

OXFORD

Second Edition

Environmental Impact Assessment

Practice and Participation



Edited by **Kevin S. Hanna**



OXFORD
UNIVERSITY PRESS

70 Wynford Drive, Don Mills, Ontario M3C 1J9

www.oupcanada.com

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide in

Oxford New York

Auckland Cape Town Dar es Salaam Hong Kong Karachi
Kuala Lumpur Madrid Melbourne Mexico City Nairobi
New Delhi Shanghai Taipei Toronto

With offices in

Argentina Austria Brazil Chile Czech Republic France Greece
Guatemala Hungary Italy Japan Poland Portugal Singapore
South Korea Switzerland Thailand Turkey Ukraine Vietnam

Oxford is a trade mark of Oxford University Press
in the UK and in certain other countries

Published in Canada by Oxford University Press

Copyright © Oxford University Press Canada 2009

The moral rights of the author have been asserted

Database right Oxford University Press (maker)

First Published 2009

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, or under terms agreed with the appropriate reprographics rights organization. Enquires concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above.

You must not circulate this book in any other binding or cover and you must impose this same condition on any acquirer.

Library and Archives Canada Cataloguing in Publication

Environmental impact assessment : practice and participation / edited by
Kevin S. Hanna. — 2nd ed.

Includes bibliographical references and index.
ISBN 978-0-19-543022-6

1. Environmental impact analysis—Canada—Textbooks.
I. Hanna, Kevin S. (Kevin Stuart), 1961—

TD194.68.C3 E55 2009 333.71'40971 C2009-900878-5

Cover images: iStockphoto

The pages of this book have been printed on paper which has been certified
by the Forest Stewardship Council (©1996 FSC, Cert. no. SW-COC-002358),
and which contains 100% post-consumer waste.

Printed and bound in Canada.

1 2 3 4 — 12 11 10 09

Public Participation in Canadian Environmental Assessment: Enduring Challenges and Future Directions

A. John Sinclair and Alan Diduck

Introduction

As observed by Devlin et al. (2005), Petts (1999, 2003), Wood (2003), and others, public participation has long been recognized as a cornerstone of environmental assessment (EA). In fact, for some, the basic legitimacy of an EA process is questionable if the process does not provide for meaningful participation (Gibson 1993; Roberts 1998). Consistent with this, most Canadian EA legislation establishes participation as an essential element of the process. For example, the preamble of the Canadian Environmental Assessment Act 1995 (CEAA) states: 'The Government of Canada is committed to facilitating public participation in the environmental assessment of projects . . . and providing access to the information on which those environmental assessments are based.'

In addition, all EA legislation, whether at the provincial or federal level, includes at least some practical measures for participation. For these reasons, it is essential to have an understanding of key theoretical and practical aspects of participation. This chapter provides an introduction to these subjects. The first section summarizes the benefits of participation, the second provides an overview of basic Canadian legislative provisions, and the third reviews enduring concerns. The fourth part examines promising future directions, with the final section discussing the implications for sustainability objectives. Throughout the chapter, we refer to illustrative Canadian EA cases.

We use the word *participation* to mean the active involvement of the public in the EA process through various means, ranging from open houses to panel reviews, as outlined later in the chapter. Reference is also made to *meaningful public participation*. This term is used in referring to participatory processes that incorporate all of

the essential components of participation, from information sharing to education, including the active and critical exchange of ideas among proponents, regulators, and participants. Some authors, such as Roberts (1998), refer to this as public consultation. We prefer to use 'meaningful public participation' because consultation is often used to describe a single event, such as an open house, that is the sum total of the participatory efforts in a particular situation. In our view, an open house alone would not constitute meaningful public participation.

The Benefits of Participation

The benefits of public participation in EA have been described in both theoretical and practical terms. A key theoretical argument is that participation actualizes fundamental principles of democracy and strengthens the democratic fabric of society (Parenteau 1988; Sinclair and Diduck 1995; Shepard and Bowler 1997; Forrester 2006). This argument situates EA as a key channel through which the public can choose to participate directly in the decisions that affect them, thereby contributing to a more participatory democracy. A related point is that EA provides a vehicle for individual and community empowerment (Fitzpatrick and Sinclair 2003). This recognizes that meaningful participation in decision making enables individuals and organizations to adapt to environmental change and also to generate change through the expression of human agency. It has also been suggested that participation is conducive to broad-based individual and social learning that could enable the transition to sustainability (Webler et al. 1995; Palerm 2000; Sinclair and Diduck 2001; Diduck and Mitchell 2003; Fitzpatrick and Sinclair 2003; Sinclair et al. 2008; Sims and Sinclair 2008). Such a view clarifies the link between learning at multiple levels of social organization and the achievement of sustainability goals.

In practical terms, the benefits of public participation are numerous and touch on ecology, law, politics, conflict resolution, planning, and decision making (e.g., Susskind and Cruikshank 1987; McMullin and Nielson 1991; Smith 1993; Meredith 1995; Webler et al. 1995; Shepard and Bowler 1997; Petts 1999; Usher 2000). Reflecting this interdisciplinarity, the literature suggests that public participation in EA

- provides access to local and traditional knowledge from diverse sources;
- enhances the legitimacy of proposed projects;
- helps define problems and identify solutions;
- permits a comprehensive consideration of factors upon which decisions can be based;
- ensures that projects meet the needs of the public in terms of both purpose and design;
- brings alternative ethical perspectives into the decision-making process;
- broadens the range of potential solutions considered;
- furnishes access to new financial, human, and in-kind resources;
- prevents 'regulatory capture' of EA agencies by project proponents;

- encourages more balanced decision making;
- increases accountability for decisions made;
- facilitates challenges to illegal or invalid decisions before they are implemented;
- illuminates goals and objectives, which is necessary for working through value or normative conflict;
- furnishes venues for clarifying different understandings of a resource problem or situation, which is key to resolving cognitive conflict;
- helps avoid costly and time-consuming litigation; and
- reduces the level of controversy associated with a problem or issue.

It is obvious, even from the foregoing brief summary, that public participation in EA can provide diverse and important benefits for planning and decision making. However, whether such benefits are realized in any particular case depends, to a large extent, on the legislation and policy applicable in the case. Therefore, it is important to have a basic understanding of Canadian EA legislation (Table 4.1) pertaining to public participation. The ensuing section provides an overview, focusing on the core provisions of current EA public participation regimes, namely provisions dealing with adequate notice, access to information, participant assistance, public comment, and public hearings. The discussion centres on federal legislation (the CEEA), but it includes references to various provincial and territorial processes.

Key Public Participation Provisions in Canadian Environmental Assessment

Adequate Notice

Once a development proposal is submitted to government authorities and the EA process is triggered, adequate notice is fundamental to fair and meaningful public participation. Notice should be provided in such a way that it comes to the attention of interested persons well before decisions are made. Notice normally involves some form of advertisement through local print and, in some cases, broadcast media. It provides the public with notification of the proposal and informs them where they can get further information and to whom they can submit their comments.

All Canadian jurisdictions have notice provisions in their EA statutes, regulations, or supporting policies. However, there is little consistency in how notice is provided for important milestones in the EA process, such as the filing of the proposal and the completion of the environmental impact statement (EIS) (see chapter 1 for a summary of other key steps in the EA process).

