

The Integration of Environmental Assessment and Municipal Planning



W.T. Perks, J. Bilkhu and D.A. Thompson

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FOREWORD

On behalf of the Intergovernmental Committee on Urban and Regional Research (ICURR), we are pleased to present this analysis of the problems impeding the proper integration of environmental assessment practices and municipal planning measures. This study, written by W. Perks, J. Bilkhu and D.A. Thompson addresses a major concern of the ICURR Board, which represents Ministries of Municipal Affairs across the country, as well as the Canada Mortgage and Housing Corporation. In this era of restructuring, our timely and extensive analysis of duplication or lack of coordination of efforts on the part of various local and provincial governments could be invaluable.

The study is comprehensive in scope and includes a review of selected documents. A survey of public officials and subsequent interviews bring to light managers' perceptions of the problems and possible solutions as proposed by four scenarios. The ensuing discussion and conclusion identify strengths and weaknesses, opportunities and constraints, as well as new directions to take. The report is therefore of great use to planners, administrators, and environmentalists in municipal and provincial governments. It also serves to enlighten students of local government.

This report complements ICURR research in the field of municipal environmental planning. Previous studies published by ICURR on this subject include: *Sustainable Urban Development in Canada: From Concept to Practice* by Virginia Maclaren (1992); *Environmental Policy Review of 15 Canadian Municipalities* by Paule Ouellet (1993); *Ecosystem Planning for Canadian Urban Regions* by Ray Tomalty et al. (1994) and *Developing Indicators of Urban Sustainability: a Focus on the Canadian Experience* by Virginia Maclaren (1996).

ICURR hopes to pursue this challenging area of research, as it will undoubtedly play an increasingly important role in the planning process. Other areas of research at ICURR include local governance, local finance and local economic development. We wish to thank the authors for their perseverance with this difficult topic and their dedication to the completion of this project.

André Lanteigne
Executive Director

Dr. Claude Marchand
Research Director

Intergovernmental Committee on Urban and Regional Research

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A number of graduate students at the Faculty of Environmental Design assisted in the research. Adrienne Schipperus contributed significantly to the literature search and reviews. Tom Ainscough and Lorraine Byerley played valuable roles in task management, and in data processing and analysis for the questionnaires.

We would also like to express our gratitude for the invaluable help given by numerous public officials and professional associates across the country. Often on very short notice, they advised us, and organized and managed the interview sessions in their cities. Many senior officials freed time in their busy schedules to attend these sessions and to engage in the interview discussions.

A final word of thanks and gratitude is extended to Dean Robert Page of the Faculty of Environmental Design, who supplemented the budget for the project from Faculty funds.

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ABOUT THE AUTHORS

William T. Perks, the project leader and principal author of the study, is Professor of Urbanism and Planning at the University of Calgary. He served as the first dean of Calgary's Faculty of Environmental Design when it was established in 1971, and has been director of the Planning Program there. Professor Perks has practised as a private consultant in Quebec and Alberta, and has served on commissions for regional development, housing, environment, municipal planning and urban design, for by senior governments in Canada and abroad. He has held a number of appointments at the National Capital Commission, first as policy planner and subsequently as Vice Chairman, Acting Chairman, and member of various planning and design advisory committees. He has also led major consulting and outreach projects in strategic planning, community economic development, environment, and sustainable development. In his regional development work under the ARD Act in the early 1960s, he established the first interdisciplinary planning consultancy in Canada. Among Professor Perks' published works are *Urban and Regional Planning in a Federal State; Assessment of Built Projects for Sustainable Communities* (CMHC), and *Consumer Receptivity to Sustainable Community Design* (CMHC, forthcoming). He has published book chapters, monographs and journal articles, and has been editor of special theme issues for *Environments* and *Plan Canada*. Professor Perks hold degrees in Civil Engineering and Civic Design.

Jagdev Bilkhu, principal research associate in the project, is currently completing a Master of Environmental Design (Planning) degree at Calgary. He has specialized in environmental-ecological planning and municipal restructuring. He holds a degree in Science from McGill University where he minored in business management. In 1995, he served as planner with the Greenbelt Master Plan Review at the National Capital Commission, with responsibility for updating the plan's environmental assessment.

Dixon A. Thompson is Professor of Environmental Science in the Faculty of Environmental Design at the University of Calgary, and honorary professor, UNASAM, in Huarez, Peru. He teaches and publishes in the areas of environmental management, auditing, impact assessment, and science policy and technology (both private sector and public). Dr. Thompson has over 20 years of experience in academic and government institutions, and in organizational development in private sector R&D organizations. Currently, he is working with a CIDA-sponsored project on environmental impact assessment in Peru, and on Aspects of the NAFTA Parallel Accord on the Environment. He has held appointments as director of the Environmental Science program and the Industrial Design program at Calgary. Dr. Thompson holds a degree in the Humanities and a Ph.D. in Science.

EXECUTIVE SUMMARY

This study, initiated by the Intergovernmental Committee on Urban and Regional Research (ICURR), arose from ICURR's concern that land-use planning and environmental assessments are too often conducted in isolation from one another. To lay the groundwork for a better integration of provincial environmental assessments and municipal planning, the researchers were set the task of establishing current practices and concerns, by canvassing the views of those involved, and then analyze their findings in the broader context of contemporary social, economic, and political trends.

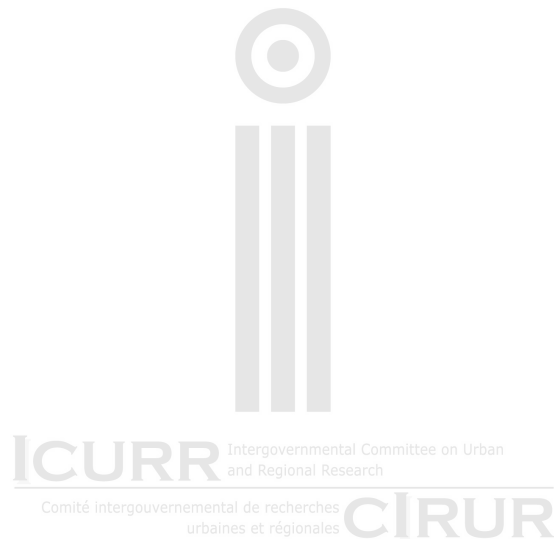
In chapter 1, the authors define the "problem" and outline the research program. They place the situation of the municipal corporation at the core of their analysis because they see the relevant senior managers in the municipalities as key actors and agents of change. What these people believe, and what moves them, are critically important factors in determining the possibilities for change and improvement. The study was designed to probe their perceptions, attitudes and opinions about current trends and practices. It also tests their receptivity to four possible future scenarios. These can be summarized as: (1) Continuation of the Status Quo; (2) Adaptation of the provincial-municipal planning system through integration of Environmental Assessment and Municipal Planning; (3) Environmental Assessments done but outside the municipal system; and (4) Movement of the planning system towards sustainable development principles and goals.

The introductory chapter also sets out, in general terms, what the authors regard as the solution to the problem: to unite environmental protection, land-use planning, and sustainable development initiatives, by thinking of them henceforth as "family" of practices.

In Chapter 2 the authors report on the responses of 42 provincial and municipal officials and 18 environmental consultants to two questionnaire surveys conducted in six provinces (British Columbia, Alberta, Manitoba, Ontario, Quebec, and Nova Scotia) between May and December 1994. Chapter 3 summarizes, and briefly comments on, ten studies selected for their relevance and originality after an extensive search of the literature. The chosen texts are grouped into two sets, the first dealing with "Critical Appraisal and Remedies," and the second with "Normative Proposals." Chapter 4 gives an account of seven interview-focus sessions held with public officials in Victoria, Vancouver, Calgary, Winnipeg, Toronto, Quebec City, and Halifax. Chapter 5 discusses the challenges and opportunities presented by recent and foreseeable "sustainable development" and "municipal restructuring," surveys the concepts, instruments, and practices now current in the area of municipal environmental assessment and planning, and describes the "Environmental Management System (EMS)" that, having emerged as practice in the private sector over two decades, is now gaining recognition among Canadian municipalities. Similarly, "ecological planning and design" has emerged in the theoretical discourse and in projects carried out in Europe. Chapter 6 describes a number of initiatives reported by participants in the initial survey, to emphasize the dynamic elements in the current situation.

In the final chapter, the authors sum up their findings, analyze the current situation in terms of strengths and weakness, opportunities and constraints. They further present as vision of future practice in which today's predominantly mechanistic land-use planning practice will gradually be transformed into a proactive, thoroughly experimental, planning-design process with sustainable development as its goal.

A Selected Bibliography and an appendix listing the names of survey participants, complete the report.



CHAPTER 1

Context, Objectives and Outline of the Research Program

The Intergovernmental Committee on Urban and Regional Research (ICURR) has noted that land use planning and environmental assessments are frequently “conducted in parallel processes with little consolidation” or “co-ordination.” The resulting redundancies and looping of efforts, system frictions and inefficiencies, and unnecessary expenditures have given rise to municipal and provincial concern about the management and the practices of environmental assessment. Public officials and industry, alike, are worried by the tendency of expectations about assessment procedures and performance outcomes to be ambiguous and variable, and disquieted by conflicts between the requirements of the provincial environmental programs and the decisions of municipal planners.

1.1 Relevant Forces and Sectoral Trends

A number of additional forces and sectoral trends have emerged that complicate the “problem.” For example, complaints by the property industry about an overly-regulated planning control and development implementation system that stifles innovation has strengthened the trend toward deregulation and liberalization of markets; and this is putting pressures on the municipal planning system for changes in the norms of practice and standards of development performance. Sustainable development is another force at work.

In the business and industry sector, growing risk awareness and prudence are leading to the establishment of environmental management systems. In the municipal sphere, environmental management is also a mounting preoccupation. These trends are reinforced by strengthening interpretations of the civil liabilities of corporate directors, senior decision-makers and municipal corporations, and by demands from insurance and financial institutions that builders, developers and manufacturers show how they plan to handle environmental risks.

Many municipalities, especially the large ones, have undertaken to expand the scope of their environmental procedures, and have either considered or already adopted environmental management policies and practices of their own design. These include such measures as Environmental Impact Assessments (EIA), Environmental Policy Statements (EPS), State of the Environment Reports (SOER), and Site Environmental Assessments (SEA). Typically, these instruments are tailored to fit the particular culture and political circumstances of the local community.

Also relevant is the trend to “restructure” or “reinvent” governments, which expresses itself in a tendency to download services and financial responsibilities from senior governments to municipalities and third-sector agencies. Restructuring will increasingly challenge the capacities of municipalities to deliver more imaginative environmental performance more

efficiently. Finally, the “sustainable development” movement serves as a force for system change and development.

Because restructuring entails re-thinking and a search for opportunities, it has created the occasion for a new look at the conceptual bases, norms of performance, and operational terms of environment and planning. It may also be possible (or seen as necessary) to devolve selected responsibilities from senior governments to municipal administrations, and from the latter to urban communities and civic associations.

As a result, the government activities designated as Environment, Planning, and Sustainability might conceivably come to be seen, in future, as a family of closely related practices, in which differences are less significant than commonalities. Indeed, it seems to us that this “family” is a prime candidate for “re-union.”

1.2 Objectives

The main objectives of the report are:

- ◆ to describe the issues, concerns, and conceptual, institutional, managerial, and operational implications of the “problem” created by the tension between municipal planning and environmental control
- ◆ to provide a situational analysis that includes a look at alternative future scenarios and examine prospects for improvements to the environmental assessment-municipal planning system

The report also seeks to clarify the terms of the discussion with a view to harmonization, beginning with the term “environmental assessment”: a concept and a practice that generates confusion and communication mishaps, and does not always give satisfactory and consistent guidance to practitioners.

1.3 Research Method

At the centre of the investigation is the municipal corporation. The relevant senior managers of the municipalities are cast as the key actors and agents of change and problem-resolution in the matter of environmental assessment planning. To understand what the officials believe and what moves them is critically important if we are correctly to assess the possibilities for improvement. Because of this, it was decided to base our study largely on an awareness and opinion survey of municipal officials.

The environmental assessment planning problem takes a different form in each community. In order to discover common features and pinpoint differences, it was therefore necessary to conduct our investigations in a number of Canadian municipalities. With an eye to the future, we placed special emphasis on exploring each municipality’s capacity to conceive and implement solutions. We also examined the municipalities’ organizational structures,

managerial practices that were conducive to (or hindered) problem resolution, intervening political priorities, and organizational culture.

Second, the research task was conceived as a “situational analysis.” In strategic thinking, it is common to speak of a “situation” as a blend of external and internal environments that affect an organization at a particular point in time. Situational analysis anticipates a future, in which opportunities to set new purposes and directions can be envisioned. The survey of public officials was therefore designed to:

- ◆ investigate how provincial and municipal officials and other practitioners view the present situation and its management challenges
- ◆ explore various current initiatives in order to establish whether municipalities and provinces are moving toward or away from improvement in the environmental assessment-planning situation
- ◆ assess the possibilities for developing the operational practices of both environmental assessment and municipal planning.

The research was also designed to:

- ◆ determine how the provinces and municipalities might devise effective overall strategies to improve the environmental assessment-municipal planning situation
- ◆ identify those issues, forces and trends most closely associated with co-ordination/integration of environmental impact assessment and municipal planning
- ◆ examine the perceptions, attitudes and opinions of the key actors regarding procedural and substantive tenets of environmental assessment practices
- ◆ bring into relief the variability of situation and context in the different provinces
- ◆ write futures scenarios that would depict a range of plausible and/or desirable directions of change in the practices of planning and environmental assessment
- ◆ “test” the receptivity of managers in municipal and provincial organizations, and of private consultants, to these scenarios
- ◆ investigate the conceptual and technical elements of environmental assessment and environmental management practices, in order to determine the conditions necessary for their success

1.4 Outline of the Research Program

The research program developed around five activities reported in chapters 2 through 6:

- ◆ Two *questionnaire surveys* conducted among a sample of public officials and environmental consultants across Canada (Chapter 2)
- ◆ A focused and select *review of the literature* on environmental assessment (Chapter 3)
- ◆ *Interviews with public officials* in the six provinces sampled by the survey questionnaire (Chapter 4)
- ◆ A *discussion of conceptual-terminological issues, and elements of professional practice* that may affect the search for solutions to environmental assessment-municipal planning concerns (Chapter 5)
- ◆ An *assemblage and synoptic review of documented "initiatives"* reported to us by the survey participants (Chapter 6)

In the first phase of the project, the literature search was carried out in parallel with the design and execution of the two surveys. The selection of survey participants and questionnaire formulation involved informal consultations with experts, and approaches to survey participants identified by ICURR. For budgetary reasons, the investigation was confined to six provinces: British Columbia, Alberta, Manitoba, Ontario, Quebec and Nova Scotia; and only a few municipalities in each province could be included.

The initial survey, directed to municipal and provincial officials, was carried out between May and September 1994. A second Survey was sent to a selection of environmental consultants between September and December of that year. The two surveys were largely identical. They asked 20 main questions, and gave respondents an opportunity to indicate their preference for one of four futures scenarios written up by the research team. During this period, we also reviewed a series of recent initiatives reported by our informants (Chapter 6).

On the basis of information gleaned from the literature and documentation reviews, and from the survey responses, we proceeded to the final phase: a situational analysis designed to serve as the basis of, and inspiration for, change (Chapter 7).

CHAPTER 2

Opinion and Attitude Surveys

This chapter analyzes the responses to two questionnaire surveys carried out between May and December 1994. Initially, the questionnaire was sent to 56 carefully selected senior planners and managers from 14 municipalities and two provincial departments in six provinces. Subsequently, a virtually identical questionnaire went to 35 environmental consultants, senior practitioners who had been recommended by the respondents in the initial survey. Questionnaires were returned by 42 officials and 18 consultants.

For each of the municipalities, three officials were approached: the Chief Administrative Officer, City Manager or Chief Commissioner, the Environmental Officer or senior manager equivalent, and the Head or Director of Planning. For each province, two officials were selected: a senior official in Municipal Affairs, and one in Environment.

The findings are organized and commented on according to four main lines of enquiry. Section 2.1 looks at environmental considerations and assessment practices. Section 2.2 focuses on impact assessment and other environmental management tools. Conceptual and practice issues are dealt with in section 2.3, while section 2.4 examines the respondents' views and opinions about the future. On most questions, we have compared the responses of the public officials with those of the environmental consultants, on the assumption that the consultants would view many issues from a more dispassionate, less "engaged," perspective than that characteristic of most provincial and municipal managers.

Occasionally, we have also provided comparisons among the public officials, and between the different localities and provinces, in order to assess the importance of intra-managerial and regional similarities and differences.

2.1 Environmental Considerations and Assessment Practices: Situation, Awareness, Understandings

Seven questions (1.1, 2.1, 3, 4, 5, 16.1, 16.2) sought to establish the general situation regarding environmental considerations within the municipal planning regime, and to obtain opinions about the use and adequacy of selected environmental management tools. The answers to these questions also serve to establish the respondents' state of awareness and understandings about environmental assessment concepts. We will look at these questions in turn.

