing management structures to a decentralised and community-based adaptive management structure (M'Gonigle 1997b). To implement major structural and legislative change of this type, provincial governments require broad public support garnered by opening up the issues to broad public discourse. Evidence of this dynamic is lacking. While environmentalists and allied critics provide enclaves of lively discourse, forest policy debate in Canada's major logging provinces (BC, Alberta, Ontario and Quebec), is generally barren. In terms of public scrutiny, critical assumptions go unexamined, significant policy alternatives remain unexposed, and crucial 'who wins – who loses' questions remain undebated (Wilson 1998). Rather, the issues and extent of forest policy debate across Canada continue to be controlled by political and forest industry elites with little interest in raising or responding to questions about the consequences of continuing along the status quo path of sustained yield-liquidation policies and corporate tenure systems. Provincial governments, which serve as the public owner's agent, continue to be pressured by corporate industry who most directly benefit from exploitation of the forest resource, and participatory democracy falls short of its potential (Wilson 1998).

According to Wilson (1998: 348), "While democratic well-being is a multidimensional concept, a central component does hinge on the notion that in vibrant political societies, important policy decisions and nondecisions are preceded by lively debate about the costs, risks, and benefits of a full range of options." This is the challenge currently facing provincial governments and forest management agencies across Canada. Given current Canadian forest values, it is surely time to advance and broaden public debate on the direction of forest policy across the provinces. The democratisation of forest management in Canada requires the political power brokers to organise broad public discourse on key forest policy issues that inform and engage the current generation and seek to protect the interests and options of future generations. Wilson (1998) identifies key policy questions, such as: How and how much do the public owners of the forest resource subsidise the forest industry? How is the wealth generated from our forests distributed? What is the economic viability of a forest industry that is required to observe high environmental standards? Would alternative policies – such as those advanced in devolution and tenure reform proposals – provide a more optimal package of environmental and economic benefits? If the final stages of the liquidation-conversion policy are completed, will a viable second growth forest industry be tenable in the twenty-first century? Answers to these questions will portray this generation's commitment to future generations. Without rigorous public scrutiny of the assumptions that have directed post-Second World War forest policies across Canada:

people of the twenty-first century are likely to deliver a negative verdict when they discover that one of the wealthiest societies of the late twentieth century aggressively pushed policies threatening forest ecosystems, all in the face of compelling doubts about long-term consequences. They are likely to be particularly scathing in their judge-

ment of the fact that this society refused to stop long enough to debate its obligations to future generations (Wilson 1998: 348).

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