Under the CEEA, notice is mandatory for all types of assessment: screenings, comprehensive studies, mediations, and hearings. Notice of an assessment must be presented on the Canadian Environmental Assessment Agency (CEA Agency) website within 14 days of the start of the assessment. The CEA Agency is responsible for

Table 4.1 A list of primary Canadian EA legislation, plus government websites providing access to the legislation

Jurisdiction	Primary Legislation and Internet Web Address (accessed March 2009)
Alberta	<i>Environmental Protection and Enhancement Act</i> , R.S.A. 2000, c. E-12 http://www.qp.gov.ab.ca/documents/Acts/E12.cfm?frm_isbn=9780779729241
British Columbia	<i>Environmental Assessment Act</i> , S.B.C. 2002, c. 43 http://www.bclaws.ca/Recon/document/freeside/--%20E%20--/Environmental%20Assessment%20Act%20%20SBC%202002%20%20c.%2043/00_02043_01.xml
Canada	<i>Canadian Environmental Assessment Act</i> , S.C. 1992, c. 37, C-15.2 http://www.canlii.org/en/ca/laws/stat/sc-1992-c-37/latest/sc-1992-c-37.html
Inuvialuit Settlement Region	Inuvialuit Final Agreement, as implemented by the <i>Western Arctic (Inuvialuit) Claims Settlement Act</i> , S.C. 1984, c. 24, W-6.7 http://www.canlii.org/en/ca/laws/stat/sc-1984-c-24/latest
Manitoba	<i>The Environment Act</i> , C.C.S.M. c. E-125 http://web2.gov.mb.ca/laws/statutes/ccsm/e125e.php
New Brunswick	<i>Clean Environment Act</i> , R.S.N.B. 1973, c. C-6 http://www.gnb.ca/0062/PDF-acts/c-06.pdf
Newfoundland and Labrador	<i>Environmental Protection Act</i> , S.N.L. 2002, c. E-14.2 http://assembly.nl.ca/Legislation/sr/statutes/e14-2.htm
Northwest Territories	<i>Mackenzie Valley Resource Management Act</i> , S.C. 1998, c. 25, M-0.2 http://www.canlii.org/en/ca/laws/stat/sc-1998-c-25/latest/
Nova Scotia	<i>Environment Act</i> , S.N.S. 1994-95, c. 1 http://www.gov.ns.ca/legislature/legc/statutes/envromnt.htm
Nunavut	<i>Nunavut Land Claims Agreement</i> , Article 12, Part 5 http://www.canlii.org/en/ca/laws/stat/sc-1993-c-29/latest/
Ontario	<i>Environmental Assessment Act</i> , R.S.O. 1990, c. E-18 http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e18_e.htm
Prince Edward Island	<i>Environmental Protection Act</i> , R.S.P.E.I. 1988, c. E-9 http://www.gov.pe.ca/law/statutes/pdf/e-09.pdf
Quebec	<i>Environment Quality Act</i> , R.S.Q. c. Q-2 http://www.canlii.org/qc/laws/sta/q-2/20080515/whole.html
Saskatchewan	<i>Environmental Assessment Act</i> , S.S. 1979-80, c. E-10.1 http://www.qp.gov.sk.ca/documents/English/Statutes/Statutes/E10-1.pdf
Yukon	<i>Yukon Environmental and Socio-economic Assessment Act</i> , S.C. 2003, c. 7, Y-2.2 http://www.canlii.org/en/ca/laws/stat/sc-2003-c-7/latest/

ensuring proper notice is provided (CEAA, section 55.1). In Alberta, the proponent is required to publish notice of an application in at least one paper with daily or weekly circulation in the locality of the proposed undertaking, and to announce that people who are directly affected can submit their concerns (Alberta Environment 2004). The provincial EA director can waive this requirement when the activity proposed is considered routine, when notice has already been given, or when there is an emergency. The notice provisions in Ontario's EA Act are strong; they include, for example, requirements on the content of the notice and the provision for notice to be given in the first stage of the process, that is, during development of the terms of reference for the project (Environmental Assessment Act, R.S.O. 1990, c. E-18, section 6). Given the lack of a consistent approach to requirements for notice, participants and proponents must give careful consideration to the formal notice requirements in each jurisdiction.

Access to Information

Ready access to information provided by proponents and to any comments offered by participants and regulators is essential to meaningful participation. There must be opportunities for the timely exchange of information among all parties. A registry or repository system is the basic means of public access to information used in most Canadian jurisdictions. Such registries are usually held in libraries and other public buildings to facilitate orderly access to the information available. Most jurisdictions provide Internet access (or partial access) to their public registries (Table 4.2).

Provisions for access to information in the CEAA are generally quite strong. Specifically, sections 55–55.6 of the Act set out in detail what documents must be made available and establish the Canadian Environmental Assessment Registry and CEA Agency website. As a starting point, any document that would be available through access to information legislation has to be made available proactively. Furthermore, all relevant information must be made available in a manner that ensures convenient public access. Provincially, there are diverse approaches to access to information. The Alberta legislation (section 56) has a general requirement for a document registry, but provides little guidance on what needs to be included or how it is to be made accessible (see also the Manitoba Act, section 17). Generally, provinces either leave these issues to regulation (through specific 'rules' promulgated under the authority of legislation) or have broad statutory provisions respecting access to information.

Participant Assistance

Numerous authors have established the importance of participant (or intervenor) funding (e.g., Gibson 1993; Wood 2003), and this view has long been echoed by Canadian environmental non-governmental organizations (ENGOS). For instance, the Canadian Environmental Network (1988) argued that '[e]ffective participation by the public requires funding. The disproportion of resources between pro-

Table 4.2 Public registry websites for those jurisdictions providing full or partial Internet access

Jurisdiction	Internet Web Address (accessed March 2009)
Alberta	http://environment.alberta.ca/1283.html
British Columbia	http://a100.gov.bc.ca/appsdata/epic/html/deploy/epic_home.html
Canada	http://www.acee-ceaa.gc.ca/050/index_e.cfm
Manitoba	http://www.gov.mb.ca/conservation/eal/registries/index.html
New Brunswick	http://www.gnb.ca/0009/0377/0002/index-e.asp
Newfoundland and Labrador	http://www.env.gov.nl.ca/env/Env/EA%202001/pages/index.htm#Projects
Northwest Territories	http://www.mveirb.nt.ca/registry/index.php
Nova Scotia	http://www.gov.ns.ca/nse/ea/projects.asp
Ontario	http://www.ebr.gov.on.ca/ERS-WEB-External/
Prince Edward Island	No on-line public registry but EA info is available at http://www.gov.pe.ca/infopei/index.php3?number=40190&lang=E
Quebec	http://www.bape.gouv.qc.ca/sections/mandats/
Saskatchewan	http://www.environment.gov.sk.ca/Default.aspx?DN=dd506e76-4819-4493-a22b-6411133ca469
Yukon	http://www.yesab.ca/assessments/public_registry.html

ponents and the public necessitates the establishment of an independent funding body to provide adequate amounts of funding to allow full and meaningful participation, at all steps, to committed members of the public.'

Participant assistance, when it is provided, is usually reserved for large-scale EAs. In such cases, funding can create a more substantive dialogue by allowing participants to gather independent technical expertise related to specific issues in the assessment (see, for example, Lynn and Wathern 1991; Lynn 2000; Hayward et al. 2007). Public participants can use financial resources to prepare and participate in scoping meetings, review draft assessment guidelines, review the proponent's EIS, and prepare and participate in public hearings.

Few Canadian EA processes provide mechanisms for participant assistance. At one time, the province of Ontario was a leader in this field and enacted a participant assistance statute (the Intervenor Funding Project Act). However, the legislation had a time limit and lapsed in 1996. In practice, only the governments of Canada and Manitoba provide assistance at present.

Under the CEAA, assistance is available for both public hearings (discussed further below) and comprehensive studies. See the CEA Agency website (<http://www>.

acee-ceaa.gc.ca/010/0001/0002/index_e.htm (accessed 23 March 2009) for a good overview of the federal Participant Funding Program. In Manitoba, the participant funding regulation (Participant Assistance Regulation, Manitoba Regulation 125/91) was used only once from 1990 to 2001 (in the case of the proposed Conawapa hydroelectric generating station), but in recent years the government has been far more willing to support public interest intervenors. A guide to the province's Participant Assistance Program can be downloaded at <http://www.cecmanitoba.ca/File/CEC%20Admin/assistance-guide%20Feb.%202008.pdf> (accessed March 2009). In July 2003, \$870,000 (Cdn) was announced for the Wuskwatim EA, which dealt with a proposed 200 MW generating station on the Burntwood River in northern Manitoba. The funding award, one of the largest in Canadian EA history, was allocated in the following manner:

- \$190,000 for the Consumers Association of Canada/Manitoba Society of Seniors
- \$160,000 for Pimicikamak Cree Nation
- \$145,000 for Time to Respect Earth's Ecosystems/Resource Conservation Manitoba
- \$115,000 for the Canadian Nature Federation
- \$80,000 for the Manitoba Metis Federation
- \$60,000 for Opaskawayak Cree Nation
- \$60,000 for the Community Association of South Indian Lake
- \$20,450 for Mosakahiken Cree Nation
- \$20,450 for Puckatawagan Fisherman's Association
- \$20,000 for Trapline #18
- \$5,488 for York Factory First Nation

Public Comment

Meaningful participation processes include reasonable opportunities for the public to comment on the project proposal, respond to the government's position on the proposal, and react to input from other participants. Most often, proponents provide opportunities for public comment during open houses at which the proponents typically supply information on their proposals and invite input. Government regulators normally allow for public comment on EA documents by inviting people to provide written comments. These and other opportunities for public comment typically occur irrespective of whether there is a public hearing (see below) for the proposal under consideration.