Q1. *Does your organization have an established procedure or other mechanism that effectively accommodates environmental issues in the organization's strategic planning process? (For environmental consultants: Do the municipalities in your province have ... etc.).*

Environmental Consultants		Public Officials	
Yes	18%	Yes	67%
Only a few exceptions	37%	No, but under consideration	10%
No	45%	No	23%
n=17		n=42	

The public officials differed from the environmental consultants in their opinion, and/or awareness, of the actual state of affairs. Nearly half of the consultants stated categorically that the municipalities in their jurisdiction are *not* enabled by established procedures that *effectively* engage environmental issues in a strategic planning context; and another third of them were inclined to believe that there are only a few exceptions. In contrast, two-thirds of the officials stated that they are in fact so enabled.

Nor were the officials unanimous among themselves. In only a few of the municipalities was there *full agreement among the three senior persons* surveyed. In a number of provinces, unanimity among the two provincial respondents was also absent.

These contrasting perceptions of the state of affairs between “insiders” and “outsiders” of the municipal-provincial system, together with the diversity of views among senior managers *within* the system, point to some important differences of value judgment about the need for, and/or effective use of, environmental assessment within the planning process.

Q2.2. *Does your unit have an established procedure or other mechanism that effectively accommodates environmental issues in the organization's strategic planning process? (Question for the Public Officials only)*

Public Officials	
Yes, and same as the Organiz.	51%
Yes, but different than the Org.	18
No, but under consideration	5%
No	26%
n=39	

On a unit basis, about one third of the managers reported that their operating unit had no procedure specifically directed to environmental issues. It would appear that an operating unit's established procedure for considering environmental issues may not be the same as, or consistent with, the one directed to the organization's overall strategic planning needs.

Q2. *Does your organization operate with a code, established procedure or other mechanism that explicitly takes account of, and deals with environmental issues within one*

or other level of the municipal planning operations? (For environmental consultants: *Do the municipalities in your province operate with a code ...etc.?*)

Environmental Consultants		Public Officials	
Yes	31%	Yes	71%
Only a few exceptions	13%	No, but under consideration	2%
No	50%	No	22%
Don't Know	6%	Don't know	5%
n=17		n=41	

Again, a significant discrepancy between the environmental consultants and officials is apparent. While most consultants stated that municipalities in their jurisdiction had not adopted or introduced an explicit mechanism, a strong majority of officials declared the existence of some form of code or procedure for at least limited aspects of environmental assessment.

On the other hand, 29 percent of the officials indicated that they either didn't know or disagreed. Only in Ontario was the percentage of No responses markedly lower. Responses to Question 2 suggest that some municipal organizations may not give priority to environmental assessment even when the necessary procedures are in place. They also indicate that what may in fact be a "management policy" does not, in the minds of some, constitute an *effectively-established* code or procedure.

It may also be that the code/procedure has not been well publicized or consistently honoured, or environmental assessment may be cast as informal or low-priority policy, subject to management discretion in its application. Another possibility is ambiguity: some respondents may have assumed that the question referred to the existence of *municipal* measures rather than to the existence of provincial codes/procedures for particular types of environmental assessments.

The weight of No responses among the environmental consultants in questions #1 and #2, together with the fact that environmental officers most often tended to be the ones to disagree with planners and chief administrators, points to a *dissonance of normative values* in the system. The environmental professionals appear to have higher expectations about substance and depth of performance than do the other respondents.

One conceivable way to achieve an integration of environmental impact assessment and municipal planning would be the device of provincial statute. To what extent then, is the *current* legislation considered by the survey respondents to be adequate and effective for dealing with environmental considerations? This question is addressed by #16.

Q16. Refer to "environmental assessment" and "E-Audit" in the TERMS provided on page 1. In my professional opinion, the Planning Act and/or the Environmental legislation in our province already makes (or together make) adequate and effective provisions for ...

Q16.1 *Environmental assessments (EAs) to be carried out in all contexts and situations where they ought to be carried out.*

Environmental Consultants		Government Officials	
Strongly Agree	12%	Strongly Agree	18%
Agree more/less	35%	Agree more/less	58%
Disagree	53%	Disagree	23%
No opinion	0%	No opinion	3%
n=17		n=40	

The 17 consultants were equally divided on agreement and disagreement. Three-quarters of the officials (municipal and government together) signified their agreement with the statement; but only one out of six would categorically agree.

The distribution of opinion across the six provinces is of interest:

- In Manitoba, Quebec and Nova Scotia, the officials were substantially agreed that there *are already* adequate and effective provisions for environmental assessments to be carried out where they ought to be.
- Officials in Alberta and Ontario, on the other hand, were more likely to be split on the question.
- In British Columbia, the provincial officials did *not* believe that adequate legislation exists, whereas municipal officials were more likely to agree that it does.

The interview sessions subsequently held in British Columbia did not altogether confirm this finding. In the other five provinces, on the other hand, the interviews generally confirmed the results of this survey question.

The divisions of views seem to point to uncertainties in the minds of respondents about what precisely is intended by the terms “accommodating environmental concerns,” “effectiveness” in assessment procedures, and “adequate and effective provisions for” (environmental assessments, etc.). The possibility exists, of course, that enabling provisions for municipalities to engage in environmental impact assessment are actually in place, but are not regularly or commonly deployed in the local planning process. This supposition, however, is not confirmed by the literature.

The survey findings tend to suggest that the statutory status quo, rather than a freshly codified-regulatory arrangement for betterment of the system and/or the integration of environmental impact assessment and municipal planning, would satisfy most of the survey participants.

When the same question was asked regarding Environmental Audits, however, a somewhat different set of responses was obtained.

Q16.2 *Environmental audits to be carried out in all contexts and situations where they ought to be carried out .*

Environmental Consultants		Government Officials	
Strongly Agree	12%	Strongly Agree	15%
Agree more/less	12%	Agree more/less	30%
Disagree	64%	Disagree	38%
No opinion	12%	No opinion	17%
n=17		n=40	

Unlike the public officials, a majority of the consultants disagreed with the statement. In other words, the “outsiders” looking in on the municipal system were emphatically less satisfied than the “insiders” with the status quo.

For questions 16.1 and 16.2, disagreement or agreement was registered by virtually the same respondents in each instance. Only two respondents agreed with one statement but not the other. As well, there were no significant differences in the opinions of the *consultants*, within or between the various provinces

Half of the *officials* who responded either disagreed or had no opinion; only a small portion of the responses represented strong agreement. Again, differences among the provinces are worth noting:

- Officials in Alberta and Ontario were the most likely to disagree.
- Officials in Manitoba, Quebec and Nova Scotia were most likely to agree.
- In British Columbia, opinion was divided.

Opinion differed from province to province as to the desirability and/or the actual place and importance of environmental audits in the overall scheme of municipal environmental management. Evidently, monitoring and surveillance of environmental effects by audits enjoys much lesser status than do impact assessments.

Because environmental audits (monitoring, etc.) are key to a meaningful, coherent environmental management program, the municipal officials alone were queried to ascertain the extent of use (and awareness) of the Canadian Standards Association (CSA) guidelines on the subject:

Q5. Does your unit or some other unit in the organization do routine environmental auditing? (E-auditing defined by Canadian Standards Association Z751-94, *GUIDELINES FOR ENVIRONMENTAL AUDITING: STATEMENT OF PRINCIPLES AND GENERAL PRACTICE*).

Municipal Officials

Yes	28%
No	51%
No, but under Consider.	21%
Don't Know	0%
n=29	

Although provincial Planning and/or Environmental legislation may provide adequately for the appropriate environmental codes and procedures, well as for environmental audits, at least in many places, on the basis of these responses one may legitimately question whether the available environmental tools are made fully and consistently operative, and whether they have a significant effect on the outcomes of planning decisions. We note that the literature review indicates that the answer to these questions is probably, no.

Regarding both assessments and audits, public officials seem to differ strongly about what the propositions “in all contexts and situations” and “ought to be” really signify. Environment-related world views and professional normative values among officials in the planning-environment system appear not to be as homogeneous or as grounded in empiricism and theory as they those of municipal planners. This speaks in part to the conceptual barriers to change discussed in Chapter 5.

A final point: the questions analyzed above refer repeatedly to the regulatory regime -- legislation, codes, formalized procedures, etc. -- and to its adequacy to achieve certain environmental ends. Generally speaking, the political-economic-business community tends to reject any notion of strengthening legislation/regulation. Public officials may (in their responses) be cautioning against further regulation because of their sensitivity to this climate of opinion.

Questions #3 and #4 sought to establish the situation and state of awareness among officials regarding environmental and sustainable development policies in their organization. The existence of an Environmental Policy Statement (EPS) provides only a *nominal indicator* of how the organization regards -- and intends to manage -- “environmental considerations” that arise in development planning and project implementation. Usually, EPSs are also meant to indicate how environmental concerns are to be managed across the spectrum of corporate departments and operations. The same applies to sustainable development policies and statements.

Q3. *Does your organization have an Environmental Policy Statement?*

Public Officials

Yes	59%
No	33%
No, under Preparation	8%
Don't Know	0%
n=39	

Q4. *Does your organization have a policy regarding Sustainable Development? -- for either corporate affairs or regulating, establishing goals, standards, etc. of land use planning and development?*

Public Officials

Yes	46%
No	24%
No, under consideration	24%
Don't Know	5%
n=41	

Clearly, advances are being made in these two critical -- and converging -- areas of environmental management and conceptualization. In the main, however, the statements and policies -- particularly the sustainable development ones -- refer to *internal corporate management*. Their actual influence on land use planning and development control practices is not yet that apparent.

2.2 Impact Assessment and Other Environmental Management Tools: Status and Effectiveness

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In the next set of questions (6.1, 6.2, 7, 8, 13), public officials and environmental consultants were asked about the status of impact assessment and other environmental management tools in their locality. Customary terminology was used to signify the type of practice queried. In this respect, responses to some of the questions can conceivably indicate whether or not, among and between the respondents, there is a commonly-shared understanding of terms and meanings.

Q6. For your municipality, is there legislation, or a by-law, corporate policy or administrative practice ...

6.1 requiring Environmental Impact Assessment (EIA) of large projects.

Public Officials

Yes	67%
No	20%
No, but under consideration	13%
n=30	

Although a healthy majority of responding officials answered Yes (67%), nearly a third of them did not respond. The proportion of negative responses and declined (33%) responses would seem to indicate either a weak state of awareness of this assessment activity or an uncertain understanding about its meaning.

All of the respondents in Ontario, and all but one in British Columbia, indicated there is some type of law or regulation that requires environmental impact assessment for large projects within their municipality. However, the same was not true for the other four provinces. There were distinct differences of awareness or understandings among municipal officials in Vancouver, Calgary, Brandon, Sherbrooke and Halifax. This diversity of responses indicates a variable state of awareness and understanding of the term.

When the same question was asked regarding Class Environmental Impact Assessments (EIAs) of *small projects* (next, below), the number of Yes responses was more or less the same; but the No responses rose proportionately, and a greater number of officials withheld a response.

6.2 requiring Class Environmental Impact Assessment (EIA) of small projects?

Public Officials

Yes	61%
No	32%
No, but under consideration	7%
n=28	

Similar conclusions as to the weak state of awareness and understanding can be drawn as to those in question 6.1.

In none of the six jurisdictions surveyed was there a uniform response to the two-part question #6. In only two of the six provinces -- British Columbia and Ontario -- were municipal and provincial officials most likely to state there *is* legislation or a bylaw or policy or an administrative practice that *requires* an EIA for large projects and a Class EIA for

small projects. However, both provincial respondents from Nova Scotia also stated that Class EIAs are required for their municipalities.

The survey sought to establish the organizational status of, and practical experience with, assessment *and* other tools. Among these tools is the State of the Environment Report (SOER), regarded by many authors and practitioners as a valuable public information-public policy device for ensuring that the environment is indeed attended to. Ideally, the SOER sets out what has been happening (good and bad) and what management remedies and mitigations are in place.

Q13. *Does your unit or some other unit in the organization prepare State of the Environment Reports?*

Public Officials	
Yes	51%
No	37%
Under Consideration	12%
Don't Know	0%
n=41	

It need only be said that half the public officials attesting to the preparation of SOERs is not an impressive indicator of the use of this particular management tool, especially considering that these responses came from only about a third of the localities surveyed.

The next two questions (#7, #8) go to the matter of experience with environmental assessments, needs met or not, and effectiveness. We were particularly interested to establish whether the consultant “outsiders” evaluated the status and effectiveness of the municipal-provincial system the same way as the “insiders.”

Q7. *The general experience in our region -- our municipality and the areas around us -- has been that the environmental assessments actually carried out, were done in a timely way and when really needed.*

Environmental Consultants		Public Officials	
Yes	59%	Yes	41%
No	29%	No	28%
Don't know	12%	Don't know	31%
n = 17		n = 29	

A slight majority of the seventeen consultants and more than one in three public officials who responded believe that the environmental assessments carried out in their locality have been done in a timely way when really needed. About one quarter of the respondents disagreed.

Negative responses were received from consultants in four of the six provinces. The proportional distribution of No responses within each of the six provinces was more or less the same.

Given the proportion of the No and Don't Know responses, and the fact that a good proportion of the officials surveyed declined to respond, one may conclude that the state of information, awareness and shared priority in environmental considerations across the senior levels of the municipal-provincial system is less coherent than might have been expected. It would appear that *significant differences of professional opinion and value judgment ripple across the system.*

The mixed responses and declined responses may also indicate that local monitoring, and the dissemination of reviews of, and information on, impact assessment performance, are not widely or thoroughly practiced.

In an endeavour to draw on the practitioners' observations and experience, the participants were asked if it would have been more efficacious had environmental assessments been carried out as an integral part of the planning-development control process.

Q8 . *The general experience in our region -- our municipality and the areas around us -- has been that the environmental assessments actually carried out were more (less) costly and/or less (more) effective than had they been done as an integral part of the municipal planning procedure or development control system we operate. (Questions 8.1 and 8.2)*

8.1. Cost

Environmental Consultants

More Costly	47%
About the same	12%
Less costly	6%
No opinion	35%
n = 17	

Public Officials

More Costly	15%
About the same	12%
Less costly	0%
No opinion	73%
n = 26	

8.2. Effectiveness

Environmental Consultants

Less effective	47%
As effective	18%
More effective	12%
No opinion	24%
n = 17	

Public Officials

Less effective	8%
As effective	15%
More effective	4%
No opinion	73%
n = 26	

The most 'telling' response is the big majority (73%) among the public officials who had no opinion on the relative cost and effectiveness of regularly performing environmental assessments within the planning system. It should also be noted that over one-third of the

officials declined to answer the question. The consultants were less tentative: nearly half of them regarded the experience in their region as both more costly and less effective.

The most that can be inferred from the responses from within the municipal system is that hardly any cost-benefit review has been done. It is also worth noting that costing studies have not yet appeared in the planning or assessment literature.

2.3 Conceptual and Practice Issues: Key Management Factors and Viewpoints

Whether environmental considerations are viewed and dealt with in a consistent and efficacious manner depends in part on whether there exists a commonly shared conception of the issues and the appropriate tools to bring to the task. In management practice, one may ask whether the substantive meanings and terms, intentions, methods and norms of assessment procedures are adequately defined and commonly understood. Is there a shared value system? Are expert resources allocated commensurably with the policies and procedures, codes, etc. that comprise the management framework? Is there a shared opinion on the advantages and benefits to be gained when assessment and other environmental management tools are deployed? Questions 15, 9, 10, 17 and 18 probe these topics.

Q15. *Environmental Assessment brings into play a knowledge base, and a set of procedures and applications of expert knowledge that are distinctive in many (or some) important respects from what is practiced in municipal planning.*

Environmental Consultants		Government Officials	
Strongly Agree	53%	Strongly Agree	24%
Agree more/less	35%	Agree more/less	60%
Disagree	6%	Disagree	10%
No opinion	6%	No opinion	7%
n=17		n=42	

Question 15 tries to ascertain whether the respondents believe that the skills and knowledge related to impact assessment are more or less in line with those required in planning. A substantial majority of the combined consultant and public official groups agree with the statement to some extent. On the other hand, while half of the consultants responded in the affirmative, only one in four officials agree unequivocally.

Most officials took a middle position; and ten percent of them disagree with the statement. One may infer that these respondents viewed the theoretical and empirical foundations of assessment practices as more or less identical to, and/or already a part of, planning.

Planning deploys procedural techniques that are shared to one extent or another by environmental assessment practices. However, in our view, there are several substantive aspects of impact assessment practice, for example, a knowledge of the ecological sciences and the ability to apply them, as well as a firmly grounded understanding of biotic and abiotic phenomena (including their probable dynamic under conditions of stress or impending

impact). Similarly, the assessment of post-development effects rests on distinctive analytic-scientific measurement skills and methods that are not commonly part of the capacities of municipal planning practitioners. One can only speculate to what degree of respondents recognized these particular knowledge and skills distinctions when they agreed with the statement in Question 15.

Regretably, the survey did not ask municipal officials to identify the “distinctive” knowledge and skills acknowledged in their responses. Nor did we enquire into employment practices of the past decade or so, which would have helped to gauge just how extensively distinctive environmental assessment knowledge and skills are currently being woven into municipal planning. However, the next two questions provide some basic indicators.