Provisions in the CEAA for public comment on screenings are weak, generally speaking. The decision on whether (and if so how) to permit comment is at the discretion of the responsible authority (RA), which may be the proponent, the regulator, or both (for a discussion of responsible authorities, see chapter 14). For comprehensive studies (defined in chapter 14), public comment is mandatory, but only regarding project scope and on the final comprehensive study report—not on the ongoing assessment or development of the report. It is important to note that

only a handful of assessments out of thousands conducted under the CEAA have gone through a panel review, and less than 50 have undergone a comprehensive study. For more than 99 per cent of the assessments, therefore, the CEAA includes no legislative requirement for public comment.

Some provinces, such as Ontario (e.g., sections 6(3.6), 6.4, and 7.2 of the Act), Newfoundland (e.g., sections 3(3), 6(1), and 7(3) of the Environmental Assessment Regulations, 2003, O.C. 2003-220), and Manitoba (e.g., sections 7(2) and 10(4) of the Act), make general provision for public comment without providing details on the timing or quality of the opportunities. Consequently, although notice must be given, there is no assurance of the types of opportunities that will be available for members of the public to act on the notice. Most provinces have little in the way of specific requirements for when and how public comments are to be sought and considered, outside the public hearing process.

Public Hearings

To support decision making and add transparency to the EA process, environment ministers in all Canadian jurisdictions have the authority to call public hearings (or, in some cases, public meetings). Hearings are sometimes equated with impartial decision making because hearing panels typically operate at arm's length from governments and proponents. However, in no Canadian jurisdictions do hearing panels have ultimate decision-making authority. The role of panels is restricted largely to providing advice to government decision makers. In spite of this, interest groups and other members of the public often favour hearings for their procedural certainty and transparency. In addition, public participants who take part formally in a hearing (often referred to as intervenors) receive access to key documents of the other parties to the hearing. They also receive, in a timely fashion, the formal written reasons for the ultimate decision in the case. With all that said, it is noteworthy that, contrary to popular opinion, very few assessments go to public hearings—less than 2 per cent of all EAs nationally. Further, Hazell (1999) noted that 'there is much cynicism about CEAA public review panels such as the BHP diamond mine [in the Northwest Territories] review among others.' In the overall EA context, therefore, panel reviews are probably less important than is suggested by the media attention they typically attract.

The CEAA does include provisions for the conduct of public hearings. Section 34 requires review panels to make information available and hold hearings in a manner that offers the public an opportunity to participate. Under section 35(3), hearings are generally open to the public, although the Act does provide for exceptions. Otherwise, the CEAA leaves the conduct of public hearings to the panel.

Among the provinces, the Ontario (Part III), Quebec (Division II.1), and Newfoundland and Labrador (sections 62–66) Acts provide considerable detail regarding public hearings. In other jurisdictions, hearing protocols are adopted from general public inquiry legislation (e.g., Saskatchewan—section 14), established in detail in regulations (e.g., Nova Scotia Environmental Assessment Board Regulations, O.I.C. 95-221, N.S. Reg. 27/95) or developed by hearing panels or govern-

ment EA officials (e.g., the Manitoba Clean Environment Commission's hearing guidelines, <http://www.cecmanitoba.ca/index.cfm?pageID=54> [accessed March 2009]). It should also be noted that other provincial decision-making processes, which often occur before, or concurrently with, a project EA, can include hearings as well. Energy utility regulators, such as the Alberta Utilities Commission and the Manitoba Public Utilities Board, are good examples of this.

The CEAA and several provincial acts also provide for various forms of alternate dispute resolution, such as mediation and arbitration. The CEAA permits the use of mediation as a partial or complete alternative to a panel review. Nova Scotia also provides, under section 14 of its Act, for the use of alternate dispute resolution in place of more conventional EA decision making. In both jurisdictions, however, uncertainty over the proper application of the legislation, especially with respect to the identification of interested parties and what happens when the alternate dispute resolution fails, has discouraged the use of these mechanisms. In the case of the federal act, these provisions have not been used even once since the Act came into force. Ontario (section 8), Manitoba (section 3), and other provinces also have general references to mediation in their legislation.

Enduring Concerns Regarding Public Participation in Environmental Assessment

Despite the potential benefits of public participation in EA and the diversity of legislative approaches to implementation, meaningful participation has proven elusive (Blaug 1993; Meredith 1997; Prystupa et al. 1997; Petts 1999; Diduck and Sinclair 2002; Sinclair and Fitzpatrick 2003). Long-standing concerns range from substantive matters, such as lack of shared decision making, to procedural issues, such as inadequate notice (Sinclair and Doelle 2003).

Lack of Shared Decision Making

For citizen activists and some ENGOS, lack of public participation in decision making is a serious shortcoming of Canadian EA processes. A helpful tool for understanding this problem is Arnstein's (1969) classic ladder of citizen participation (also see Dorcey et al. 1994; Connor 2001). Arnstein identified eight levels of public participation and associated degrees of power sharing. The bottom rungs of the ladder, manipulation and therapy (characterized as non-participation), describe participation that amounts to no more than a public relations exercise designed to gain support for a predetermined decision. The middle rungs (forms of tokenism) include informing, which involves flows of information from managers to citizens but does not include dialogue; consultation, in which citizens are given a voice but are not necessarily heard; and placation, in which managers seek citizen advice but retain decision-making authority. The top rungs describe situations where forms of citizen power occur, such as partnerships (where trade-offs are negotiated), delegated power, and citizen control, the last of which involves the highest degree of 'decision-making clout' (Arnstein 1969, 217). Activists and ENGOS are often highly

critical of processes that only consist of lower levels of involvement, and argue that public participation should entail redistribution of power over decision making. In other words, for them, public participation should involve shared decision making.

A related concern is lack of clarity over the purposes of any given public participation exercise. As suggested above, the purposes of participation can range from relatively modest goals, such as information sharing, to more ambitious objectives, such as partnerships and power sharing. If purposes are unclear, members of the public could easily expect to participate in decision making when the very purpose of the process in which they are involved is considerably less ambitious. In the end, lack of clarity and concomitant unfulfilled expectations frequently leave participants cynical and dissatisfied with their participation experiences (Shepard and Bowler 1997; Hazell 1999; Petts 1999; Stewart and Sinclair 2007). This occurred in the Halifax Harbour clean-up EA where key choices concerning siting and technology were made in a less than transparent way, leaving participants with little role in the decision making (Doelle and Sinclair 2006). Lack of clarity can sometimes be traced to muddled public participation jargon. Diverse terms are used, often interchangeably, to describe both the ends (i.e., the goals) and the means (i.e., the strategies and specific techniques) of participation programs. Such terms include involvement, consultation, engagement, information sharing, education, communication, and collaboration. Given this problem, regardless of the terms used, EA practitioners need to be clear about whether the purpose of participation is information exchange, shared decision making, or some other goal.

Lack of Participation at Normative and Strategic Levels of Planning

Another concern for activists, NGOs, and academics is lack of public participation at early stages of project planning (Diduck and Sinclair 2002; Diduck and Mitchell 2003). Participation can occur at the normative level of planning (in which decisions are made about what *should* be done), the strategic level (in which decisions are made to determine what *can* be done), or the operational level (in which decisions are made to determine what *will* be done) (Smith 1982). The earlier that participation occurs in the EA process, the more influence the public is likely to have on important issues such as project need, purposes, and alternatives. A good early example of normative involvement is the Mackenzie Valley Pipeline Inquiry of the 1970s; it was groundbreaking in the extent to which it engaged potentially affected communities early in the planning process (Berger 1977). As that case showed, through early participation, basic choices can be considered (including whether the project should proceed at all) before political momentum builds for a project and substantial amounts of time and money are invested.

In Canada, participation is not required legally until well into the planning process and sometimes just at the operational stages of planning. Participation at earlier junctures is left to the discretion of the proponent, and early involvement is sporadic at best. This has proven to be a barrier to widespread participation,

as exemplified by the Maple Leaf hog-processing EA in Manitoba (in which the proponent was ultimately licensed to slaughter up to 54,000 hogs per week under a single daily work-shift scenario). In that case, many members of the public as well as ENGO activists wanted to discuss large normative questions (e.g., Should we have an industrial hog-processing plant in our community?) rather than detailed operational issues (e.g., How thick should the liner be for the anaerobic lagoon in the waste treatment facility?) (Diduck and Sinclair 2002). For these people, the fact that they could not discuss the normative questions was an indication that the ultimate decision in the case was a foregone conclusion and that there was therefore little point in participating actively in the EA.

The recent Red Chris case—*MiningWatch Canada v. Minister of Fisheries and Oceans et al.* (F.C.: T-954-06); (F.C.A.: A-478-07, A-479-07)—underscores the importance of decisions made by RAS about how to engage the public in early scoping decisions. In this case the proponent needed approvals from Fisheries and Oceans and Natural Resources Canada for a proposed copper and gold mining operation in British Columbia. Since metal mines processing more than 3,000 tonnes of ore per day are on the federal comprehensive study list, the project was destined for this type of assessment until the RAS scoped the project very narrowly and changed it from being a comprehensive study to a screening. Section 21 of the CEAA indicates that

[w]here a project is described in the comprehensive study list, the responsible authority shall ensure public consultation with respect to the proposed scope of the project for the purposes of the environmental assessment, the factors proposed to be considered in its assessment, the proposed scope of those factors and the ability of the comprehensive study to address issues relating to the project.

In contrast to a screening, comprehensive studies require that the public be consulted on the scope of the project, have the opportunity to comment on the comprehensive study report, and be given access to a funding program to help facilitate their participation. MiningWatch argued that the public had not been actively engaged in the process that led to the decision to narrow the scope of the project, and had been excluded from the actual screening assessment undertaken. Justice Luc Martineau agreed. This decision was 'considered a major victory as it upheld a law passed by Parliament which required a greater role for public consultation in environmental assessment' (MiningWatch 2008). The Crown appealed the Federal Court's decision, and on 13 June 2008 the Federal Court of Appeal ruled in favour of the Crown, citing the Crown's discretion regarding decisions related to whether an assessment is to be a comprehensive study or a screening. In early 2009, the Supreme Court of Canada agreed to hear MiningWatch's appeal of the Federal Court of Appeal's decision.

In other cases, facilitating public participation early in the planning process has been a challenge, and asking normative questions before specific projects and sites have been identified has created a barrier to broad participation. When the Regional Municipality of Ottawa-Carleton started planning a waste management system, it organized public workshops to help design the project. Despite adequate pro-

motion and apparent widespread public interest, only a handful of people participated. However, once the municipality identified the preferred components of the system (e.g., a landfill and specific potential sites), the rooms that had been booked for public meetings were not big enough to hold the participants who wanted to hear what was planned and have their voices heard. A number of these participants also indicated that there should have been opportunities for them to be involved earlier in the process. Herein lies an important lesson for public participation practitioners: reasonable provision must be made to allow those who join the process late to be brought up to speed and have their concerns heard.

To complicate matters further, even if early participation is permitted, restrictive policies and practices can sometimes undermine the very purposes of such involvement. For example, restrictions that limit the number and type of alternatives that can be considered for any given project (an important strategic phase of project planning) scuttle an important benefit of participation, namely bringing in diverse and innovative ideas. Further, such restrictions confound the ability of participants to influence the selection of alternatives. Some of these elements can be seen in the Cheviot coal mine EA from Alberta (which involved a proposed open-pit mine less than 2 km from Jasper National Park, a UNESCO World Heritage Site). In that case, there was limited public participation in the consideration of alternatives for the project, as well as a general lack of attention to important reasonable alternatives. Members of the public and ENGOS argued that the underground mining alternative, as opposed to open-pit mining, had not been considered fully by the proponent and regulators. They challenged the validity of the assessment on this and other grounds in court and won, with the judge requiring the proponent and regulator to do the assessment again but this time with all reasonable alternatives included (see *Alberta Wilderness Association v. Cardinal River Coals Ltd.*, [1999] 3 F.C. 425). (Recent decisions of the Federal Court of Canada can be found on the Internet at <http://decisions.fct-cf.gc.ca/fct/index.html> [accessed March 2009].) In most EAs involving projects of large magnitude, important issues to consider are the range of alternatives considered by proponents to meet the need or problem being addressed by a project and the public's participation in the choice of an alternative.

The questions surrounding why normative and strategic planning sometimes engenders and sometimes inhibits broad public participation—and why there are so often difficulties associated with implementing early participation—are challenging and require additional research. Further, to some degree, these questions are related to ongoing policy initiatives that seek to involve the public in wide-area planning, which is typically broader, more abstract, and more overtly value laden than most EAs. Two examples of such initiatives are discussed later in the chapter, in the section on future directions.

Information and Communication Deficiencies

Yet another enduring concern pertaining to public participation in EA is information and communication deficiencies, including inadequate notice, inaccessi-

bility of project documents, and lack of dialogical (or interactive) participation opportunities.

With respect to notice, as discussed earlier, there is little consistency in legal provisions in Canadian EA processes. Further, some processes, such as CEAA screenings, have traditionally had discretionary notice provisions. With respect to screenings, which are about 99 per cent of all federal assessments, this has meant that assessments are often concluded before the public is given an opportunity to review and comment on the information available. In the case of Bounty Bay Seafoods, which dealt with the development of a major aquaculture project in St Ann's Harbour, Nova Scotia, the Sierra Club of Canada challenged the approvals that were granted by the federal Department of Fisheries and Oceans (*Sierra Club of Canada v. Canada [Attorney General]* [2003], Federal Court of Canada, Trial Division, T-765-02). The Sierra Club argued that its right to participate fully in the EA (a screening done under the CEAA) was denied because access to key EA documents was overly restrictive. The environmental impact statement, for example, was available only for viewing but not for copying (to protect proprietary commercial information, according to the proponent), and it was only available publicly in five locations, all of which were in or near Baddeck, Nova Scotia (May 2003). In addition, the final screening report was not placed in the public domain until four days before the project approval was granted. In the end, the court quashed the approval permit and ordered a new EA to be done.

Inadequate notice has also been a legal issue at the provincial level. In *Caddy Lake Cottagers Association v. Florence-Nora Access Road Inc.* (1998), 129 Man. R. (2d) 71 (Man. C.A.), for example, the court considered whether the provincial EA office was required to publish project notices in newspapers with circulation outside the directly affected local area. While the applicants, who argued for wider public notice, lost the case and the judge agreed with a narrow definition of *public*, the case brought into focus the issue of notice provincially and has since precipitated a policy change on the part of the provincial government (Sinclair 2002).

Despite recent improvements in public registry systems and the growing influence of access to information legislation, problems still exist with the inaccessibility (both physical and cognitive) of project documents. With respect to physical inaccessibility, some public registries in Canada present ongoing problems, including limited hours of operation, lack of harmonization among registry locations, poor condition of documents, incomplete indices, and expensive copying charges (Burcombe 1998; Kidd 1998; Sinclair and Diduck 2001). The Sunpine EA, which involved a logging road and two bridges designed to provide access to forest on the eastern slope of the Rocky Mountains in Alberta, shows the controversy that can arise because of physical inaccessibility (also see the *Bounty Bay Seafoods* case discussed earlier). In this case, the public registry was in Sarnia, Ontario, while the affected publics were over 2,000 km away in southwestern Alberta. This was challenged in court, and the judge ruled that the registry must be made more accessible (*Friends of West Country Association v. Ministry of Fisheries and Oceans et al.*, [1998] Federal Court of Canada, Trial Division, T-1893-96).