Q9. *Is there an Environmental Officer (EO) appointed in your organization?* (For the CAO only to respond).

Chief Administrative Officers (CAOs)

Yes	75%
No	25%
n=8	

Q10. *Does your Planning unit employ a person (or persons) professionally qualified to organize, lead and carry out environmental assessment, E-Auditing tasks, projects, studies or special assignments?* (For the Head of Planning Department only to respond)

Heads of Municipal Planning Units

Yes	25%
No	50%
Under Consideration	25%
Don't Know	0%
n=8	

Most significant for our central question, very few planning units appear to have equipped themselves with a basic minimum of professional expertise.

Evidently, the appointment of Environmental Officers in municipal organizations (whether in Planning or in other units) is still not general. The strong indicator (75%) in question #9 has to be tempered by the fact that six out of the 14 CAOs surveyed declined to respond. Similarly, a third the Planning Heads declined to respond. One must hope that this was not for want of reliable knowledge of the state of affairs.

In 1994, when the survey was being conducted, certain changes to the Planning Act were under consideration, activated, or reaching completion, in Alberta, Ontario, Nova Scotia, and British Columbia. Question 17.2 brought the Survey participants back to the issue of adequacy of the legislative provisions in the light of impending changes.

Q17.2 *In my professional opinion, the proposed changes to the Planning Act make adequate and effective provision for environmental assessments to be carried out in all contexts and situations where they ought to be carried out.*

Public Officials	
Strongly Agree	7%
Agree more or less	33%
Disagree	27%
Strongly Disagree	20%
No Opinion	13%
n=15	

The 15 officials responding were located in the three provinces in which Planning Act changes were afoot. The spread of opinions recorded above is virtually the same in each of those jurisdictions. There is nothing conclusive in these findings, except perhaps that almost no one firmly believes that current changes to the Planning Act will improve the situation.

The next set of questions (#18, a1- a8) seeks to determine what can be done to improve the environmental assessment-municipal planning situation. The statements enunciate several principles; and they posit advantages or benefits of impact assessments and other practices that are commonly discussed in the literature and in professional forums.

Q18. LIST a: *Thinking about your organizational environment, your management experience, and how you see the present and future situation, RATE the following statements by placing a 1, 2, 3, 4 or 5 next to the statement, where:*

1= agree, 2= tend to agree, 3= tend to disagree, 4= disagree, 5= can't say

a1 *Early incorporation of environmental assessment and resource conservation issues into the municipality's Strategic Planning will reduce or alleviate public concerns which can -- and often do -- lead to expensive revisions in later stages of the planning and development control process.*

Environmental Consultants		Public Officials	
Agree & tend to agree	83%	Agree & tend to agree	81%
Disagree & tend to disagree	17%	Disagree & tend to disagree	17%
No Opinion	0%	No Opinion	5
n=18		n=42	

Apparently, almost everyone believes that there is a correlation between thoroughness and thoughtful comprehension at the start, and public satisfaction and overall economy of effort at later stages. This may, however, merely indicate that respondents answered in the way that the 'logic of planning' and 'theory' would dictate. The minority viewpoint, representing one in six respondents, deserves consideration here. Certainly, the empirical evidence is not all in, and what we have is not all that reliable. In particular, we have only sparse and inconclusive evidence related to public satisfactions and concerns. On the other hand, to the extent that principles and professional beliefs are the driving forces for betterment, and

because we are dealing here with the considered judgment of experienced practitioners, the finding of agreement should not be readily discounted.

a2 *To the extent that municipal planners have knowledge of, and/or access to expertise about, environmental assessment issues and resource conservation, later delays and expensive revisions will be reduced.*

Environmental Consultants		Public Officials	
Agree & tend to agree	83%	Agree & tend to agree	78%
Disagree & tend to disagree	11%	Disagree & tend to disagree	12%
No Opinion	6%	No Opinion	10%
n=18		n=41	

Here, the overwhelming agreement among and between the two groups of respondents is reassuring.

a3 *Regular E-Audits will provide municipal and provincial officials with important and timely information that will improve the cost effectiveness of decisions.*

Environmental Consultants		Public Officials	
Agree & tend to agree	78%	Agree & tend to agree	71%
Disagree & tend to disagree	0%	Disagree & tend to disagree	14%
No Opinion	22%	No Opinion	15%
n=18		n=42	

Interestingly, a greater proportion of consultants (one in five) than of public officials gave no opinion. The general tendency, however, was to agree that environmental audits would be valuable management tools for the municipality, and that bringing in audits would be “cost effective.”

Regular environmental audits has its own undeniable fiscal logic; but a justification for it depends on whether the private or the public sector is expected to pay. Second, the positive responses on this question are not consistent with the earlier responses. If audits are such an important factor in doing environmentally-sound work in the municipal context, why is it that most municipalities do not do them?

a4 *Annual State of the Environment reports will provide the public and ENGOs with objective facts and trend information on which to better base their interventions on environmental matters.*

Environmental Consultants		Public Officials	
Agree & tend to agree	78%	Agree & tend to agree	74%
Disagree & tend to disagree	22%	Disagree & tend to disagree	24%
No Opinion	0%	No Opinion	2%
n=18		n=42	

a5 *Annual State of the Environment reports will provide an important, valuable data base, information source for municipal and provincial planners/decision makers.*

Environmental Consultants		Public Officials	
Agree & tend to agree	82%	Agree & tend to agree	95%
Disagree & tend to disagree	18%	Disagree & tend to disagree	5%
No Opinion	0%	No Opinion	0%
n=18		n=40	

In connection with the two preceding items, the reader is invited to revisit the responses to question #13, above. Given the large majority of positive responses to #18a4 and #18a5, one might ask why municipalities do not apply the SOER tool more often or more thoroughly. This question arises particularly in relation to the data-base component of State of the Environment reporting.

a6 *Regularly provided, sound information on environmental issues and resource conservation provides important, needed feedback for municipal planners/decision makers - whether for long term plans or day-to-day management.*

Environmental Consultants		Public Officials	
Agree & tend to agree	89%	Agree & tend to agree	95%
Disagree & tend to disagree	11%	Disagree & tend to disagree	5%
No Opinion	0%	No Opinion	0%
n=18		n=42	

a7 *Good environmental planning and resource conservation can often be cost-effective for both public authorities and private sector agencies.*

Environmental Consultants		Public Officials	
Agree & tend to agree	89%	Agree & tend to agree	89%
Disagree & tend to disagree	11%	Disagree & tend to disagree	9%
No Opinion	0%	No Opinion	2%
n=18		n=42	

The overwhelmingly positive responses to questions #18a6 and #18a7 were not unexpected; but it does raise the question: what is being done to deal with these concerns? The

impressive agreement between the officials and the consultants on the matter of cost effectiveness would seem strongly to support the case for “integration” of assessment and other environmental practices into the municipal planning system. Still, the key question remains: to whom should the costs be allocated? To the private sector? the municipal sector? the provincial sector? or to some “sharing partnership” among all three sectors?

a8 Integrating Environmental Assessment with the Municipal Planning process will streamline the approvals process.

Environmental Consultants		Public Officials	
Agree & tend to agree	83%	Agree & tend to agree	69%
Disagree & tend to disagree	11%	Disagree & tend to disagree	17%
No Opinion	6%	No Opinion	14%
n=18		n=42	

Again, an overwhelming majority tended to agree that “integration streamlines.”

To sum up, in these aspects, a significant majority (ranging from 70% to 90%) in both groups of respondents agreed with most of the statements. Few chose the No Opinion option. It bears noting, however, that six of the 42 public officials had no opinion on the “integration” statement, and that a similar proportion of them disagree with it.

It is also interesting that the weakest affirmation occurred for this proposition, with only 69% of public officials and 83% of the consultants expressing approval. In contrast, respondents most strongly affirmed the proposition regarding advantages and benefits in the early incorporation of environmental assessment and resource conservation issues into strategic planning (#18a1).



2.4 Prospective Views and Opinions

A cluster of questions (Q19, b1 - b6) deals with “integration” and “capacity.”

19 LIST b: *Thinking about your organizational environment, your management experience, and how you see the present and future situation, RATE the following statements by placing a 1,2,3,4 or 5 next to the statement, where:*

1= agree, 2= tend to agree, 3= tend to disagree, 4= disagree, 5= can't say

b1 *An integration of environmental assessment and municipal planning will require a significant reorganization of the organization's structure(s) and/or management-decision making process.*

Public Officials	
Strongly Agree	24%
Agree more or less	38%
Tend to Disagree	21%
Disagree	12%
No Opinion	5%
n=42	

Only one official in four agrees unequivocally with this proposition; but a significant proportion join them by expressing qualified agreement. One-third disagreed or tended to disagree. The spread of viewpoints here is significant.

The tables below re-group the data and compare the responses of environmental consultants and public officials.

Environmental Consultants		Public Officials	
Agree & tend to agree	33%	Agree & tend to agree	62%
Disagree & tend to disagree	50%	Disagree & tend to disagree	33%
No opinion	17%	No opinion	5%
n=17		n=42	

A fair majority of officials are inclined to agree that integration of environmental impact assessment and municipal planning would require significant reorganization. There is a diversity of opinion across the six provinces: In Alberta and Quebec, all agree or tend to agree, whereas all respondents but one in British Columbia disagree, and opinion is more or less equally divided in Manitoba, Nova Scotia and Ontario.

In contrast, half the consultants are inclined to disagree. This may reflect an expectation on their part that impact assessment tasks could and would be contracted out.

Similarly, contrasting responses are given when the respondents are presented with the supposition that “additional in-house resources” might be needed:

b2 *An integration of environmental assessment and municipal planning will require additional in-house resources (e.g., financial, and/or professional, technical expertise, and/or technologies) that are likely not obtainable in the foreseeable future.*

Public Officials	
Strongly Agree	38%
Agree more or less	29%
Tend to Disagree	21%
Disagree	12%
No Opinion	0%
n=42	

The statement combines two conditions into a single proposition on integration: more municipal resources may be required, but these may not be readily obtainable. Two-thirds of the public officials are inclined to agree. Those in Alberta, Quebec and Manitoba express the greatest agreement, while opinion in British Columbia, Ontario and Nova Scotia is fairly evenly divided. Also noteworthy is the fact that officials in the smallest municipalities and the non-metropolitan municipalities are more inclined to agree. It might reasonably be inferred that because resources in these municipal settings are already scarce, there is very little prospect of augmenting them.

Since public officials are the key agents for change and improvement in the system, the findings on this question are particularly significant from a strategic point of view. In certain provinces, public officials clearly recognize the need for additional in-house resources; in other jurisdictions, they are more equivocal. Yet -- and this is supported by the literature -- there is no doubt that the needs of smaller municipalities would have to be met by provincial allocations.

The tables, below, demonstrate that, in contrast to the public officials, half of the environmental consultants are inclined to disagree with the need for additional in-house resources.

Environmental Consultants		Public Officials	
Agree & tend to agree	33%	Agree & tend to agree	67%
Disagree & tend to disagree	56%	Disagree & tend to disagree	33%
No opinion	11%	No opinion	0%
n=18		n=42	

This comparison would suggest that, where a municipality does not have the necessary in-house expertise for environmental impact assessment inputs to municipal planning, the gap might have to be filled by outsourcing, that is, by using consulting services. An alternative would be to re-train and/or replace existing staff; but this might be the harder way to go, given the financially-constrained circumstances of the present and near future.

For the smallest cities, towns and rural municipalities, neither option is likely to be feasible; provincial authorities would have to provide expert assistance directly, or, on occasion, offer grants for engaging consultants.

b3 *An integration of environmental assessment and municipal planning will likely increase costs to the private sector actors in the planning-delivery system (e.g. preparing, processing plans; development permits, etc.).*

Public Officials	
Agree	26%
Tend to Agree	31%
Tend to Disagree	21%
Disagree	12%
Can't say	10%
n=42	

A slight majority (57%) of respondents foresee that integration of environmental assessments and municipal planning would increase costs to the private sector, presumably because costs would have to be passed on. Officials in Alberta and Quebec were the most likely to hold this view.. Officials in all other jurisdictions, however, were divided in their opinions.

Those who do not agree unequivocally offered a particularly wide range of responses. This suggests, again, that there is little understanding of full cost accounting, or of how costs are (or should be) distributed among the various sectors.

The comparison with consultants (below) indicates no significant divergence between the two groups.

Environmental Consultants		Public Officials	
Agree & tend to agree	44%	Agree & tend to agree	57%
Disagree & tend to disagree	39%	Disagree & tend to disagree	33%
No Opinion	17%	No Opinion	10%
n=18		n=42	

b4 *An integration of environmental assessment and municipal planning will likely mean that all categories of plans or development projects or works need to have an Environmental Impact Assessment done.*

Public Officials	
Agree	19%
Tend to Agree	17%
Tend to Disagree	29%
Disagree	26%
Can't Say	10%
n=42	

Only just over one-third (36%) of the officials in all six provinces believe that integration means that all categories of plans or development projects or works would need an environmental assessment. A large majority tend to disagree, possibly in the belief that requiring such assessments would not be efficient or effective in every case.

The respondents in British Columbia are especially receptive to the integration proposition. In the other five jurisdictions, opinion ranges more widely.

The views of the consultants contrast significantly with those of the public officials. Three-quarters of them disagree with the statement, while one-third of the public officials agree. The predominance of disagreement responses from both groups, however, supports what appears in the literature, namely that a graduated system of assessment techniques and depths of study or investigation can be adopted to apply across the full range of planning-development projects.

Environmental Consultants		Public Officials	
Agree & tend to agree	17%	Agree & tend to agree	36%
Disagree & tend to disagree	78%	Disagree & tend to disagree	55%
No Opinion	5%	No Opinion	9%
n=17		n=42	

b5 *An integration of environmental assessment and municipal planning will likely mean introducing a new statute or an amendment to the Planning Act, and such is not foreseeable in the present climate or situation.*

NB: Responses to this question were not analyzed.

b6 *An integration of EA and MP will likely mean introducing a by-law at the municipal level, and such is not foreseeable in the present climate or situation.*

Public Officials

Agree	9%
Tend to Agree	17%
Tend to Disagree	17%
Disagree	21%
No Opinion	36%
n=42	

The most revealing finding is that more than one-third of public officials have no opinion on the question. Province-by-province breakdowns might shed further light on this question; but the point to be made here is that very few public officials would seem to favour or foresee a codified, regulatory approach. The same holds true for the consultants.

Environmental Consultants

Agree & tend to agree	28%
Disagree & tend to disagree	39%
No Opinion	33%
n=18	

Public Officials

Agree & tend to agree	26%
Disagree & tend to disagree	38%
No Opinion	36%
n=42	

b7 *An integration of EA and MP will likely complicate the approvals process to an extent that is not likely acceptable to municipalities and/or private sector agencies.*

Public Officials

Agree	10%
Tend to Agree	24%
Tend to Disagree	21%
Disagree	29%
No Opinion	16%
n=42	

In every province except Alberta, respondents tend to disagree with the statement. Respondents in Alberta believe that integration *would* further complicate the approvals process, and that integration would probably not be acceptable to the municipalities and/or the private sector -- especially the private sector. Alberta officials also indicated skepticism about the administrative possibilities or feasibility of formally integrating environmental assessments with municipal planning.

In the other five provinces, the respondents not only appeared more open to change themselves, but seemed also to believe that other agencies -- provincial and private sector -- would be generally amenable to adopting an integrated approvals process.

Notably, taken all together, only *one third of all of the respondents* (34%) tend to the view that an integration of environmental impact assessment with municipal planning *will* complicate the approvals process to an extent that is not likely acceptable (below).

Environmental Consultants		Public Officials	
Agree & tend to agree	33%	Agree & tend to agree	34%
Disagree & tend to disagree	61%	Disagree & tend to disagree	50%
No Opinion	6%	No Opinion	16%
n=18		n=42	

The Questionnaire concluded by asking the participants to select one of four (4) *scenarios* written by the research team. (See Appendix 2)

Each scenario sets out some key premises about the *future situation*, mainly in terms of the social-political-fiscal environment, and then proceeds to depict a corresponding status for environmental assessment in relation to municipal planning.

#1 *Status Quo* -- the status of environmental assessments and their relationships and role with the municipal planning system remain more or less what they are today.

#2 *The provincial-municipal planning system adapts, integrating environmental assessment and municipal planning* -- municipalities adopt many environmental management tools, integration of environmental impact assessment with strategic levels of planning and development decisions, and organizational restructuring accompanied by a more efficacious handling and resolution of environmental considerations.

#3 *Getting environmental assessment done, but outside the municipal system* -- contracting out of certain key planning and environmental services to certified practitioners, no significant statutory or system changes in the environmental assessment framework.

#4 *Consumers and municipal politicians both move in the direction of sustainability* -- municipal restructuring, a re-alignment and renewal of municipal planning practice that adopts sustainability criteria, goals and performance as a fresh or renewed normative foundation for planning.

All but four of the 57 respondents felt confident about their scenario selections. (Question 20.2).

Q20.1 *Select one of the four Scenarios.*

Environment Consultants		Public Officials	
Scenario 1	19%	Scenario 1	12%
Scenario 2	31%	Scenario 2	44%
Scenario 3	38%	Scenario 3	24%
Scenario 4	13%	Scenario 4	20%
n=16		n=41	

The responses to this question are interesting in a number of respects.