With respect to cognitive inaccessibility, the overly technical language and general lack of readability of EISs and other EA documents remain a concern for public participation practitioners because these problems tend to impede broad and active participation (Gallagher and Jacobson 1993; Sullivan et al. 1996; Petts 2003; Diduck and Sinclair 2002). Related to the cognitive inaccessibility of EA documents are the complexity and difficulty of EA legislation itself. In most Canadian jurisdictions, EA legislation is highly technical and jargon filled, which has led to the creation of guidance (or public information) documents. Both the public and proponents rely on guidance material to aid in their understanding of the EA process and ensure their effective participation. However, guidance material is often lacking, as is education about the EA process, including case-specific training opportunities (Sinclair and Diduck 1995; Croal and Grady 1998; Clark 1999; Petts 1999). Recognizing the need for improved guidance, the CEA Agency released new guidance, including the publications 'Public Participation Guide' and 'How to Determine If the Act Applies'. All of the agency's guidance material is available at http://www.acee-ceaa.gc.ca/012/newguidance_e.htm (accessed March 2009).

Although proponents frequently use open houses (and similar consultation methods) and government officials occasionally convene hearings, dialogic participation techniques are rarely used in Canadian EA. These types of methods (e.g., advisory committees, task forces, community boards, mediation, and non-adversarial negotiation) emphasize ongoing dialogue and communication among project proponents, EA officials, and civic organizations, and serve important mutual learning, relationship building, and conflict resolution functions. Table 4.3 summarizes the full range of public participation techniques available for use in EA, including various dialogic practices. Canadian EA has tended to rely on the public information and public input methods, while making little use of the more dialogic (i.e., group problem solving) techniques.

Insufficient Resources for Participants

As noted earlier, participant funding mechanisms in Canadian EA legislation are varied in their clarity and design, and sporadic in their application. Consequently, NGOs and other civic organizations frequently lack sufficient resources to make effective interventions. Important voices and issues, reflecting critical yet valid points of view, are therefore often silenced in formal EA processes. This is an enduring concern for EA practitioners and policy makers. The problem is compounded when proponents have a high degree of control over public participation programs, which has been the case in many Canadian jurisdictions (outside of hearing situations) (Sinclair and Diduck 2001); that is, in many EA processes, the proponent has often had considerable control over how the public is consulted and how the information obtained is assessed and utilized. Those promoting the project are thus left to collect, implement, and report to EA decision makers the issues and concerns raised by the public. This can result in an unbalanced representation of the results of the public consultations (in favour of the proposed project) and contributes to negative perceptions of public participation processes.

Table 4.3 Public participation techniques available for use in EA

Passive public information techniques		
Advertisements	Feature stories	Information repositories
News conferences	Newspaper inserts	Press releases
Print materials	Technical reports	Television
Websites		
Active public information techniques		
Briefings	Central contact person	Community fairs
Expert panels	Field offices	Field trips
Information hotline	Open houses	Technical assistance
Simulation games		
Small-group public input techniques		
Informal meetings	In-person surveys	Interviews
Small-format meetings		
Large-group public input techniques		
Public hearings	Response sheets	
Mail, telephone, and Internet surveys		
Small-group problem-solving techniques		
Advisory committees	Citizen juries	Community facilitation
Consensus building	Mediation and negotiation	Panels
Role playing	Task forces	
Large-group problem-solving techniques		
Workshops	Interactive polling	Sharing circles
Websites and chat rooms		
Future search conference		

Sources: International Association for Public Participation 2001; Diduck 2004; Rowe and Frewer 2005.

Calls for enhanced resources must, however, be weighed against the sentiment of some project proponents that public participation is too expensive (Petts 1999). Governments have been hesitant to take on more costs—or to pass costs on to proponents—that would add to the overall expense of project planning and development.

Accelerated Decision Processes

All EA laws in Canada restrict the amount of time given to the public to review and respond to EA documentation, typically 30 days, and they also restrict the time that regulators have to make a decision. While these timelines are meant to be minimum standards, they tend to be interpreted strictly by regulators regardless of the complexity of the EA case at hand. This has occurred because a key issue of concern to project proponents is the amount of time it takes for a decision to be rendered. Proponents often contend that public review periods unnecessarily extend the time it takes to make decisions, thereby creating process inefficiencies and economic uncertainties. As a result, decision makers have established timelines in an attempt to balance the needs of proponents and those of the public. The result, however, is accelerated decision processes that often do not allow adequate time for the public, and some would argue the regulator, to properly review and respond to the EA information provided and for a two-way dialogue, aimed at issue resolution, to occur (Petts 2003; Sinclair and Diduck 2001).

Weak Public Participation in Follow-up

As discussed in chapter 1, follow-up is a critical component of EA because it gauges the way a project actually affects the environment. It provides the basis for designing further mitigation efforts if they are necessary, assessing the accuracy of the predictions made in the original EIS documents, and learning from EA experiences. The CEAA provides for consideration of follow-up for all types of federal assessment, but the implementation of follow-up programs is required only for comprehensive studies and panel reviews. If follow-up measures are required, there is an obligation to advise the public of the results of the measures (section 38(2)(d) and (e)). Most provinces do not make any reference to follow-up, and none provide for public participation in the follow-up process itself. There is also no provision in any Canadian legislation, including the CEAA, requiring notice of and public comment on the results of monitoring or follow-up measures. The fact that the follow-up processes do not require public participation has likely meant that valuable information gathered during follow-up has not been readily available to the public and that valuable local knowledge has been excluded from the assessment. Despite the general lack of follow-up activities in Canada, there are notable exceptions, such as the low-level flying EA from Labrador and the BHP diamond mine EA from the Northwest Territories, both of which are discussed in more detail below.

Promising Future Directions

The foregoing concerns suggest that EA practitioners and policy makers face formidable challenges in creating more meaningful roles for the public in EA planning and decision making. However, consideration of these concerns helps them identify important future directions. These are discussed below, unified by the proposition that public participation in EA needs to be reconceptualized in more

collaborative, community-based terms. This would involve fresh views of both the ways people are involved and the very purposes of their participation.

Early and Ongoing Participation

An important future direction for public participation in EA lies in resolving the tensions surrounding normative and strategic planning issues. As noted earlier, some cases suggest that lack of opportunities for early involvement can be a barrier to broad participation, and other cases provide powerful examples of normative involvement. Still others suggest that opportunities for participation can occur too early in the planning process, namely when they arise prior to the development of a concrete proposal to which members of the public can react. In such cases, the very earliness of the opportunity presents a barrier to broad, active, and meaningful participation.

The importance of finding ways to encourage early participation was reiterated in a survey of Canadian EA practitioners and ENGO officials (Sinclair and Doelle 2003). In that study, the respondents expressed clearly that the way public participation is envisioned by most EA statutes in Canada limits early involvement and fragments later participation opportunities. They pointed out that opportunities for participation in EA have tended to occur at discrete points in the process, such as during scoping, preparation of the EIS, and public hearings. Further, the respondents promoted moving to a more holistic process—that is, to one that encourages meaningful early and ongoing participation. In their view, the process should enable participation from the outset of the project or program planning development phase, when decisions are being made about the objectives and goals regarding what ought or ought not to be done. Later provisions should then require opportunities for participation through the operational stages of project development, implementation, follow-up, and eventual decommissioning. Such changes would not only address criticisms concerning the timeliness of involvement, they would create opportunities for ongoing exchange among stakeholders and could have positive implications for power imbalances. They would also be in line with policies in British Columbia, Ontario, and Manitoba that encourage proponents to consult with the public long before the formal EA process is initiated.