- In neither of the two groups is any one scenario preferred by a majority
- Scenario #2 -- the integration prospect -- ranks highest when the two groups are taken together (40%), with Scenario #3 coming next (28%). Scenario #4 appeals to only one in five respondents. Only five of the public officials and three of the consultants prefer the status quo scenario (#1) (these come from five of the six provinces).
- The *consultants* give virtually equal ranking to Scenarios #2 and #3 (together, 69%).
- Close to half of the *public officials* select Scenario #2. Another 44% are divided more or less equally between Scenarios #3 and #4. In other words, one in four public officials opt for Scenario #3 which favoured relinquishing some elements of environmental services to the private sector.

Comparisons between the provinces reveal some interesting divergences:

- A majority of respondents in Quebec select scenario #3 over scenarios #2 or #4. In other words, they believed that environmental assessments would be done, in future, by expertise contracted from *outside* the municipal organization.
- In the other five provinces, the inverse occurred: two-thirds of the officials favoured either scenario #2 or #4 over scenario #3.
 - * In Ontario, five out of seven chose scenario #2.
 - * In Manitoba, the respondents chose either scenario #2 or #4., reflecting sensitivity to the province's initiatives in sustainable development strategies and legislation..

The diversity of views about future prospects is probably due in good part to the differing social-political and economic contexts in the various provinces, and to the regulatory dynamic that characterizes each one. Yet we also thought that the management position of the respondents, and the characteristics of their jobs, might have some bearing on how they saw future. In the event, however, the breakout of responses by position indicated gave no support to this hypothesis.

Selection of Scenarios Among Public Officials

Management Position	Scenario 1 #	Scenario 2 #	Scenario 3 #	Scenario 4 #
Chief Admin. Officer	1	4	2	2
Environmental Officer	1	2	4	4
Head of Planning	3	5	1	-
Municipal Affairs Official	-	3	1	2
Environment Official	-	4	2	-

It is worth commenting on some features of this distribution of the scenario responses.

- The spread of responses illustrates how unlikely it is there could be a convergence on any *single* (or simple) “solution” to the issues and concerns addressed in the Study.
- Only in Calgary did the three *municipal* officials in the Survey each select a different scenario (Scenario #1, #2, and #4). In the other municipalities, at least two among the three officials were in agreement.
- Half the CAOs and the Heads of Planning in the municipalities were inclined to Scenario #2 (the integration prospect). Next favoured by the planning managers was the status quo (Scenario #1).
- None of the planning managers chose scenario #4 (the sustainable development-planning reform variant).
- The two provincial officials in the six jurisdictions were most inclined to Scenario #2 (seven of the twelve responses). A few of this group chose the sustainable development future (Scenario #4). Not one expected the status quo to continue (scenario #1).
- Significantly, only one planning official and two CAOs subscribed to scenario #3. This contrasts with the Environmental Officers (a fifth of the sample) who were inclined to this scenario or to scenario #4.

2.5 Conclusions

Six conclusions are drawn from our survey of public officials:

1. The status quo was not a “solution” for any but a handful of the municipal officials, and it was favoured by *none* of the provincial officials.
2. While change in the direction of integrating assessments and municipal planning was their most frequently registered option, the respondents were far from unanimous in this regard.
3. There was an interesting spread of viewpoints in support of contracting out *and* in support of renewing planning practice by adopting sustainable development norms. While not one of the planning managers shared this perspective, a number of CAOs, municipal affairs officers, and environmental officers (especially) chose this option.
4. Outsourcing of impact and other assessment activities was regarded as a plausible future. Assuming that governments continue with fiscal retrenchment, and that municipal restructuring occurs, this was seen as a persuasive, if only partial, “solution.” Support for outsourcing is not necessarily incompatible with the “integration” scenario #2. In other words, public officials likely foresee that consultant services could or would, in future, be regularly and continuously woven into the day-to-day and year-to-year municipal planning process, whether strategic or ad hoc.
5. Not surprisingly, however, the public officials were most inclined to see environmental assessment done in-house, by municipal personnel. Presumably, this was because they regard this as the best way to retain control over the substantive content of impact assessments, the rigour and depth of impact or other assessment procedures, and control over the resources to be allocated to “environmental considerations” in general.
6. That the sustainable development-planning reform prospect found favour with only one in six of the respondents, and was selected by none of the planning managers, is somewhat surprising. One would have expected more support for this scenario, given the recent ‘sustainability’ initiatives of several provincial governments, and the fact that industry and business are in the process of restructuring for sustainability and changing their operating policies and behaviours accordingly.

One is left with the question: *Is there an environmentally-inspired, environmentally-defined ‘leading edge’ in municipal planning practice today?*

CHAPTER 3

Environmental Assessment: Critiques and Proposals

This chapter reports on the writings of several authors who have dealt with the key issues and concepts of environmental assessments, both generally, and in the context of municipal planning. After an extensive search of the literature on impact assessment and other environmental management tools, we selected ten works for review. All are reasonably current and qualitatively significant, and all bear directly on the topic under study.

Many of the writers discuss environmental assessments in their various applications and comment critically on the effectiveness and the operational deficiencies of assessment practices. Others have interesting things to say about normative concepts and change models. The ample amount of writings available on "what ought to be," however, has not been matched by an equivalent discussion of how changes to the planning and municipal organizational systems might best be implemented. We were also unable to locate studies of the costs and benefits of organizational change models, or reports of research on the issue of capacity-building.

In this chapter, we have divided the titles reviewed into two groups one focuses on critiques and remedies, the second on normative proposals for change. The chapter concludes with a few summary comments.

3.1 Critical Appraisal and Remedies

- ◆ Audrey Armour. 1990. "Impact Assessment and the Planning Process: A Status Report." *Impact Assessment Bulletin*. Vol. 9.

Armour's central message is that environmental impact assessment (EIA) is a *misused tool*. Integration of impact assessment and planning has failed because of undue preoccupation with process and procedural requirements. Inordinate emphasis is placed on impact statement-writing at the cost of efforts to advance the substantive purposes of an EIA.

In practice, EIAs are generally given a project-only focus: responsibility for doing them is being consigned to private consultants and report writers. This means that EAs have become divorced from the public planning and public decision processes. As well, engineers and lawyers dominate the EA practice, with ecologists, biologists, sociologists, anthropologists and other disciplines assigned only a small role.

- ◆ Audrey Armour. 1989. "Integrating Impact Assessment in the Planning Process: From Rhetoric to Reality." *Impact Assessment Bulletin*. Vol. 8.

The effectiveness of an impact assessment (EIA) depends on its point of intersection with planning. The problem is that EIAs are most often used only as a plan evaluation method, and *not as substantive input* to the planning process. Integration of EIA into planning involves reforming the planning process, through the introduction of three corrective functions:

- Technical (or disciplinary) integration, which brings together ecological, social and economic factors. Challenges include budget constraints, data incomparability, and lack of authoritative, integrative evaluation methods
 - Consultative (mediative) integration, which brings competing interests and rival perspectives into a unifying social, economic and political process
 - Integration of organizations and key actors, which brings together private and public implementing agencies into a unified management approach
- ◆ Katherine Davies. 1991. *The Role of Environmental Considerations in Municipal Decision Making in Canada and Some Preliminary Comments on Municipalities and the Proposed Canadian Environmental Assessment Act*. Federal Environmental Assessment Research Office (FEARO).

This report analyzes environmental decision-making on the basis of a survey of 32 cities, small towns and rural municipalities in Canada. Several municipalities have formally adopted an assessment procedure, with authority for it built into the official plan process. The appraisal process has three main features:

- EAs/EIAs are generally done for developments that affect “environmentally sensitive” areas and new suburban areas (greenfield sites). The key problems or challenges faced are the inability of municipal staff to evaluate adequately, due to lack of knowledge and experience, and the absence of guidelines that explain the procedure and purposes of an assessment to the private-sector developers
- The assessment process is wanting, for a number of possible reasons. The extent and force of environmental considerations that actually occur in planning-decision making is highly situational, determined by such things as unclear signals from the provinces, which alternately encourage and discourage environmental assessment; the low priority given to environmental matters by local politicians; and the tendency to make the provincial and federal authorities, rather than the municipalities, responsible for environmental protection and assessment

- When environmental considerations are made part of local planning, the slowness of the development approval leads to greater aggravation and higher costs to industry
- Resources available to the municipalities for doing better with EA, EIA, etc. are insufficient. As a result, only the large and (therefore)"rich" municipalities can afford it

Davies cites three further barriers:

- Organizational behaviour: Traditional departmental specializations and functional “territories,” as well as hierarchical management procedures, rules and program controls, are constraining, negative factors; inter-departmental coordination and collaboration are difficult to establish and maintain on any but an ad-hoc project basis
 - Committees: Many cities have one or more task forces, Roundtables, inter-departmental committees, citizen-administration advisory committees, and so forth, but it is questionable that these have had meaningful influence on development projects
 - Legislation: The Municipal Act and the Planning Act generally fail to prescribe, or refer in an encouraging or operational way to, environmental considerations or the desirability of assessment practices
- ◆ Geoffrey McDonald and A. Lex Brown. 1989. "Planning and Management Processes and Environmental Assessment." *Impact Assessment Bulletin*. Vol. 8, No. 1: 261-275.

The authors point out that environmental assessments (EA/EIA) are generally applied too late in the process and often used to *justify decisions already made*.

Although planners need early advice on likely impacts, the difficulty of predicting and evaluating effects is compounded when these are assessed before all the data are available. At the preliminary stage of project planning and design, the lack of data makes it virtually impossible to complete a persuasive impact assessment.

Moreover, planning units generally have neither the expertise nor the responsibility to do proper environmental assessment.

McDonald and Brown recommend that environmental assessment (EA) be dissolved as a separate, distinctive activity. They advocate the incorporation of assessment practices into the planning process at every stage, with intent and expectations defined appropriately at each stage.

3.2 Normative Proposals and Concepts

- ◆ Arthur J. Conacher. 1995. "The Integration of Land-Use Planning and Management with Environmental Impact Assessment: Some Australian and Canadian Perspectives." *Impact Assessment Bulletin*. Vol. 12, No.4.

According to Conacher, there is no effective, operational correlation between existing regional plans and project-level planning. Proponents of projects/works are not required to show how their projects relate to, enhance, or detract from a regional plan or "bio-region." Regional plans are not specific enough in their prescriptions to be used to establish environmental qualities and remediation targets.

For integrated assessment and planning to succeed, there would need to be:

- One agency responsible for creating and implementing regional plans
 - Environmental considerations inserted into planning at an *early* stage
 - Ongoing monitoring and feedback mechanisms
 - Screening and scoping techniques to identify the nature and importance of specific issues, and to clarify situation-specific expectations concerning the outputs of an EIA
- ◆ T. Diesch. 1993. *Municipal Land-Use Planning and Environmental Assessment: An Inquiry into the Nature of and Potential for Municipal Environmental Assessment in Ontario*. Federal Environmental Assessment Research Office (FEARO).

Diesch proposes a "*Municipal Environmental Assessment*" (MEA) mechanism, with three basic variants in its application:

- Assessments applied to land-use plans: a plan's policies and goals and land-use designations are scrutinized (evaluated) by means of an EA procedure
- Site assessments for site-specific, development projects: initial proposals are subjected to a procedure that identifies the impacts that will have to be assessed in full when the development proposal has reached a sufficiently detailed stage of planning or design
- Area-wide assessments: an assessment is carried out for a geographic area and is generally independent of existing projects, or, at least, can be conducted prior to a specific proposal for a development or a land-use plan

Deploying a mix of MEAs would provide an efficacious approach. There are four main procedural possibilities:

- No regularized EA requirement: EA only has an informal status and would be applied ad hoc, on a management decision basis
- An EA requirement but no independently established EA procedure: an EA is performed as one of a series of tasks that together constitute the planning process
- partial integration of EA and municipal planning: a formal EA procedure is established and operated independently of, and parallel to, the traditional planning process. Thus, assessment activities intersect the traditional planning process at "discrete points" (at inception and completion stages, and at in-between points); assessments and planning would likely be performed independently by two sets of practitioners, who would share information regularly
- full integration: an amalgamation of formal assessment procedures within the planning process

The key obstacles or constraints to integration are, by and large, the same as those enunciated by Davies:

- Limited resources of the municipalities: inadequately trained staff, and/or restricted capacity to hire consultants
 - Uncertain state of knowledge of ecosystems and unreliability of impact-risk predictions, which exacerbate the (negative) responses of politicians and limit the amount that officials have to spend as they try to decide whether to favour or discourage developments
 - Failure of the provinces to play a leadership role by providing financial assistance and expanding mandatory assessment requirements to meet perceived needs
 - Absence of municipal authority to protect environmental features that have been identified by impact assessments done at the municipal level
- ◆ David Lawrence. 1992. "Planning and Environmental Impact Assessment: Never the Twain Shall Meet?" *Plan Canada*. July: 22-26.

Lawrence first discusses similarities and differences in the practices of environmental assessment and municipal planning, and then looks at the advantages to be gained when the two are integrated.

Both practices are said to follow the rational planning model. Both sets of practitioners play the roles of technician, advisor, facilitator, and advocate; both practices focus on the management of changes to the built environment; and both practices have an institutionalized foundation in statutes. They are different because planning is preoccupied with protecting "public interest(s)" and consumer wants and desires in the land development business, while assessments are premised on an imbalance in decision-making, which they seek to correct by placing greater weight on natural-biophysical and social-environmental values. While planning tends to focus on achieving normative goals in and through land use, and by stipulating features of the built environment, an impact assessment concentrates on identifying the negative effects of land developments.

There are a number of advantages to be gained from an integration of EA and planning:

- Integration would invite an extension into the sphere of EIAs of the "non-science" values traditionally synthesized or reconciled in urban planning, with positive effect and outcome
- EIAs customarily look at the singular impacts of a particular project, Unification of the two processes would mean the application of spatial design concepts common to planning in the environmental assessments, and would take into account the cumulative impacts of projects
- The socio-economic considerations customarily taken into account in the planning process can be made more persuasive when environmental impact information is wedded to them
- Economies can be obtained because the two practices are united in one municipal operation

Impact assessments, as such, need only be applied in selected circumstances. However, Lawrence's proposal would require a merging of the legislative provisions for environmental assessments and municipal planning.

The two practices should be integrated at the educational level, i.e. in schools of planning and environmental studies.

- ◆ Nigel Richardson. 1994. "Moving Toward Planning for Sustainability: Integrating Environmental Assessment and Land Use Planning in Ontario." *Plan Canada*. March: 18-23.

Richardson approaches the question of integration with the aim of strengthening and enriching the scope of the municipal planning system. Substantial reconstruction of the planning framework is implied:

- The municipality's planning operations and not the ad hoc impulses of particular development projects or works would provide a context for environmental assessments of different kinds and purposes, regularly carried out.
- Municipal planning would adapt by incorporating the aims and the procedural precepts of assessment practices into all phases of plan-making
- Planning should determine "the what," an environmental assessment, "the how"
- In the implementation phase of a land-use plan (e.g. project-specific development approvals, and where applications fall into pre-defined categories), an assessment procedure would be applied but individualized and tailored to take into account the specific features of the project
- The municipal plan would function, in effect, as an environmental-assessment-screening instrument, thereby obviating the need to apply a distinctive assessment procedure to individual projects

A singularly important element of Richardson's integrative framework is the *Environmental Code*. The Code would be based on goals enunciated by agencies such as the World Conservation Strategy. It would mandate such things as the maintenance of essential ecological processes and life-supporting systems, the preservation of ecological diversity, and the sustainable use of species and ecosystems. It would specify a comprehensive set of environmental policies, standards, and performance criteria, and would be administered much like a Building Code. That is, application would be differentiated in rigour and scope depending on the category of the land-use or building project or works.

Environmental assessments *per se* are to be applied at the "implementation" phase, that is, when development proposals come forward for approval, or when changes to the zoning, etc. are being contemplated. Accordingly, three categories of assessment-type procedures would operate:

- Minor operations -- scrutiny by an elementary checklist. Example: a building renovation project
- Proposals/projects of predefined types and magnitude, a category similar to the present Class EAs -- more thorough scrutiny against the requirements of the Environmental Code. Examples: cases involving serious uncertainty, and all Plan amendments, zoning bylaws, subdivisions of land, and site-development agreements
- Proposals/projects of a predefined nature and/or scale where significant environmental impact can be reasonably expected -- application of the most rigorous assessment procedure. Examples: transportation works, infrastructure

services, waste- management plans or projects, projects with potential impacts outside the municipal boundary

Richardson proposes a 7-step plan-making-development approval system that incorporates an explicit environmental component at each step and calls for continuous referral to environment standards, criteria and principles enunciated in the Environmental Code.

In contrast to what some others have proposed or implied, Richardson contends that it would not be feasible to subject all the possible outcomes of a completed municipal plan to a full assessment review. Nor would such a review be justified or needed in the case of a plan that has undergone what Richardson calls "integrated assessment" procedures such as those specified in his 7-step model. In his view, the only genuinely practical approach is to test the provisions of the municipal plan against the provisions and stipulations of the Environmental Code.

- ◆ State of Israel, Ministry of the Environment. 1992. *The Environment in Israel: National Report to the United Nations Conference on Environment and Development*. Jerusalem, Israel.

The integration of environmental considerations into land-use planning decisions has been a major element of environmental policy in Israel since the early 1970s. Environmental assessments have been introduced into planning at the national, regional *and* local levels. A system of environmental impact statements (EIS) was established for checking the impacts of specific, but detailed, plans and development proposals. Israel has successfully implemented policies for sustainable development within this planning process.

The core of the planning system is a series of "National Outline Schemes." In the Canadian setting, these would be the equivalent of province-wide schemes and policy plans, or perhaps, "strategies." The National Outline Schemes are sectoral master plans. They lay down a sectoral planning structure for the entire area of the country. In some cases, environmental aspects are the dominant considerations. As well, strong emphasis is placed on environmental management principles, as follows: development confined mainly to established urban settlements, and optimizing the use of existing infrastructure; high quality areas of natural and landscape value to be protected; no development in areas exposed to environmental degradation; location and development of industrial parks, with attendant pollution control regulations.

- ◆ David Williams. 1989. "Integrating EA into Resource Management Planning: The U.S. Bureau of Land Management." *Impact Assessment Bulletin*. Vol. 8, Nos. 1 and 2: 161-179.

The mission of the Bureau of Land Management (BLM) is to manage federal lands for multiple uses. The BLM developed a system to integrate planning and environmental impact assessments: an interdisciplinary team of managers and

resource specialists prepare combined documents, with intensive public involvement. Notably, the BLM does not “write-up” the impact assessments/reviews of a plan that has been drawn up; rather, it integrates impact assessments into resource management planning throughout the preparation process.

The BLM practice is similar in the general sense to Richardson’s proposals, though apparently less rule-bound and procedurally prescriptive.

3.3 Summary Comments

A number of the articles (and others not reported here) advocate a practice fully inclusive of “environmental considerations”. Rather than viewing the environment exclusively comprised of ecological, biotic and a-biotic phenomena, they believe that assessments must take social and economic, aesthetic and other factors into account. Some go on to argue that assessment procedures would be enriched and rendered more valuable by an infusion of “non-science” topics.

Arguably, comprehensiveness has its virtues, but the virtue of managerial simplicity, for provincial and municipal institutions, or for members of the public who would like to be better informed about environment issues, is not one of them. Given the current context and the expressed concerns that gave rise to our study, we are convinced that the first order of business for environmental assessment practice is to develop and legitimate, methodologically and substantively, the unique contributions that the ecological and other sciences can make to a betterment of urban development.

Further, assessment practices should be developed in ways that would help to attain the goals of resources conservation and ecological propriety that have awakened public as well as scientific interest in the past two decades. This development, we believe, must stress the ecosystem and biotic and a-biotic phenomena, the quintessential components of a distinctive environmental perspective that the sciences are best equipped to inform.

Richardson's recommendation for an *Environmental Code*, together with a seven-step planning performance and a three-part typology of assessment procedures, is the most coherent of the integration proposals. It joins elements of Diesch and Williams, and it does some felicitous sorting out and clarifying of the thinking of both Lawrence and Diesch.

An Environmental Code would bring to environmental management practices a clearly articulated set of concepts and meanings, terms of practice, etc. that are now lacking. Richardson’s suggestion for a differentiation of substance and procedural rigour by category of project/development proposal, is, by and large, practicable.

One might question, however, whether the Richardson proposal constitutes a feasible model for change and integration. The general proportions and substance of his framework should receive serious consideration: they are all-of-a-piece, and take a long term, developmental view of the practice of environmental assessment. Nevertheless, it must be pointed out that

this model is principally driven by the public sector. The implications of this, politically and in terms of municipal resource capacities, have not been accounted for.

Turning to the studies that focus essentially on the state of affairs in environmental assessment practices (Armour, Davies, etc.), these make clear that environmental concerns are not being as well addressed as well as they might be, due to shortcomings of municipal corporate management, the statutory relationships between provinces and municipalities, or the lack of political leadership. Environmental assessments are applied too late and generally serve only to confirm plan-making decisions already arrived at. Moreover, procedural correctness tends to take precedence over substance. Integrative evaluation methods are underdeveloped, and there is too little data comparability (indicators) between assessment and planning. Financial resources, and the appropriate professional expertise, are lacking or underutilized.

One the other hand, one must bear in mind that it is impossible to generalize for all regions, all municipalities. Although many environmental productions, including impact assessments, amount only to "write-ups" or casual pronouncements for public and municipal-corporate consumption, some municipalities *are* establishing procedures that can conceivably make a difference.

Statutes, leadership and public support all play important roles in the environmental assessment process. Typically, municipalities are constrained in their authority and their responsibilities by the Municipal Act and the Planning Act. The practicability and effectiveness of environmental assessment procedures are rendered problematic by the episodic encouragement-discouragement given by provincial governments. Local taxpayers generally give low priority to the environment. Municipal councils are too often reluctant to lead on environmental matters.

These studies also make clear that certain *organizational factors* inhibit integration or system improvements. Among these are traditional departmental specializations and functional-sectoral "territories" in municipal organizations. Hierarchical (centralizing) management procedures, rules, and controls tend to block creative solutions, innovative approaches and procedures, and effective communication on environmental matters.

CHAPTER 4

Interviews with Public Officials in Six Provinces

This chapter provides an account of the interview-focus sessions organized in the six jurisdictions selected for the study. The project resources allowed for only seven sessions -- Victoria, Vancouver, Calgary, Winnipeg, Toronto, Quebec City and Halifax. Each session numbered between six and eight persons. Because most officials could not offer more than two to three hours, the interviews were conducted in a fairly informal “roundtable” format, with much less structure than is customarily employed in a focus group.

The individuals invited to participate were, in the first instance, chosen from among those who had completed questionnaires in the initial survey. However, a good number of them were unavailable. A good proportion of the participants were therefore “fresh” to the study. In some localities, the liaison person recruited officials from departments other than Municipal Affairs, Environment, and Municipal Planning, for example: from legal, public works, engineering services, health and safety, corporate administration, and the cabinet secretariat.

4.1 Victoria

The Victoria group had a distinctive provincial perspective on the activities of municipalities.

One point made was that there needs to be flexibility in the requirements for environmental impact assessments at the urban development-municipal level. Federal, provincial, and municipal “planning” (substantive requirements, procedures, social-political conditions, etc.) are very different from one another. As well, there can be two or three tiers at the municipal level – policy/strategic planning, major projects and subdivisions, and smaller scale land development projects. The requirements for environmental impact assessment have to be tailored to the scale and the budget of the project, and must show a sensitivity to the situation and development context of the area in question. For example, if no major impacts are to be expected, or no sensitive environmental areas are involved, it is inappropriate to require an onerous or extensive environmental impact assessment.

Some participants also stressed that the terms used in the practice of environmental impact assessment – and to an extent in planning – are frequently misunderstood, leading to a failure of communication. It is important, therefore, for government authorities to help develop some common understanding of terms and definitions.

It is also important that legislation be brought into harmony with best practices in the leading municipalities. Land constraints, high land values and the role of a buoyant market in the

GVRD and elsewhere means that some municipalities can be selective about the kinds of development they want, and impose their own terms. In some places they are levying development cost charges; and Social Impact Assessments (SIAs) are deployed extensively. The session suggested that requirements such as these, along with higher standards, could or would be gradually diffused from the leading municipal practitioners to become general practice in the province.

Victoria participants stated that it is important to move provincial goals towards sustainability. Many communities have done sustainable development visioning, but they have as yet to devise and the ways and means to implement their visions. The session felt that it was important for “Strategic Environmental Planning” to be set out as a provincial mandate, and urged that sustainability goals and targets be linked to monitoring and auditing procedures. The complexity and difficulties in defining indicators and monitoring/auditing were acknowledged.

At the provincial level of policy and strategy, BC is already moving toward scenario 4 (consumers and municipal politicians both move in the direction of sustainability), but practice corresponds better to scenario 2 (provincial-municipal planning adapts, integrating environmental impact assessment and municipal planning). Movement towards one or the other scenario varies from place to place in the province.

4.2 Vancouver

Some differences were observed in scope of thinking and perspectives on the current situation between the “provincial” session in Victoria and the “municipal” session in Vancouver.

The question of scoping arose, for example how to keep municipal-specific environmental impact assessments within reasonable bounds so that the assessment did not end up having to embrace such “planetary” concerns as global warming or endangered species. Second, it was not clear to Vancouver participants whether the environmental impact assessment procedure would be just for capital projects or for land-use plans and other municipal policies and programs as well.

There were also questions – and uncertainties of understanding – regarding methodologies for municipal environmental impact assessments that would be both effective and efficient. Many were concerned about the affordability of adding environmental impact assessment to the municipal planning process, in view of the cost of staffing with expertise, compiling data bases, and conducting environmental studies. They also noted that environmental impact assessments carried out within the federal and provincial contexts are largely for megaprojects and outside the urban socio-economic context. Therefore, established environmental impact assessment methods and procedures might not be readily applicable to municipal planning. Currently, provincial statutes lack the necessary provisions that would induce or allow or underwrite the ability of municipalities to do what they need to do. The

use of Mandatory Development Permit Areas is one option, but the municipalities do not have the resources (staff and finances) to make that option effective.

The environmental-land use domain of powers/responsibility is divided. Municipalities control land use, but provincial authorities are responsible for air and water quality, wildlife, etc. For example, parking requirements are part of the planning-urban development process and could be one instrument for influencing transportation and therefore carbon dioxide emissions, but the federal and provincial transportation planners often work at cross purposes with their programs for freeways and roads. As a result, advocates for more environmentally-friendly transportation modes do not always get support from government agencies.

The participants indicated that the general plans and the mapping done for some municipalities are good, but there is difficulty in dealing with sensitive areas identified by the mapping programs. A key problem is the lack of adequate financial resources for compensation when development of private land has been restricted or prohibited for environmental reasons: municipalities often cannot afford to purchase the development rights.

It was suggested that, at the municipal level, state-of-environment reporting needs to be integrated with social and quality of life issues. The “State, Pressure, Response” model can be used to do that.

Participants raised the question of downloading of responsibilities from higher levels of government to municipalities, without providing the enabling resources. A referral process whereby municipalities can send questions to provincial agents who have control over resources and environmental matters, is in place, but responses are not always adequate. This can be seen in such sectors as agricultural activities, spawning streams, etc. Moreover, staffing of federal and provincial agencies is being cut.

4.3 Calgary

One of the strongest points made in the Calgary session was that there is no standardization of terms, definitions and procedures for any of the practices expected of environmental impact assessment, Environmental Effects Assessments, Environmental Statements, or Environmental Audits. Since the province does not issue standards and guidelines, participants were concerned about the lack of uniformity of requirements, practices and expectations among municipalities across the province. Smaller municipalities do not and cannot, plan seriously or rigorously for environmental considerations. The lack of coherence can have implications for legality and litigation. It could also lead to a two-tiered system which, the participants suggest, could cause businesses to move to localities where requirements are “softest.”

Another point made centres on the municipality’s de facto authority: planners may raise concerns, but the municipality has no authority to do anything about them. The legislation is

there for a municipality to engage in an environmental impact assessment, but it is up to Alberta Environmental Protection to carry it out, and the province may choose not to do, or not to act on the EIA study.

The municipal planning agenda is different from the agenda of Alberta Environmental Protection. As one participant noted, the planning process is good for identifying the problems but can do nothing to actually solve them. Financial resources are also a problem. The province is in the process of cutting municipal grants.

Even assuming a legislative framework or code/by-law in place for doing environmental impact assessments along with municipal planning, the Calgary participants were of the view that the municipality does not have the capacity to perform environmental impact assessments adequately and effectively.

There are problems caused by contradictory authority and judgements among and between the various government institutions that have responsibility in environment and environment-related matters. Needed is a serious look at the interface between the Environmental Planning Act, the Municipal Planning Act, the Tax Recovery Act, Public Health, and other pieces of legislation.

The municipal planning process operates mainly on a site-by-site basis. This presents a further complication if the municipality is to take on cumulative impacts as part of an environmental impact assessment process within the municipal planning system.

Most of the Calgary participants are inclined to see Scenario 1 – the status quo.

4.4 Winnipeg

The invitees from the City of Winnipeg declined or were unavailable to attend this session. This can be partly explained by the fact that, although the Planning and the Environmental Acts are the most relevant instruments in Manitoba as in the other provinces, Winnipeg is governed by its own “City Act,” which makes it autonomous and anomalous in the provincial picture.

Manitoba’s Rural Development offers planning services to the municipalities. Plan-making is not mandatory, but when municipalities do engage in planning, they are drawn into an informal process of satisfying requirements of the *Environment Act* as well. The *Environmental Act* of 1988 brought about environmental impact assessments on private and public projects. Major projects are brought into the formal process through a project environmental impact assessment.

Having both an informal and a formal process of an environmental impact assessment has its advantages and disadvantages. One of the advantages of the informal process is that it helps to make the proponent of a project better informed. However this generally requires the proponent to go through the procedures twice. The informal process does not usually

involve all of the stakeholders. However, it has the big advantage that it serves as a feasibility study for the project: the proponent finds out about public concerns early enough to assess whether it makes sense to try to accommodate them.

The Winnipeg session dealt at length with the anticipated *Sustainable Development Act*. The Manitoba Act will promote sustainable development in government operations as well in the several, major activities of society. It is expected to change the way decisions are made for substantial developments of any type. Economic, environmental and social aspects of a development proposal (land use, industrial development, forestry, roads, etc.) will be considered. The Act will be an umbrella-type coordinating and integrating instrument, administered by the province. It will affect some one hundred pieces of existing legislation. These cannot all be changed at once. The intention is to make the “umbrella” work as both a licensing process, and a “one-stop” review for all of the regulations and legislation relevant to a project. The new Act is supposed to lead eventually to a “blending” of the review procedures of the various other acts, and to formalize the present informal process.

Sixteen sustainable development strategies have already been developed, including sectoral strategies for forestry and mining.

The participants seemed to agree that sustainable development must become the basis of decision-making on planning and environmental matters.

Regarding the prospects for environmental impact assessment and municipal planning, these were seen as in a state of mutual struggle. Under the present statutory frameworks, neither takes precedence of authority over the other, but there is no coordinating mechanism. Different jurisdictions (Planning and Environmental Acts) cannot be tied together. Sustainability Assessment (SA) will provide a new option. The intention is that there will be an SA of any public or private undertaking. Approval will be based on whether a project is “truly sustainable.” This comprehends sensitivity to environmental effects, and therefore supposes some sort of environmental impact assessment, but with what rigour or standards? An agency of the province will adjudicate. Land-use policies will have to take sustainable development into consideration, addressing both environmental and economic issues. How the process is actually implemented is still rather unclear.

The participants indicated a disposition towards either Scenario 2 (integration) or Scenario 4 (sustainability). One participant foresaw a blending of the two. Scenario 2 drew support from those participants who indicated some hesitancy about the ambitious, comprehensive integration role expected of the new Sustainable Development Act. Through guidelines and environmental impact assessments in selected instances, environmental impact assessments could realistically be implemented at the municipal level via the building codes and zoning by-laws. Other participants saw environmental impact assessment and municipal planning as gradually converging in municipal practices, although it will be difficult for engineering, planning and other departmental functions and roles to be joined in a common process develop a common set of expectations.

There was agreement that the planning methodology of today is not mature enough for the task of monitoring/assessing cumulative effects. Lack of financial and expert resources is considered to be the main constraint on the monitoring of cumulative impacts.

4.5 Toronto

Discussion focused around the Ontario *Planning Act*. Under the new Act, the province makes sectoral policies while the municipalities do the planning. It is the municipalities who make plans, regulate, implement, and monitor. Under the new legislation there will be an optional planning process whereby municipalities can combine Environmental Impact Studies (EIS) with the municipal planning process.

The participants commented that the legislation does not set out “exactness.” While it should establish expectations, it should not dictate all aspects. Municipalities must be allowed to take action according to local contexts and situations; different municipalities have to be treated differently. The province should provide research, guidelines and awareness.

There was agreement that community-based decisions are the best ones, and that there needs to be community involvement at the grassroots level. The public must be informed, and convinced about the importance of taking account of, and assessing, environmental considerations within the municipal planning process.

Environmental impact assessment was seen mainly to involve public projects. The municipal planning process looks at private developments. The Planning Act is more normative, while the Environmental Act is more technical and procedural. The two processes have been linked, but not fully or adequately integrated, in certain cases (such as Halton). Class environmental impact assessments are seen to involve approval of a *process*, while full environmental impact assessments are associated with the approval of a *project*, including public works. A class environmental impact assessments can be bumped up to a full environmental impact assessment on appeal, but this is not commonly done, and usually only after public pressure.

The Toronto participants also mentioned problems of communication between departments, at both the provincial and local levels. They believed that organizational restructuring will be necessary. Departments compartmentalized into “silos” are costly and inefficient. Traditionally, long range planning, plans of subdivision, zoning, engineering design, and engineering construction, have separately and collectively ignored environmental considerations. “Environmental planning” has been secondary and usually incidental. There also needs to be separation between the administrative and political process, because political agendas may vary from term to term, and politicians may not always embrace the notions of sustainable development or may vary widely in their receptivity to the concept.