In recent years, regional (or wide-area) planning has been an important testing ground for new ideas on the subject of early and ongoing involvement. In British Columbia, the Commission on Resources and Environment and the Land and Resource Management Plans of the 1990s established broad-based round tables that brought local people together in an attempt to resolve regional land-use planning issues. Each table offered innovative experiments in multi-stakeholder planning, consensus building, and shared decision making (Owen 1998; Penrose et al. 1998; Williams et al. 1998; Jackson 2001). The Government of Manitoba recently started a broad-area planning initiative for the east side of Lake Winnipeg, a large geographic area bounded by Lake Winnipeg on the west, the Ontario-Manitoba border to the east, Sagkeeng First Nation to the south, and Oxford House to the north. The objective was to 'bring together local communities, First Nations, in-

dustry and environmental organizations to develop a vision for land and resource use in the area that respects both the boreal forest and the needs of local communities' (Manitoba Conservation 2003). A round table and advisory committees were established to meet with local communities and organizations in the development of a vision and plan for the region that would precede any project EAs for activities such as forestry operations, parks development, and road construction. As part of this ongoing planning effort, the government has supported traditional area land-use planning activities with thirteen affected First Nations. Coordinators have been hired to assist with these efforts, and the East Side Policy Coordination Committee will ensure that broad-area planning is maintained as these local plans are developed.

Given these experiences and similar policy initiatives in Canada, it is our view that EA policy makers and practitioners should continue to seek ways to integrate regional planning (with its increasingly concomitant early and ongoing public participation) and formal EA processes. If wide-area planning precedes assessment, EA legislation should then require that the plan be considered during the assessment (unless the EA itself was done in a sufficiently open and participative way). In cases where broader plans do not exist, normative issues would continue to be raised by members of the public during the EA of individual projects. To facilitate the development of broader regional plans, government departments involved in EA processes should be required to alert decision makers when an undertaking is proposed in a region where no land-use plan or policy exists. It would then be up to the decision makers to decide whether EA consultation activities should include broader issues than those raised in the context of the narrow scope of a proposed undertaking or whether a broad planning exercise needs to be carried out before any decision is rendered on the individual undertaking.

Mutual Learning

Building on the idea of ongoing participation, another key future direction for public involvement in EA relates to taking greater advantage of the learning opportunities resulting from participation. As noted earlier, participation in EA creates important opportunities for learning related to sustainability at various organizational levels. First, it affords opportunities for individual practitioners and decision makers to identify social values and learn from local or traditional knowledge. Second, it provides opportunities for members of the public to acquire scientific and technical knowledge, learn about their community and the interests of fellow citizens, and engage in collective political action. In addition, participation in post hoc and cumulative effects assessments creates opportunities for NGOs, communities, and other forms of social organization to learn from past development decisions.

Promising forums for mutual learning are created by mechanisms designed to provide ongoing participation, such as community advisory committees and co-management boards. Organizations of this type are being used increasingly in EA, including in research and monitoring functions. Two prominent examples can be

found in the low-level flying EA from Labrador and the BHP Ekati diamond mine EA from the Northwest Territories.

The first example involved a federal assessment of an agreement between Canada (the Department of National Defence) and some of its NATO allies (the United Kingdom, Germany, and the Netherlands) to permit low-level military training flights over the Quebec-Labrador peninsula. A key outcome of this controversial EA was the creation of the Labrador Institute for Environmental Monitoring and Research, a co-management organization involving local and Aboriginal partners. Since so little was actually known about the impacts of low-level flying on people and the environment, the institute was established to conduct comprehensive, multidisciplinary scientific research on the flying program. For more information on the institute and its current activities, visit <http://www.iemr.org/> (accessed March 2009).

In the second example, a federal review panel approved the BHP Ekati diamond mine but with 29 conditions, several dealing with environmental monitoring and mitigation. In 1996, when the federal government conditionally approved the project, it required an agreement to be drawn up among Canada, the Northwest Territories, and the project proponent (BHP Diamonds Inc.) to ensure that the conditions of the review panel were met. The agreement called for the establishment of the Independent Environmental Monitoring Agency, which included representation from local and Aboriginal communities. The tasks of the agency included reviewing monitoring and management plans and results, encouraging the use of traditional knowledge, bringing concerns of Aboriginal peoples and the general public to the proponent and government, and keeping Aboriginal peoples and the public informed about agency activities and findings. The agency's most recent annual report can be reviewed at <http://www.monitoringagency.net/> (accessed March 2009).

Although the reviews are mixed regarding the efficacy and results of the organizations described above (Macleod Institute 2000; Ross 2004), these types of institutional arrangements for ongoing public participation are highly conducive to mutual learning. They not only create opportunities for communication and deliberation, but also provide forums for trust building, risk taking, problem solving, and conflict resolution. All of these are key dynamics for integrating knowledge systems and modifying basic attitudes, values, and behaviour (Diduck et al. 2005). Our position, therefore, is that proponents, EA practitioners, and decision makers should continue to expand the use of mechanisms for ongoing participation. Doing so will help maximize the learning benefits that can be derived from participation in EA.

Alternative Dispute Resolution

The use of mediation and other forms of *alternative dispute resolution* (ADR) has been almost non-existent in Canadian EA. There is increasing recognition, however, that various ADR tools could be applied usefully at most points of the process when there is conflict among the parties. Such adjustments in process would signal

the need for approval agencies and proponents to give serious consideration to more collaborative techniques of participation. In this regard, the default forms of participation, such as open houses and town hall meetings, would be viewed as mere on-ramps to more participatory involvement techniques.

Indications that such a change in thinking is happening can be found on a few fronts. For years at the federal level, the CEEA included the provision that if a mediation attempt failed, the EA would move directly to a panel review. Many viewed this as a deterrent to the use of mediation and the main reason why no mediations were attempted in the first five years of the CEEA's existence. When the Act was amended in 2005, this requirement was dropped in an attempt to encourage the use of mediation.

At the provincial level, Quebec is by far the most active in using ADR tools. Under certain circumstances, the Bureau d'audiences publiques sur l'environnement (BAPE), an independent body responsible for environmental assessment hearings in the province, can engage in environmental mediation. Under the EA process in Quebec, any individual may request that a public hearing be carried out by the BAPE. In reviewing the input received, the BAPE can request that the minister of environment allow it to proceed by way of mediation rather than public hearing. Since 1990, there have been 39 projects that proceeded in this fashion, and there are now formal rules for BAPE mediation processes.

Manitoba's Environment Act includes provisions for mediation, as noted earlier. These have been used very rarely, but through a combination of political will and administrative support on the part of the Clean Environment Commission, some mediations have occurred in recent years. One of these, the Rothsay Rendering EA, was quite successful in that the community and company were able to agree on steps the company needed to take to reduce odours and the company was able to secure funding to install the technology required. The commission is taking a cautious approach to using mediation and is trying to find ways to level the playing field for all participants at the mediation table. It has had at least one case where the public participants requested mediation rather than a hearing.

In our view, these activities in Quebec and Manitoba and the legislative change at the federal level are positive reforms that should guide change in other jurisdictions.

Community-Based Assessment

New approaches to working with residents of small communities to assess the impacts of local projects are being tested in various parts of the developing world. What has become termed *community-based environmental assessment* (CBEA) has merged aspects of conventional EA with aspects of participatory local appraisal (Chambers 1994) to form an innovative way to assess smaller, community-based projects that utilize natural resources for basic livelihood needs (Spaling 2003; CIDA 2005; Neeffjes 2000; Pallen 1996). Typical projects include boreholes, gravity water systems, small reservoirs, agro-forestry, fish ponds, construction of latrines, clinics, schools, and small bridges. Since these projects interact directly with bio-

physical systems, many already under stress, there is potential for resource degradation through over-extraction, land clearing, soil erosion, contamination, and other forms of exploitation. Application of EA to these projects is emerging as a way to facilitate management of local resources and ensure continued project benefits (Spaling 2003).

CBEA is a highly participatory approach in which local communities are directly involved in conducting EAs. In fact, local residents do much of the assessment themselves with the help of facilitators and environmental practitioners. Recent studies in Kenya and Costa Rica show the benefits of CBEA from the community's perspective, including individual and social learning outcomes, greater social cohesion, and better decision making (Montes 2008; Sinclair et al. 2009). While the context for CBEA has generally been the developing world, many of the reasons for using the approach are applicable to small projects in Canada—reasons such as the desire to ensure that projects are assessed (and assessed cost effectively and efficiently) and to build local capacity for participation in EA. Furthermore, in the right Canadian setting—one involving a localized project with broad support in a small community (perhaps in a First Nation)—it is reasonable to expect to see some of the same types of benefits witnessed in other parts of the world.

Legal Requirements

The benefits of having a legislated and mandatory basis for EA are well established in the Canadian literature (Jeffery 1991; Gibson 1993; Hazell 1999). Such a foundation reduces administrative discretion, enhances procedural certainty, clarifies authority, creates rights and responsibilities, and presents opportunities for judicial remedies. In spite of this, as noted throughout this chapter, high levels of discretion and critical legislative gaps characterize public participation regimes in Canada. Government EA officials have argued that discretion is necessary to allow for flexibility in tailoring public participation to the multitude of situations created by different EA cases. The opposite view is that with too many discretionary provisions, the law provides little in the way of direction for achieving meaningful public participation. Sinclair and Doelle (2003) attribute many of the weaknesses found in EA public participation activities to missing, discretionary, or ineffectual legal provisions. In essence, too much discretion was given to regulators in deciding whether or not there should be public participation in any given case, when it should occur, and what it would entail, and this has led to weak and ineffectual participatory events.

Given this, we advocate a rethinking of the legal underpinnings of public participation in Canadian EA legislation and suggest that changes are necessary to create a clear and mandatory foundation for public participation. Legislated reforms are necessary to address the concerns and enable the future directions outlined above. As argued elsewhere (Sinclair and Doelle 2003; Doelle and Sinclair 2006), many of the changes needed are relatively modest and are consistent with the views of diverse EA reformers both within and outside of government. They also pertain to familiar aspects of EA public participation that have been debated

since the inception of legislated EA. At the same time, in totality a coherent package of reforms aimed at resolving the concerns and enabling future directions could make a significant contribution to reconceptualizing participation in EA, seeing it transformed from a series of proponent-driven opportunities for input at discrete points in a process to meaningful public-driven participation occurring throughout the project/policy cycle from development to decommissioning.

Conclusion

Public participation is essential to effective and fair environmental assessment in Canada and elsewhere in the world. Meaningful participation provides diverse social, political, and environmental benefits. It actualizes democratic principles, enables individual and community empowerment, facilitates individual and collective learning, informs planning and decision making, and affords numerous other practical benefits. However, whether such advantages are realized in practice depends on various factors, including pertinent legislative and policy frameworks. Key aspects of EA public participation regimes in Canada include adequate notice, access to information, participant assistance, public comment, and public hearings.

Owing to Canada's relatively long EA history and the resulting knowledge gained by EA practitioners, this country is often looked to as a leader in public participation. However, this does not mean that public participation practice in Canada is flawless. There are long-standing concerns about weaknesses in the way important aspects of participation are implemented, including lack of shared decision making, lack of early (i.e., normative and strategic) involvement, information and communication deficiencies (e.g., inadequate notice and inaccessible information), and insufficient intervenor funding.

These concerns highlight the challenges facing practitioners, policy makers, and others who care to strengthen the role of public participation in EA. They also illuminate promising future directions, such as the promotion of early and ongoing involvement, the enhancement of opportunities for mutual learning, the increased use of alternative dispute resolution, and the creation of a clear, mandatory legislative base for public participation. With respect to this last point, only relatively modest legislative reforms would be necessary to achieve these goals. At the same time, a coherent, focused package of reforms would help reconceptualize public participation in EA in a community-based rather than a managerial (or top-down) paradigm. This would facilitate the formation of partnerships among industry, government, and civic organizations, thereby promoting economic development that is community oriented, equitable, and sustainable (both environmentally and socially) over the long term.

Acknowledgements

We are grateful to Richard Roberts, Patricia Fitzpatrick, and Peter Duinker for reviewing early drafts of this chapter. Shortcomings in the final manuscript remain our sole responsibility.

References

- Alberta Environment. 2004. *Alberta's environmental assessment process*. Pub No. I/990, September. Edmonton: Alberta Environment. <http://environment.gov.ab.ca/info/library/6964.pdf>. Accessed 20 June 2008.
- Arnstein, S. 1969. A ladder of citizen participation. *Journal of the American Institute of Planners* 35 (4): 216–24.
- Berger, T.R. 1977. *Northern frontier, northern homeland: The Report of the Mackenzie Valley Pipeline Inquiry*. Ottawa: Minister of Supply and Services.
- Blaug, E.A. 1993. Use of environmental assessment by federal agencies in NEPA implementation. *Environmental Professional* 15 (1): 57–65.
- Burcombe, J. 1998. *Federal Environmental Assessment Index and public registries*. Brief to President of CEAA on behalf of Mouvement au Courant, Montreal.
- Canadian Environmental Network, Environmental Planning and Assessment Caucus. 1988. *A federal environmental assessment process: The core elements*. Ottawa: Canadian Environmental Network, Environmental Planning and Assessment Caucus.
- Chambers, R. 1994. The origins and practice of participatory rural appraisal. *World Development* 22 (7): 953–69.
- CIDA (Canadian International Development Agency). 2005. *Environment handbook for community development initiatives: Second edition of the handbook on environmental assessment of non-governmental organizations and institutions programs and projects*. Gatineau: CIDA. Available at <http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/JUD-47134825-NVT>.
- Clark, B.D. 1999. Capacity building. In J. Petts (Ed.), *Handbook of environmental impact assessment*, 145–77. Oxford: Blackwell Science.
- Connor, D.M. 2001. *Constructive citizen participation: A resource book*. Victoria, BC: Connor Development Services Ltd.
- Croal, P., and K. Grady. 1998. Environmental assessment in Canada. *EIA Newsletter* 17, University of Manchester.
- Devlin, J.F., N.T. Yap, and R. Wier. 2005. Public participation in environmental assessment: Case studies on EA legislation and practice. *Canadian Journal of Development Studies* 26 (3): 487–500.
- Diduck, A.P. 2004. Incorporating participatory approaches and social learning. In B. Mitchell (Ed.), *Resource and environmental management in Canada: Addressing conflict and uncertainty*, 497–527. Toronto: Oxford University Press.
- Diduck, A.P., N. Bankes, D. Clark, and D. Armitage. 2005. Unpacking social learning in socio-ecological systems: Case studies of polar bear and narwhal management in Northern Canada. In F. Berkes, R. Huebert, H. Fast, M. Manseau, and A. Diduck (Eds), *Integrated management, complexity and diversity of use: Responding and adapting to change*. Calgary: University of Calgary Press.
- Diduck, A.P., and B. Mitchell. 2003. Learning, public involvement and environmental assessment: A Canadian case study. *Journal of Environmental Assessment Policy and Management* 5 (3): 339–64.
- Diduck, A.P., and A.J. Sinclair. 2002. Public participation in environmental assessment: The case of the nonparticipant. *Environmental Management* 29 (4): 578–88.
- Doelle, M., and A.J. Sinclair. 2006. Time for a new approach to environmental assessments: Promoting cooperation and consensus for sustainability. *Environmental Impact Assessment Review* 26 (2): 185–205.
- Dorcey, A., L. Doney, and H. Ruggeberg. 1994. *Public involvement in government decision-making: Choosing the right model*. Victoria, BC: Round Table on the Environment and the Economy.
- Fitzpatrick, P., and A.J. Sinclair. 2003. Learning through public involvement in environmental assessment hearings. *Journal of Environmental Management* 67 (2): 161–74.
- Forester, J. 2006. Participatory governance as deliberative empowerment: The cultural politics of discursive space. *American Review of Public Administration* 36 (1): 19–40.