The prospect of integrating environmental impact assessment and municipal planning revolves around the issue of how the municipality determines what business it is in. Once a municipality decides what services it should offer and what roles it should be playing (for

example, as a facilitator of sustainable development in the community), then it can reorganize or restructure around these goals. The City of Waterloo has started a department whose focus is to produce the “product,” defined as the physical environment in which its inhabitants live. Given government downsizing, greater fiscal tightness at the local level, and downloading of provincial programs and services onto local governments, the municipalities are having to rediscover how to do things and further the emergence of “best practices.” One partnership resource is the universities. The University of Waterloo, for example, has a number of working relationships with the City of Waterloo, which enable the City to obtain cost-effective expert services for both planning and environmental studies.

As they innovate and try new approaches in restructuring, municipalities should be encouraged to take chances and allowed to make mistakes. Good ideas should not be institutionalized, as laws can stifle creativity.

For the Toronto participants, scenario 2 (integration), with some aspects of scenario 3 (e.g., use of consultants, proponents pay) seemed to be suggested by the current political-economic climate. Scenario 4 (sustainability) is seen as a more distant possibility and as a gradual outgrowth of scenario 2.

4.6 Quebec City

The Quebec City session dwelt at some length on the present situation and on explanation of issues. With reference to municipal planning, there is no requirement for municipal environmental impact assessment procedures as such. Environmental impact assessment is seen by the municipalities as the government’s responsibility, particularly of the *Ministère de l’environnement, et de la faune* (MEF). The approach taken is sectoral, and is limited to big projects and those outside the urban milieu. Studies are limited to natural environments. Socio-economic impacts and other human concerns are not studied. Environmental impact assessment is commonly viewed as a complex process, carried out and overseen by specialists; because of this, their municipalities hesitate to incorporate environmental impact assessments routinely into their planning.

Related to the foregoing, participants commented on the availability of expertise and financial resources in the province. *Hydro Quebec* and the *Ministère des transports* (MTQ) currently do “90% of the environmental studies” -- the environmental impact assessments. This concentration of the province’s expertise at the service of two state organizations presents a certain “threat,” because the municipalities and the citizens never benefit from the expert knowledge produced. Nor do they benefit from, or get access to, the state’s financial resources or its pool of expertise which they need to make good use of the powers to initiate environmental impact assessments that the LAU (Planning Act) and the MEF already give them.

MEF has been actively considering requiring environmental impact assessments for selected urban projects such as large buildings or major parking areas; but it is not clear whether this

will be done by standard procedure and regulation, or only by issuing guidelines and by public education.

The prospects of advancing the practice of environmental impact assessment in Quebec are not strong. The MEF has not been active in explaining or promoting environmental impact assessment to municipalities or to the ministry's provincial partners. The government is not pushing for it. The municipalities are not pushing. But there are indications of a growing public demand for environmental qualities to be incorporated into regional and local plans. As in other jurisdictions, industry-citizen Roundtables are active.

Certain sectorally-defined ecological issues are, indeed, being addressed. Some planning takes "environmentally-sensitive areas" into account. The Planning Act (*La loi 125 sur l'aménagement et l'urbanisme* -- LAU) provides the necessary powers that would allow municipalities to do environmental impact assessment for the two levels of planning: regional plans for the *municipalités régionales de comté* (MRC) and *plans d'urbanisme* (municipal plans) within local/municipal planning. Some municipalities appear to be applying environmental impact assessment in at least embryonic fashion. In many MRCs, environmental criteria are being incorporated into the municipal planning process, and therefore, by extension, into the municipal plans, which are expected to conform to the regional plan. The most common example is protection of rivers and water courses. At the project planning stage of building permits, too, environmental guidelines are usually to be observed.

Lack of public involvement at the time MRC plans (*schémas d'aménagement*) are drawn up is a particular deficiency of the present system. When consultation does occur, it generally follows after the plan is fixed, that is, when development projects run into difficulties.

The public can sometimes espouse environmental values that contradict those of the scientific experts or the public authorities.

Several substantive, methodological and municipal capacity issues were mentioned by the participants. They noted that there is no established methodological framework to enable environmental impact assessment to be incorporated routinely into plan-making. Municipalities and MRCs do not avail themselves thoroughly or often enough of established criteria and techniques for identifying environmental values and for building in constraints that could give moral and/or legal support for public participation. In this connection, the Hydro Quebec-Portneuf project was cited. Heritage values (*patrimoine*) can and should figure strongly in the conception of "environment"; but there are some conceptual difficulties in making the connection between the architectural heritage, for example, and the environment.

Sustainable development is still too much of an all-embracing, imprecise concept to serve as more than a goal. A good integration of environmental impact assessment techniques with municipal planning might conceivably be a formula for achieving sustainable development. Rather than adopting a sustainable development-based approach, the LAU is essentially land use-procedurally framed legislation. It leaves substantive and normative objectives and

content of the plans up to the regional (MRC) and local municipalities. This is the case in all provinces. Still, normative-substantive advances have been made by the MEF, with the adoption of clean water and coordinated waste management programs by the MRCs. Quebec City is working on a program that explains to developers, officials, and others, how sustainable development would work in the context of urban development. Performance criteria for adjudicating development projects are included. The City has an environmental policy and a “green guide,” but these are still promotional, not regulatory.

The critical factor for bringing about organizational changes that would facilitate an integration of environmental impact assessment and municipal planning will be the provision of expert resources.. Opinion was divided on the relative importance of financial resources. The structures of the planning and environment systems were not regarded as critical.

The Quebec participants seemed pretty well agreed that the region (MRC) is the appropriate level for doing environmental impact assessments. The additional costs would be marginal. The need is for better-trained personnel to manage a process of environmental impact assessment and municipal planning integration. Persons having the basic qualifications (i.e., “planners”) are already employed by the MRCs. It was felt that the proponents of private projects should bear the costs of environmental impact assessment studies.

It was urged that a better assessment process be established, one open to the public and defining “environment” broadly. Rather than assessing projects just against biotic criteria, the process should include heritage, social and economic benefit assessments, and affordability factors, as well as biotic-land-water regimes. In effect, this “full embrace” defines the menu for a sustainable development planning-assessment process.

The importance of undertaking public education about the potentials and possibilities, and about the utility of doing environmental impact assessment routinely, was discussed, but the question, by whom?, was not addressed. The sessions agreed that public authorities need to employ sound marketing techniques to sensitize municipalities about environmental impact assessment and its advantages.

The status quo (scenario 1) was not regarded as an acceptable or likely prospect by this group. While scenario 2 (a systematic, coherent integration of environmental impact assessment and municipal planning) had its attractions, it was not considered likely to happen. Scenario 2 – and, to some extent, scenario 3 – were deemed politically unacceptable, given “deregulation” and government withdrawals from interventionist programs. Scenario 4 found some favour: Consumers, businesses and manufacturers are beginning to reorient their demands and their behaviours towards more sustainable lifestyles, technologies, etc. Scenario 4 fits the present “climate” because it obviates creating more regulatory formalities and complexities in the municipal planning system.

4.7 Halifax

Much of the Halifax session centred on the changes afoot in municipal planning, and on the province's recent initiative, the *Sustainable Development Strategy*.

A discussion paper, *Rethinking the Planning Act* shows that a new Planning Act is being considered. The Paper cites "the desire of planners, municipal councils and the public to encourage more environmentally sensitive and sustainable forms of land use and development." It further refers to municipalities wanting to have a more "proactive" mandate that sensitively links land use and environment concerns; and it expresses their desire to address economic development and the environment in a coordinated, empowered fashion. An expanded range of environmental issues, such as erosion and sedimentation, development in sensitive areas, tree removals and alterations to vegetation, land levels, might be addressed through a land use bylaw.

The Halifax participants tended to see in these Planning Act proposals some smoothing out of current confusion and complexities in the interface between the regulatory procedures of Planning and Environment Departments. Included here would be environmental issues consistently addressed across the whole of the province, such as "sustainable development," "resource management," and "infrastructure location."

A new Planning Act would, it seems, still retain the Environment Department's "necessary approval" for development permits. At present, environmental impact assessment does not formally come into the municipal planning process, but permission for a subdivision/land development project does require a provincial "Environment Permit." This leads to bizarre situations where a developer may obtain City approval, after which the province withholds approval until an environmental impact assessment is done. While a municipality is examining a concept plan proposal for approval, the Environment department might say that no assessment is needed for that project, but this does not constitute an "approval." Glenbourne and other projects were cited as examples of this confusing and vexing, inefficient and costly process. New requirements for environmental impact assessments are being considered. These would probably include joint hearings involving Planning and Environment; an environmental impact assessment would be at the minister's discretion.

Although environmental impact assessments of one sort or another are frequently performed, both at the comprehensive plan preparation stage and at project levels, they are not usually of the formal, procedural-methodological kind stipulated for environmental impact assessments on big resource or infrastructure construction projects in natural environments. Consultants are customarily employed. The Halifax area Birch Cove project (3,000 acres) is a current example. There, Halifax is engaged in a strategic-level environmental impact assessment study that includes, among other things, ecological baseline surveys, constraints identification, landscape views and recreational values. There is no provincial involvement in this process; and the province has no legislative authority to approve a strategic plan such as this one. In the end, it is possible that Environment could squelch a development permit for a piece of the scheme years after it is completed.

It was noted that the new Act would probably have a provision to allow delegation of responsibility from Environment to the municipality in such a situation. One planning

official said that as much as 60 percent of his time is now spent on environmental issues. To the extent that new legislation or changes in the environmental impact assessment-municipal planning regulations require more concerted, more rigorous or extensive environmental investigation at the local level, the participants generally foresaw that most municipalities would face a capacity issue in terms of both human and financial resources.

Paradoxically, while the province has been divesting itself of its roles in municipal planning (subdivision approvals, community planning services, etc.), it has brought in the Sustainable Development Strategy which some people expect will add a further role to municipal planning practice. This combined devolution and role-enrichment will most likely produce demands for expanded expertise and/or financial resources. The sustainable development initiative is at present largely promotional. It sets out principles for a holistic approach to development that *should* govern municipal programs and actions. Waste management, water management and protection, and land and economic development are the key elements. It is expected that the sustainable development strategy goals and performance objectives will be fashioned into the New Environment Act. The City of Halifax will have to develop its own sustainable development performance criteria, suited to its context and special circumstances; applying the provincially-determined criteria would probably not be politically acceptable.

Regarding prospects for the future, a variety of views were offered: The Environmental Act of the 1970s gave lots of promise, but the programmatic follow-through has not been substantial. From this observation, and given the social-economic-political climate, came a suggestion that scenario 1 (status quo) would be an appropriate expectation for the short term. Other participants referred to the growing preoccupation with environmental and sustainability matters in their offices; hence, scenarios 4 and 3 together, “along a continuum,” seemed to be the plausible future.

One participant observed that adapting planning practice to encompass the normative, performance criteria of sustainable development would be a more productive enterprise than “volumes more” legislation and regulation.

CHAPTER 5

Environmental Assessment and Municipal Planning: Challenges and Opportunities For Change

Sustainable Development (SD) and Municipal Restructuring (MR) are two of the more significant present-day forces that challenge the status quo and create opportunities for the resolution of environmental assessment-municipal planning issues. The first two sections of this chapter discuss the salient characteristics of these movements, and considers the prospects for change. Section 5.3 reviews a number of municipal planning instruments, to identify the environmental considerations and assessment activities that might be aligned with particular plan-making activities. Section 5.4 discusses the status of environmental investigations and the municipal planning practice, focusing on current ambiguities and confusions regarding concepts, meanings and procedural terms. Continuing this discussion, section 5.5 attempts to clarify the distinguishable environmental activities, and section 5.6 offers preferred definitions for a number of key terms. Finally, section 5.7 extends the discussion to a broader framework and proposes an “environmental management system.”

5.1 The Emergence of Sustainable Development as a Force for Change

Sustainable Development (SD) is a much questioned concept. For some, sustainability defies the law of entropy; end of argument. Others see SD as a threat because it seems to add another dimension to an already-lumbering regulatory regime of planning and interventionism. Still others see it as nothing more than sound environmental practice. Lastly, a few regard SD as a timely movement for planning and environmental management, a force making for productive, proactive innovation.

Sustainable development owes its prominence to the fact that it integrates environmental, social, and economic well-being. Business and government, citizen and municipal Roundtables, commissions and committees attest to a steadily-growing response, and to corresponding shifts in business practices and public regulation. Provincial statutes, policies and strategies in a number of provinces are poised to overarch established environmental policies and regulatory planning regimes. At the very least, sustainability initiatives seem likely to compound the conceptual and technical concerns that surround assessment-planning practice.

“On-the-ground” experimentation (albeit not yet in Canada) and considerable empirical information suggest that sustainability can, and probably will, exercise a growing influence on the basic tenets of urban planning and urban design, on the technologies of urban development, and on environmental management.

5.1.1 The “Sustainability” Concept

Sustainable development comes at the environment question from a normative and developmental perspective on resource conservation. Sustainability would seek to establish productive ecological conditions consistent with more congenial forms of economic activity and goals of social equity. Sustainability proceeds from an expectation that corresponding changes in consumer behaviour will develop, or can be induced. This would involve a shift to more conservation-conscious consumption. Sustainability also aims to maintain biodiversity and reduce pollution. Environmental assessment, on the other hand, proceeds from a preventive, preservationist orientation, and primarily works to correct or remedy. Consumer behaviours, consumer demands are the progenitors of the environmental stresses and threats that impact assessments seek to remedy, mitigate or obviate. How these two concepts of environment management might converge or meet in planning practice and in regulatory procedures is still an open question.

Sustainable development posits some novel principles, beginning with *inter-generational responsibility for the consumption of resources*. Thus, it proclaims that the earth’s resources and the opportunities for healthful, materially-satisfying life must not be consumed by one generation or by selected classes of people at the cost of other generations and classes. Such principles, we would suggest, differ in some important methodological and conceptual respects from the current assessment-type practices, focused as these customarily are on negative impacts, measures of protection and preservation, mitigation, and so forth.

Many experimental urban development projects have appeared in the past decade. A singularly important fact about these projects is that they deploy innovative land planning and building-architectural design principles that draw profoundly on the ecological-environmental sciences and on conservationist principles. Moreover, the projects are typically served by innovative infrastructure systems at the household and community levels. The experimental projects are, in the main, preoccupied with creating urban ecologies: communities that achieve intimate, connective relationships between built forms and productive, bio-diverse, land ecologies. Alternative technologies are deployed for energy, water and waste, and materials recycling with the object of consuming less, wasting less, and recycling and re-using resources and wasted materials.

Sustainable development invokes as a fundamental principle of all human enterprise that ecological values must be woven into economic, social, and human and community development decision-making. We would note that, because economic development and community development already are established mandates of municipal corporations, the potential for assimilating ecological-sustainability principles is evident. Sustainability further embraces a principle of social efficacy: consumers and ordinary people at the “local level” must participate in decisions that bear directly on their quality of life.

The diffusion of sustainability principles and behaviours in government, in the business sector, in the household, and in the community, is far from a completed process. However, indications are that provincial governments and municipalities are beginning to fashion

sustainability legislation and operating policies. Industry, too, is beginning to respond with novel practices and marketing strategies that reflect sustainability goals.

Yet there is still an absence of concordance. The environmental assessment literature and case studies of practice have not caught up with the “sustainability factor.” This can be seen in the matter of stipulating indicators, in methodologies, in conceptual definitions of assessment procedures and goals, and in the debate over objective-scientific data versus subjective citizen evaluation of environmental performance. Nor has planning practice caught up. The planning system in particular, and the municipal corporate culture in general, abet the currently high levels of resources consumption marketed by the property industry as the natural condition or “consumer supremacy.” But consumer demand merely reflects what the planning system and the industry delivers. Consumers have few choices where the delivery of urban developments and environmental characteristics are concerned.

5.1.2 Provincial Initiatives

In three or four of the six provinces included in the present study, governments are proclaiming sustainable development positions, policies and strategies. It seems reasonable to conclude that sustainable development is poised to induce changes in how municipalities shoulder their planning and environmental management mandates.

However, it is not altogether clear how these provincial gestures will issue in fresh demands on the assessment and planning practices. Just how will they expand the operational responsibilities and expectations for environmental performance? And how will the provincial enactments be made to work in harmony with established statutes that now govern municipal planning? For example, there is talk about “umbrella” policies and strategies, and a “one-stop procedure” for project approvals under sustainable development legislation, but the tie-ins with an already-complex, sometimes procedurally frustrating, assessment and planning situation have yet to be articulated.

5.1.3 Municipal Responses

As reported in Chapter 2, the senior municipal planners and other senior administrators we surveyed were not optimistic about a futures scenario that would position sustainability as the core normative goal of planning practice. It would seem that most public-authority planners (and their private-sector counterparts in the delivery system) are not yet persuaded that the mechanistic land-use procedures and infrastructure system planning that municipalities have operated for decades can or ought to be revisited. A second explanatory factor could be underdeveloped awareness. The emergent body of theory, R&D, and empirical evidence on sustainable development planning in urban contexts, has not as yet permeated the thinking -- or excited the imagination -- of Canadian practitioners. Given the current provincial initiatives in sustainable development, however, it does seem likely to us that there will be shifts of normative purpose.