- Gallagher, T.J., and W.S. Jacobson. 1993. The typography of environmental impact statements: Criteria, evaluation, and public participation. *Environmental Management* 17 (1): 99–109.
- Gibson, R.B. 1993. Environmental assessment design: Lessons from the Canadian experience. *Environmental Professional* 15:12–24.
- Hayward, G., A.P. Diduck, and B. Mitchell. 2007. Social learning outcomes in the Red River Floodway environmental assessment. *Environmental Practice* 9 (4): 239–50.
- Hazell, S. 1999. *Canada v. the environment: Federal Environmental Assessment 1984–1998*. Toronto: Canadian Environmental Defence Fund.
- International Association for Public Participation. 2001. IAP2 Public Participation Toolbox. <http://www.iap2.org/practitionertools/index.html>. Accessed 6 May 2002.
- Jackson, L.S. 2001. Contemporary public involvement: Toward a strategic approach. *Local Environment* 6 (2): 135–47.
- Jeffery, M.I. 1991. The new Canadian Environmental Assessment Act—Bill C-78: A disappointing response to promised reform. *McGill Law Journal* 36:1071–88.
- Kidd, S. 1998. My adventures at the public registry. *Eco-Journal* 11 (3): 5–6.
- Lynn, F.M. 2000. Community-scientist collaboration in environmental research. *American Behavioral Scientist* 44(4): 648–62.
- Lynn, S., and P. Wathern. 1991. Intervenor funding in environmental assessment processes in Canada. *Project Appraisal* 6 (3): 169–73.
- Macleod Institute. 2000. *Independent Environmental Monitoring Agency evaluation report*. Calgary: Macleod Institute.
- McMullin, S.L., and L.A. Nielson. 1991. Resolution of natural resource allocation conflicts through effective public participation. *Policy Studies Journal* 19 (3/4): 553–9.
- Manitoba Conservation. 2003. *East side of Lake Winnipeg: Broad area planning initiative*. Winnipeg: Government of Manitoba.
- May, E. 2003. Sierra Club of Canada wins one for public participation. EA Reporter (Environmental Planning and Assessment Caucus, Canadian Environment Network), no. 6 (Spring): 13–14.
- Meredith, T.C. 1995. Assessing environmental impacts in Canada. In B. Mitchell (Ed.), *Resource and environmental management in Canada*, 360–83. Toronto: Oxford University Press.
- . 1997. Information limitations in participatory impact assessment. In A.J. Sinclair (Ed.), *Canadian environmental assessment in transition*, 125–54. Waterloo, ON: University of Waterloo.
- MiningWatch. 2008. *Federal government denies need to consult public on major mining projects: Ruling will test strength of revised environmental assessment law*. Retrieved from http://www.miningwatch.ca/index.php?bcmetals/red_chris_fedl_court_of_appeal.
- Montes, J. 2008. Community environmental assessment in rural Kenya—Decision making for a sustainable future. Unpublished master's thesis, Natural Resources Institute, University of Manitoba.
- Neeffes, K. 2000. *Environments and livelihoods: Strategies for sustainability*. London: Oxfam.
- Owen, S. 1998. Land use planning in the nineties: CORE lessons. *Environments* 25 (2/3): 14–26.
- Palerm, J.R. 2000. An empirical-theoretical analysis framework for public participation in environmental impact assessment. *Journal of Environmental Planning and Management* 43 (5): 581–600.
- Pallen, D. 1996. *Environmental assessment manual for community development projects*. Ottawa: Asia Branch, Canadian International Development Agency.
- Parenteau, R. 1988. *Public participation in environmental decision-making*. Ottawa: Minister of Supply and Services.
- Penrose, R.W., J.C. Day, and M. Roseland. 1998. Shared decision making in public land planning: An evaluation of the Cariboo-Chilcotin CORE process. *Environments* 25 (2/3): 27–47.
- Petts, J. 1999. Public participation and environmental impact assessment. In J. Petts (Ed.), *Handbook of environmental impact assessment*, 145–77. Oxford: Blackwell Science.
- . 2003. Barriers to deliberative participation in EIA: Learning from waste policies, plans and projects. *Journal of Environmental Assessment Policy and Management* 5:269–93.

- Prystupa, M., D. Hine, C. Summers, and J. Lewko. 1997. The representativeness of the Elliot Lake uranium mine tailings areas EARP public hearings. In A.J. Sinclair (Ed.), *Canadian environmental assessment in transition*, 51–76. Waterloo, ON: University of Waterloo.
- Roberts, R. 1998. Public involvement in environmental impact assessment: Moving to a 'New-think'. *Interact* 4 (1): 39–62.
- Ross, W.A. 2004. The independent environmental watchdog: A Canadian experiment in EIA follow-up. In A. Morrison-Saunders and J. Arts (Eds), *Assessing impact: Handbook of EIA and SEA follow-up*. London: Earthscan.
- Rowe, G., and L.J. Frewer. 2005. A typology of public engagement mechanisms. *Science Technology and Values* 30 (2): 251–90.
- Shepard, A., and C. Bowler. 1997. Beyond the requirements: Improving public participation. *Journal of Environmental Planning and Management* 40 (6): 725–38.
- Sims, L. and A.J. Sinclair. 2008. Learning through participatory resource management programmes: Case studies from Costa Rica. *Adult Education Quarterly* 58 (2): 151–68.
- Sinclair, A.J. 2002. Public involvement in sustainable development policy initiatives: Manitoba approaches. *Policy Studies Journal* 30 (40): 423–44.
- Sinclair, A.J., and A.P. Diduck. 1995. Public education: An undervalued component of the environmental assessment public involvement process. *Environmental Impact Assessment Review* 15 (3): 219–40.
- . 2001. Public involvement in EA in Canada: A transformative learning perspective. *Environmental Impact Assessment Review* 21 (2): 113–36.
- Sinclair, A.J., A.P. Diduck, and P. Fitzpatrick. 2008. Conceptualizing learning for sustainability through environmental assessment: Critical reflections on 15 years of research. *Environmental Impact Assessment Review* 28 (7): 415–28.
- Sinclair, A.J., and M. Doelle. 2003. Using law as a tool to ensure meaningful public participation in environmental assessment. *Journal of Environmental Law and Practice* 12 (1): 27–54.
- Sinclair, A.J., and P. Fitzpatrick. 2003. Provisions for more meaningful public participation still elusive in new Canadian EA bill. *Impact Assessment and Project Appraisal* 20 (3): 161–76.
- Sinclair, A.J., L. Sims, and H. Spaling. 2009. Community-based approaches to strategic environmental assessment: Lessons from Costa Rica. *Environmental Impact Assessment Review*, 29(3): 147–156.
- Smith, L.G. 1982. Mechanisms for public participation at a normative planning level in Canada. *Canadian Public Policy* 8 (4): 561–72.
- . 1993. *Impact assessment and sustainable resource management*. New York: J. Wiley.
- Spaling, H. 2003. Innovations in environmental assessment of community-based projects in Africa. *Canadian Geographer* 47 (2): 151–68.
- Stewart, J.M., and A.J. Sinclair. 2007. Meaningful public participation in environmental assessment: Perspectives from Canadian participants, proponents and government. *Journal of Environmental Assessment and Policy Management* 9 (2): 1–23.
- Sullivan, W.C., F.E. Kuo, and M. Prabhu. 1996. Assessing the impact of environmental impact statements on citizens. *Environmental Impact Assessment Review* 16 (3): 171–82.
- Susskind, L., and J.L. Cruikshank. 1987. *Breaking the impasse: Consensual approaches to resolving public disputes*. New York: Basic Books.
- Usher, P.J. 2000. Traditional ecological knowledge in environmental assessment and management. *Arctic* 53 (2): 183–93.
- Webler, T., H. Kastenholz, and O. Renn. 1995. Public participation in impact assessment: A social learning perspective. *Environmental Impact Assessment Review* 15 (5): 443–63.
- Williams, P.W., J.C. Day, and T. Gunton. 1998. Land and water planning in BC in the 1990s: Lessons on more inclusive approaches. *Environments* 25 (2/3): 1–7.
- Wood, C.W. 2003. *Environmental impact assessment: A comparative review*. 2nd ed. London: Prentice Hall.