5.1.4. Desiderata of Sustainability Planning Practice

In the following, we sketch out what we see as the more relevant and critical desiderata of a sustainability planning practice:

- integration of economic development goals with biophysical-environmental and social- equity expectations in community and human development
- a thorough-going commitment of public and private agencies to more meaningful and effective participation of citizens in decision-making on issues to do with the community in all of its facets, including environmental qualities
- decentralization or devolution of waste, energy and water servicing and re-use to local community entities, and technological innovations for waste management, water and energy conservation, recycling, ecological design and management
- less luxurious, more economically-affordable infrastructure
- certain expectations about community self-reliance and community roles in the stewardship of environments

If the twin principles of social equity and democratic local decision-making enunciated by sustainable development are to be meaningfully applied in or through the provincial SD statutes and strategies, it would follow that the provinces will have to face the issue of empowerment and devolution of responsibilities to the municipalities.

We also foresee that municipal corporations will not only have to be re-aligned with the new values and strategies of sustainable development, but also that urban development delivery must work in a more experimental mode, and that municipal planning must be done in partnership with developers. In our view, this suggests a need to invent municipal incentives that can supplement or replace conventional regulatory-control devices.

5.2 Municipal Restructuring

Organizational restructuring in the private sector has been occurring for more than a decade. More recently, restructuring and “re-inventing” has taken hold in governments and public administrations. Municipalities are already experiencing the ripple effects of government fiscal restructuring. Programs and responsibilities are being downloaded to municipalities and third sector agencies in the local community; and capital and operating grants to municipalities are being cut by upwards of 50 percent. Consequently, municipal restructuring will be an increasingly important contextual factor for resolution of particular environmental-planning issues and, more generally, for meeting the challenges of sustainability.

Municipalities spend more money on environmental protection than do any other levels of government. At last count (early 1980s), it was estimated that municipalities spent over \$2.5 billion as compared to just over \$2 billion for the provinces and \$1.5 billion for Canada. The largest proportion of these municipal expenditures doubtless goes to waste management/treatment and pollution/contamination remediation projects. A relatively small proportion goes toward predictive and monitoring activities such as impact and other assessments, or for nurturing further corporate capacities such as environmental indicators and information systems.

Restructuring offers both challenge and opportunity. Modes of unsuccessful restructuring have been identified in the literature. These include imposing across-the-board cuts, making structural changes exclusively on the basis of existing line functions, ruling out the use of outside services or partnerships (i.e. consultants, inter-agency sharing), and re-organizing according to employees' established skills instead of real and emergent "business" needs. The temptation to restructure in these modes will have to be avoided if environmental capacities are to be developed. It has also been noted in the literature that the public is not all that concerned with *who* delivers services -- the private sector, the public sector, the third sector, or a public-private partnership. The customer, the taxpayer, is concerned above all with the quality and the value-effectiveness of services. The municipal corporation needs to match its services to the community's strongest-felt needs and values; it will have to become more customer-focused and better at listening.

Driven though it may be by fiscal concerns, restructuring is the occasion for seeking opportunities. In this perspective, it will be necessary to redefine relationships among and between units within the organization, and reassign missions, roles and tasks. Municipal organizations must focus on responding to changing demands for services in the local community, and on the possibilities of developing new or growing markets among consumers in search of sustainability policies and services, affordable and friendly living environments, and greater choice in urban residential form and in locations for work and business enterprise.

In restructuring, the municipal organization will want to streamline operations, in part by grouping closely-related tasks into renewed organizational units that focus on synthesis and coherently-targeted, measurable environmental/sustainability qualities. Outsourcing for some or all of the monitoring, forecasting and designing functions of the planning-environment system would be theoretically feasible, although its cost and reliability have not as yet been empirically proven. Lastly, the municipal corporation would have to reallocate resources, and undertake capacity-building. There would conceivably be less planning of the old type (regulation, control, reactive assessment) and more of the new type (ecological design and environmental management). Quite likely, this will have to be achieved by redeploying most of the same personnel.

5.3 Overview of Planning Instruments and Potential Scope of Environmental Considerations

The municipal system operates essentially with four plan-making and implementation instruments: *plans, policies and bylaws, development agreements, and guidelines*. In this section we outline the main categories by type and context and indicate the scope of environment issues and concerns that customarily attach to each in practice. We further suggest some of the opportunities for an expanded scope that could conceivably be attached to them.

5.3.1 Regional Plan/County Plan/Metropolitan Area Plan

Such plans usually encompass more than one municipality, and the territory involved is extensive. Their “environmental scope” can be vast and the situation is often made more complex both by the development forces at work, the diversity of natural resources/agricultural lands/human settlements, the task of delineating environmentally sensitive areas and concerns for conservation of heritage resources, and the need to make significant trade-offs in valuation of environmental assets. Transportation, waste management systems, open space conservation, are also likely to figure prominently. A “strategic orientation” is called for that includes a “bio-regional” perspective on future economic development, expansion of settlements, tourism/recreation, and protection of wildlife and other aspects of the natural environment. This level of planning is of the highest technical and management complexity.

Status: a policy- and/or concept-type plan.

5.3.2 Official Plan/General Municipal Plan/Area Policy Plan

Typically a city, town, village plan, covering a territory ranging from large to small, the environmental scope of these plans is usually limited to land use, but may also include protection or enhancement of ecological regimes and habitat/water, soils, woodlands/amenities and recreation. These plans have a strategic character or orientation, invariably focused on growth management: the basic allocations and staging of land developments and infrastructure. Planning at this level involves substantial technical and management complexity.

Status: A policy plan and/or municipal bylaw

5.3.3 Area Structure Plan/District Plan/Residential Community Plan

Typically covering areas from about sixty hectares to a quarter-square mile, these plans have an environmental scope that embraces the determination of concept urban form/land-use

density allocations, neighbourhoods/roads/transport and other urban services and public spaces. Most of them involve environmental impact mitigation, and the designation of environmental reserves or protected areas. Plans have a strategic and medium-to-long-term orientation that deals with development staging, servicing, and infrastructure investment commitments made by the municipality and private sector. In this planning situation there are opportunities for urban design-ecological planning, micro-environmental assessment, and specification of sustainability or other environmental performance criteria. Technical and management complexities are site-dependent (size, attributes, location).

Status: a concept plan and policy, and a zoning/use designations bylaw.

5.3.4 Transportation Plan

Such plans can involve single or multiple municipalities, and customarily cover multiple financing authorities. In most cases, the municipal planning authority is likely to be a participating agency, not the chief responsible agency or final arbiter. The environmental scope of transportation plans covers system impacts and transport corridors, major street systems, construction works, air/noise pollution factors, landscape aesthetic, and corridor and system design impacts on intersecting ecological regimes/open spaces. Avoidance, mitigation and remediation measures are operative. The implementation orientation may be either strategic or short term, bringing into play technical and management complexity ranging from substantial to confined, depending on the particular sites affected, and on the territorial extent of the plan. Opportunities are there for specifying sustainability performance criteria based on energy expenditure, equipment life-cycle assessments, pollution quotas, materials conservation, recycling, and social equity. Technical and management complexities are site- and locality-dependent (size, attributes, location, climate, etc.).

Status: Policy or bylaw regarding financial and works programs.

5.3.5 Subdivision Plan or Development Project Plan

Covering a few to many hectares, the environmental scope of these plans will typically extend to fixing the configuration of properties for housing, business, industry, streets, roads, services design; conserving land and resources for infrastructure. The potential is there for engaging ecological designs. Their implementation orientation is short-term and focused on land development and building projects, infrastructure investment, development agreements with the private sector, micro-environmental assessments and mitigation, and site-specific management. Within limits set by the Structure Plan or Development Agreement, there are possible further opportunities for urban design/ecological planning, and for stipulating sustainability performance criteria. Project impacts assessment and monitoring programs may be included.

Status: Zoning or land-use designation bylaw.

5.3.6 Development Agreement, Development/Construction Permit Approval

Limited to a single building or works site, ranging from a few to many hectares, the environmental scope of these planning instruments would typically cover on-site mitigations/remediations, as well as innovative building and servicing technologies for multiple- and single-site projects. Their implementation orientation is immediate and near term, confined to on-site and off-site effects, servicing and water, waste, energy designs, landscape-ecological regime improvements, and mitigation. Further opportunities for stipulating sustainability performance criteria exist. Land ecology, and building and servicing technologies are the significant technical parameters.

Status: Municipal and private-sector reciprocal commitments regarding site development standards, financial partnerships, building program, and construction standards.

5.3.7 Planning, Urban Design and Architectural Guidelines

Most cities and the larger towns deploy guidelines of one type or another to forewarn the development and building industries and their consultants about the technicalities and standards projects must satisfy. Guidelines set out the municipality's goals, expectations, and minimum standards; they are used when adjudicating the merits and deficiencies of projects. Typically, they do not prescribe environmental assessments. Covering a single building or a site of several hectares, and highly situational in their application, their environmental scope embraces qualities of the environment and other features for site planning and building design (usually visual-aesthetic, architectural neighbourliness, waste management, landscape improvements). Further opportunities exist for specifying sustainability performance criteria, particularly with reference to site servicing and building technologies (waste, water, energy, recycling, etc.). Landscape and building and servicing technologies are the significant technical parameters.

Status: Policy, possibly rules; possibly, force of bylaw.

5.4 Environmental Assessment and Planning

Although environmental assessment have certain intentions, substantive orientations, and statutory requirements in common with planning, there are significant differences between the two practices. These differences, which extend to the state of the art of each, and to the professional and institutional status each enjoys. They have implications for achieving a harmonized, productive practice of environmental impact assessment and municipal planning.

5.4.1 Institutional Status

Municipal planning is a highly institutionalized, professional practice. Its positioning in municipal administration was aggressively developed over a period of 75 years. "Everyone"

today has some understanding of what to expect of the municipality's role in planning and development; and the language and concepts are widely understood in the community. By contrast, environmental assessment has no comparable history, public recognition or position of authority and power in the municipal system.

In the essentials, planning is about articulating civic intentions concerning the management of growth and expansion and redevelopment, about envisioning the form of human settlements, and about persuading local communities and the property industry to subscribe to those intentions. This facet of the practice focuses operationally on land uses, on layout and staging of supporting infrastructure systems, and on the distribution of public (or community) facilities and services. The second facet is development control. Municipal planning units devise policies and regulations, and they negotiate the terms and conditions for approval of development projects. It is here that the levers of planning power are most effectively exercised.

In the present situation, and for all practical purposes, municipal planning holds the commanding position on the "what", the "how" and the "when to" of environmental considerations. Assessment procedures are still largely ad hoc; and environmental management considerations are typically positioned in second (or lesser) rank relative to the traditional preoccupation with land use, infrastructure staging and design, and social facilitation. Environmental practices are not positioned in the municipal corporation with authority or resources comparable to those of engineering, transportation, legal services, property management or planning.

For the most part -- in some places, almost exclusively -- environmental assessment practices rely on private consultants for profile and for establishing credibility in their performance. That is, reliance is placed upon practitioners who are not the "front-line", day-to day managers and decision-makers in the planning-development delivery system. This means that the environmental practice is only tenuously institutionalized "in house." Second, the corps of environmental practitioners is thin and less matured in reputation than that of the planners. Third, in the words of one analyst, "[the environmental assessment] community is split on the fundamental purposes of the process and the importance of good science within it." (Lee, Haworth, and Bunk 1995)

Leaving these differences and constraints aside for the moment, we should recall that "integration" of one form or another *was* favoured by participants in our survey. Moreover, the literature presents persuasive models and arguments for integration. Richardson's (1994) propositions, in particular, are attractive, although they presuppose an operational codification that would challenge or rival the performance criteria of conventional planning (See chapter 3). The Keith and Mulvihill (1995) "cooperative-coordinative capacity" principle is an equally attractive and persuasive, empirically-tested, model for integrative practice; assessment procedures and related matters are explicated in an organizational-development framework that assumes an evolutionary process towards integration, rather than a thorough-going organizational redesign.

Most, if not all, the models for change and integration posit that assessments be organized and managed according to purposes and procedures that are differentiated to take the plan-making circumstances into account. They also presuppose an adaptive municipal organization with the capacity to learn and remember.

5.4.2 Methods, Values, and Ecological Purpose

Municipal planning has been continuously adaptive. Purposes, foundational values and technical procedures of the practice have been reinvented and reshaped as the institutional structures and conditions in Canadian society have shifted and altered. In practice, the role of planning today is more complex and multifaceted than our brief account suggests. Assessment practices, on the other hand, are still in the process of being formed, although they are developing quickly and struggling to establish their purposes and their scientific foundations.

It is more proper to speak of the municipal planning system today as a “delivery system.” The term signifies a marriage or partnership of municipal administration, municipal government, and the property industry. Much of the delivery system process is devoted to negotiating policy and bylaws, and to making deals. This means that the qualitative norms, the indicators and measures, and the operational standards and procedures for determining environmental performance in all its attributes, “built” and “natural,” are continuously being modulated and refined. Principles, goals, public interest and community values, are invoked on the one side, but the operational targets and standards of performance ultimately ascribed to the developed urban environment are, for the most part, mediated by the private-sector partners.

In effect, the delivery system that evolved over the past three decades cultivated and promoted, rather than moderated, the extremes of consumer behaviour. One need only point to the high rates of consumption of land and other natural resources through land development, home-building, and retail and industrial parks projects; to the removal of ecological diversity and agricultural productivity from the landscape of cities and towns; and to the “Cadillac” standards of infrastructure and spatial design. Today, the strains of property and income taxation, shrinking real household incomes, and rocketing household debt are beginning to expose as problematic the present comfortable condition of urban life, not to mention a sustainable future.

Municipal planning subscribes to an eclectic and continuously adaptive repertory of methods and procedures. Similarly, the range and breadth of substantive issues that are today assimilated into planning is impressive. Having no pretensions to science, planning reposes more today on the management arts of political pragmatism. The profession’s historical emphasis on environmental betterment in all of its attributes, and the proud assertion of normative values beyond the casually-enunciated platitudes of “public interest” are not everywhere in evidence. Most important for present purposes, planning admits of no objective measures or procedural criteria for stipulating environmental performance.

As for the practice of environmental assessment, this would seem to hold out the authority of confirmed scientific method and objective measures and criteria; but this is something of an illusion. For example, data deployed in assessment practice are frequently of uncertain reliability, and the calibrations of risk inherent in “levels of data” with health and other impacts are hotly debated. Moreover, methodological uncertainties trouble the environmental sciences; and there is no agreement in the profession on how much it is proper or “effective” to invest in environmental assessment investigation and monitoring, or on how flexible to be in budgeting for unexpected problems that are discovered in the course of development. In short, there are as yet no management or strategic formulas (Lee, Haworth, and Bunk 1995).

In the excitement and promise of the 1970s and 1980s, and in their dedication to environmental betterment and redress, environmental scientists and “environmental planners” have, in a sense, tended to underplay their scientific role and overplay their role in processing environmental values within the community and in political forums. Thus, paradoxically, *environmental scientists* seek to become expert in the planning process, while the planning practice reaches out to embrace *environmental planners* who process social values more than they apply science and measurement. To the extent that “environmental considerations” are “everything”, if they are diffused in this way, it is unclear how the environmental and ecological sciences can work to strengthen the identity of an environmental practice.

Moreover, in the present circumstances, such things as fostering ecological productivity, maintaining bio-diversity, reducing consumption of land and other natural resources, providing for animal habitat in the urban environment, and preserving food production, suffer from want of scientific validation and are given low priority by the urban development delivery system. They exercise no significant influence on decision-makers in either the private or the municipal sector. The tragedy in this situation is one of missed opportunities.

We would argue that scientific method and “hard data” measurements are imperative in order to perform impact assessment, to give a reliable account of environmental considerations, and to anticipate sustainable development. The municipal corporation must take the lead in developing method and measurements, if only because of the default of senior governments in the present era of fiscal retrenchment. Objective information *is* in demand; in its absence, sustainability and environmental betterment have only a mitigated future (to use the language of environmentalists).

The capacities of the municipal organization should be shifted from regulatory control to the progressive applications of ecological science in the creative design of environments (the newly-conceived and the renewable alike), including greenfield sites, urban districts, and the regional setting of municipalities. The operational performance goals of a reformed municipal planning and delivery system would become these:

- ◆ maintenance of ecological diversity
- ◆ systemic nurturing and opportunistic restoration of ecological edges, niches, corridors and islands in the fabric of built environments

- ◆ waste and water recovery and energy conservation through “living machine” technologies in civic and other public agency enterprises
- ◆ elimination and correction of the sources of health-threatening pollution and contaminants
- ◆ optimal conservation of all natural resources and use of alternative energy technologies, in all stages, in all design and building processes, in all settings of urban development
- ◆ encouragement of better planning and building practices, the use of renewable resources, recycling and re-use of materials, through public education and the provision of various incentives and rewards to consumers and industry

It is claimed by industry that these are not *marketable* ideas. However, there are indications from research that consumers will be receptive to them when imaginative and genuine environmental and financial choices are offered. (See Perks and Witton-Clark, 1996).

The challenge, the opportunity is to shift from the application of negation principles of protection and development control to the exercise, in all facets of urban development, of creative ecological design and the principle of “circular metabolism.”

5.5 Conceptual and Terminological Issues

In ordinary communications and in the practices of environmental management, many and various terms tend to be used indiscriminately. “Environmental Assessment” (EA), the term on which the present study was initially centred, is the one encountered most often. Ambiguities and misleading expectations, miscommunication, and practical difficulties can, and do, arise. The effectiveness and the reputation of the assessment procedures that are actually carried out are both casualties of this state of affairs. From the present study (and confirmed by the authors’ independent experience), it is apparent that too few of the critical players -- planners, engineers, environmental managers, and senior administrators -- share “the language.”

In the interviews we conducted with public officials, conceptual clarifications and definitions were often requested. For example, we were asked what the difference is between an environmental assessment (EA) and an environmental impact assessment (EIA), what exactly is intended by an EIA, whether a site environmental assessment (SEA) differs from an impact assessment, and whether an environmental audit is the same as an impact assessment. The state of ambiguity about purposes and methods is aggravated by an absence of authoritative or “harmonized” nomenclature and language.

5.5.1 Distinguishable Environmental Activities

The following list of distinguishable assessment-type activities is intended to set the stage for a discussion of conceptual and terminological issues, with the object of improving both assessment and planning practices.

- ◆ Inventorying and classifying, defining, mapping and describing, and generally *evaluating* an “environmentally sensitive area,” a “natural ecosystem,” a “bio-region,”, or even an “urban ecology”
- ◆ Scoping, predicting and analyzing the likely positive and negative *impacts* related to a proposed development project or land-use plan, irrespective of its scope, or territorial extent
- ◆ Monitoring or auditing the immediate and cumulative environmental effects of a works project or land development project
- ◆ Conducting public or specialist hearings at which predictive, analytical or post-facto assessments and situational evaluations are variously presented, discussed and appraised
- ◆ Assembling and synthesizing information, and reporting on the state of the environment, typically for the municipality as a whole, or for a regional entity
- ◆ Devising mitigation, preservation, remedial and other management measures to deal with probable impacts, to ameliorate environmental damage or stress already in evidence, or to “balance” by recreating valued ecological properties that have been or will be lost to a development project

The last mentioned activity is not necessarily or everywhere practised as an integral part of any of the procedures earlier in this list. In practice, an assessment activity or study might well leave off at a descriptive analysis or forecast.

“Environmental Assessment” (EA) is commonly used by practitioners and some authors as a term of convenience for *several or all* of the environmental activities listed above. Another, even broader term of convenience, one particularly favoured by planning practitioners, is “environmental considerations.” Although it is imprecise and more elastic than EA, “considerations” offers a practical advantage: it can serve to prevent undue commitment to ritualistically performed, codified, environmental procedures. “Considerations” nicely conveys a circumstantial and context-specific approach to determining which environmental factors are most significant and what procedures would be the most congenial ones to deal with them.

5.5.2 Definitions and Nomenclature Changes

Some of the conceptual and terminological vexations that arise can be imagined from the following glimpse of a variety of “official” terms in use and of the changes in terminology that have been introduced recently.

- ◆ The Canadian federal legislation and regulatory provisions of FEARO of the 1970s, in force until 1994, employed the term “Environmental Impact Assessment (EIA).” Abroad, EIA has generally been used as the equivalent, in all essential respects, of “Environmental Assessment (EA),” the preferred term in European countries to designate impact studies. For a long time, Canada’s federal lexicon also included an “Environmental Assessment Review Process (EARP).”
- ◆ Ontario has for some time used EA to mean, more or less, what the federal Act meant by EIA. EA serves to a wide extent across Canadian jurisdictions, although it is not used as the exclusive term for all types of environmental assessment.
- ◆ The development of distinct types of EA is owed to changes in practices in Ontario over the past two decades: for example, the designations “Class EAs” and “Small Project EAs”, which appear as “Class EIAs” in the two questionnaires used for the present Study.
- ◆ Until 1994 the FEARO system had three classes of environmental investigation: (i) the *Environmental Screening Report* -- a modest investigation, (ii) an *Initial Environmental Evaluation* (IEA), and (iii) an *Environmental Impact Statement* (EIS) -- a panel process that entailed study, hearings and recommendations. It thereby established a three-stage procedural framework for a progressive intensification of research and deliberation on environmental considerations.
- ◆ With the promulgation in 1994 of the Canadian Environmental Assessment Act (CEAA), “Impact” was dropped from the lexicon. Since then, a freshened conceptual framework and revised terminology have been introduced. Some of the new terms are “Comprehensive Study,” “Cumulative Effects Assessment,” and “Class Screening Report”. “Comprehensive Study” appears in the regulations in connection with an exhaustive list of types of projects that would be candidates for such studies. The reference to “Class Screening Report” is the first explicit acknowledgement in statute or regulation of a practice that has evolved over the preceding decades.
- ◆ The new Alberta Environmental Protection and Enhancement Act also stipulates a “Cumulative Effects Assessment”. But unlike the revised conceptual framework of the new CEAA, the Alberta Act retains environmental *impact* assessment (EIA) as the defining term of assessment practices.

The recent federal enactment which created the CEAA to replace FEARO formulates four sets of regulations and a set of guidelines whose essential object is to spell out how compliance with the Act is to be fulfilled.

Conceptual issues and ambiguities about intentions, procedural frameworks, standards, and so forth, can occur whenever a provincial authority triggers an environmental assessment. Conflicts can arise between local and provincial authorities concerning standards and expectations, and the environmental values at issue. So it can happen that a development project already worked out with the proponent and judged acceptable by a municipality on *its* terms and criteria may be contested in a subsequent government assessment process. Moreover, in many jurisdictions, adjudication and dispute mechanisms are ill-provided or costly.

A further conceptual difficulty is caused by the fact that the terms “environment” and “planning” are themselves elastic. Is environment confined to the biotic and a-biotic systems and properties of land and natural resources? to “natural ecologies”? Does environmental assessment practice incorporate such objectives as optimal natural resources conservation or ecological carrying capacity?

In the interviews we conducted for this study, we were occasionally told that environmental assessments should consider social issues and impacts, economic development benefit or impact, heritage preservation or impacts, human health and quality of life issues, and concerns for community identity and well-being. In our view, this list of intentions illustrates not only a conceptual elasticity of environmental assessment practice but a yearning for some renewed conceptual framework that would at once define environment more inclusively and re-define the normative purposes of planning. Comprehensive-inclusionary terms, we would note, are also evident to a variable extent in provincial *sustainable development* statutes, strategies and policies.

The theoretical validity and practicability of these claims to comprehensive terms of practice are not under debate here. Suffice it to say, “constructive ambiguity” can be, and has been advantageous to, a progressive development of both planning and environmental practices. Notwithstanding the issue of conceptual and terminological ambiguity should not be readily dismissed. Three points of practical import are worth noting:

- ◆ It is essential to reach a common understanding of currently used terms of environmental assessments in their various contexts and depths of application, if we are to clarify and render less complex the present environmental assessment-municipal planning situation
- ◆ To perform a particular environmental procedure responsibly and efficaciously one must *stipulate* it as clearly as possible
- ◆ Assessments require *indicators*, and these can only be as productive and reliable as are the terms used to define and qualify an assessment procedure

5.6 Redefining Terms

The clarification of three key terms would, we believe, be a useful start in the search for improved effectiveness in the planning-assessment operations of municipalities.

5.6.1 Environmental Management

We would like to see this term used to signify *an application of the full range of environment-related tools and distinctive practices*. In its general compass, environmental management would serve to identify environment-specific concerns, problems and possible solutions, likely impacts, and actual effects, and to determine how these may be addressed in particular planning and development situations.

Management would further determine how, and in what circumstances, various public and private agencies might be expected to use the various tools, and to bear their individual responsibilities. This leaves open the possibility for outsourcing of expertise, off-loading costs and/or specified tasks to industry and business agents, or employing a mix of such arrangements. Environmental management would address implementation, that is, the designation and allocation of resources and information systems adequate to the municipality's overall environmental role, including (among other essentials) public information and a monitoring/auditing program in support of enforcement. It goes without saying that a municipality's environmental management role has to be consonant with provincial statutes, policies and strategies, including Environment, Public Health, Transportation, Agriculture and Forestry, and Sustainable Development.

5.6.2 Environmental Impact Assessment (EIA)

Given the management framework just outlined, and considering the particular ambiguity encountered in practice regarding "impact" and "effects," and the distinction between EIA and EA, we propose that the term Environmental Impact Assessment (EIA) be reserved for those *procedures designed to anticipate and predict impacts on the environment of an intended land use plan, a development project plan or design, and a works or undertaking*. EIA would apply to both large and small-scale sites and projects.

Typically, an EIA would stipulate the mitigation measures to be committed as a condition of plan approval. An assignment of responsibilities for carrying out, and/or bearing the costs of, mitigation, would also be entertained in the substantive terms ascribed to an EIA.

An EIA would thus determine *anticipated* impacts, that is, those identifiable before the fact of land development or project implementation. Planning is an acknowledged before-the-fact practice; an EIA would now be similarly identified, and therefore, some weaving together of the two procedures would conceivably be workable. The "cooperative-coordinative capacity" concept would be particularly applicable where municipal

organizations are consciously on a “developmental” path and aptly structured and managed for “learning” (Keith and Mulvihill 1995).

Three basic types of EIA might be:

- ◆ *Strategic Environmental Impact Assessment (SEIA)*. A relatively new concept, SEIA arises from the growing awareness of limitations in environmental impact assessments that are undertaken relatively late, or at too late a stage of project development. SEIAs would be carried out in the earliest stages of the municipal planning process, and would generally apply to area-extensive plan-making (Bio-regions, Municipal Plans, Structure Plans, and the like). SEIAs set out environmental attributes and issues for in-depth examination at later stages, and they signal risks under varying assumptions about the extent, form and nature of the developments anticipated. They also outline management, mitigation, indicators and monitoring measures for policy consideration.
- ◆ *Project Environmental Impact Assessment*. A full environmental impact assessment investigation for projects identified by discretionary decision of the relevant authority, this type of assessment would extend to site planning or urban design plans, building projects, works, etc.
- ◆ *Class Environmental Impact Assessment*. Applied to projects that are considered too small in scale or budget to warrant “full” environmental impact assessment or where the extent of potential impacts are well-known, these assessments would be accomplished essentially by reference to checklists of criteria and performance standards.

5.6.3 Environmental Assessment (EA)

If meaningful distinctions are to be made, if “environmental assessment” is to be divested of its multiple connotations, it follows from what has just been proposed for Environmental Impact Assessment (EIA) that the term Environmental Assessment (EA) should *not* also be thought of as dealing with possible future states. Our considered opinion is that Environmental Assessment (EA) should be reserved for *assessments that identify, gauge and measure the significance, and give an account of the causes for, what **has** happened to the environment.*

Further, an EA should also deal with measuring and recording how ecological and sustainability features are *improving or coming to fruition*, in consonance with plans or serendipitously, as the case may be. The term EA would thus be limited to after-the-fact evaluations, that is, evaluations done when implementation has been completed. Remedial/mitigation measures might be one of the decision outcomes of an EA, just as with EIAs. Moreover, in practice EAs need not be limited to project-specific developments, but might also be applied to urban ecologies in their entirety, to the ecological-environmental performance of systems such as transportation, waste collection and treatment, storm water management, and possibly even to housing.

While an EA, so defined, would not, strictly speaking, qualify as a procedural component of the municipal planning process per se, this is not to say that information obtained from EAs carried out earlier should not provide valuable input to an analogous planning task at hand. Such is what a learning and developmental-type organization does as a matter of course.

5.6.4 The Importance to Practice of the EIA - EA Distinction

There are practical and institutional considerations in the conceptual-terminological distinction between EIA and EA procedures. Forecasting and normative goal-setting -- the essence of planning *and* impact assessment -- should be kept separate from appraisals of what plans and development decisions have *actually produced* in the way of environmental performance. This is the domain of regular environmental assessment (EA). Planning units in the municipal corporation should not, on principle, be at once the advocates and the judges of their own plans.

Furthermore, the environmental performance expected of a planning operation will necessarily be articulated in terms of *indicators* of one sort or another: indicators of plan-making success, of customer/consumer satisfaction, of community values and terms of acceptance, as well as indicators derived from scientific measures of environmental-ecological performance. But the terms of an EA procedure -- the after-the-fact assessment -- should not be governed exclusively by what the planners and impact assessment experts and community opinion initially thought to be environmentally significant. An EA operation needs latitude to invent other or additional indicators and scientific measures as necessary, ones that the planners did not contemplate or whose importance they were unable to foresee.



5.7 Environmental Management and the Question of Integration

The question of ambiguities and miscommunication apart, assessment practices and concepts are undergoing rapid development and change. However, while governments and municipalities have been re-defining and sub-classifying, they have not been leading agents in an effort to bring coherency and improved rigour to environmental practices. Standardization and harmonization of terms, and guidelines have emerged from within the private sector, assisted by international and national institutions.

5.7.1 An Environmental Management System (EMS) for Municipalities

The Environmental Management System (EMS) concept evolved in the private sector over the past two decades. EMS specifies a set of tools, and how and in what circumstances they might appropriately be used. It comprehends training and information technologies as well as definition and stipulation of procedures. The British Standards Institution, the

world's leading source on the subject, was the first organization to set out guidelines for EMS. This happened as recently as 1994, about the same time the CEAA came out with the revised federal nomenclature and procedures. A number of other institutions in Europe, the USA and Canada are embarked on similar initiatives.

Municipalities in Canada, it seems, have not been asleep at the switch. KPMG Environmental Services reports that 57 percent of the municipalities responding to their 1994 survey had an environmental management system in place. However, *none of them* had established all of the vital components identified in the British guidelines for EMS. Certain other findings of the KPMG survey are of interest. For example, the most helpful management tools were considered to be “frequent monitoring,” “staff training,” “environmental site assessments,” and environmental audits” (71 to 76 percent of respondents so signifying); and the top four factors pressing municipalities to environmental action are given as compliance with regulations, public pressure, employees, and cost savings, in that order.

5.7.2 Harmonization of Assessment and Other Management Tools

In the preceding section, we offered a resolution of the two key terms around which many of the difficulties in meanings and commonly-understood intentions turn. Environmental Impact Assessment and Environmental Assessment are, however, but two in a set of tools that should be deployed in an integrated fashion by municipal managers and planning units. Others in the set are Environmental Auditing or Monitoring, Strategic Environmental Impact Assessment (SEIA), Environmental Policy Statements, State of the Environment Reports (SOER), Policy Environmental Assessments, Environmental or Ecological Performance Indicators, Sustainability/Sustainable Development Indicators, Life Cycle Assessment and Life Cycle Costing, Product and Technology Assessment (purchasing guidelines), and Risk Management. As is the case with almost any tool, the quality and effectiveness of the enterprise at hand increases when the full set is used in an integrated fashion. As an ancient Japanese adage states: “Remember, when you say chisel, you also mean hammer. ...”

Three of these tools would be of particular importance to a municipal management system:

- ◆ *Policy Environmental Assessment.* An emergent practice, this type of assessment is most applicable where assessments are not systematically part of planning and policy making at every level of the municipal administration. The intent is to ensure that the macro policies that drive development should be scrutinized, and in turn be informed, by assessment or impact studies and by monitoring of selected environmental events
- ◆ *Environmental Audit.* A management practice used by private sector companies and governments departments, audits seek to verify and evaluate an organization's compliance with regulations, conformance with in-house and industry-wide guidelines, and (typically) development of action plans for advancing environmental/sustainability goals

- ◆ *State of The Environment Reporting (SOER)*. A periodic, systematic analysis, description and presentation of scientific information on environmental conditions, alterations occurring, and their significance, SOERs have as their key elements data base building and regular data analysis. SOERs are used for defining issues, for increasing understanding, for evaluating success of efforts, for feedback, and for public education.

The need for these several tools to be used in an integrated fashion stems in the first instance from a need to achieve optimally reliable decision-making information, and to provide evaluation and feedback to all sectors of the municipal administration, not to planning units alone. They enable municipal administrations to fine-tune their policies and make more judicious decisions about how best to allocate and distribute resources to such things as impact and other assessments, monitoring, indicators design, and customer satisfaction research.

If harmonizing the environmental impact assessment and municipal planning systems is taken to mean getting the several Canadian jurisdictions to agree to identical enactments and bylaws, then it will probably be a very long and difficult process. On the other hand, reaching consensus on goals and principles, on conceptual terms for procedures, and on mechanisms for informing one another about experiences with practice, is achievable. Reaching a consensus could do much to remove misunderstandings and misconceptions, and advance mutual learning. A further advantage lies in having Canada-wide commonalities that can serve the institutional advancement of the environmental professions. It will also assist Canada to position itself in a global setting where harmonization of normative purposes, standards and practices is already in progress.

Internationally and nationally, a number of multilateral organizations have taken steps to harmonize approaches to the practices of assessment and sustainable development. The International Organization for Standardization (ISO), for example, is working on gaining consensus on a large set of environmental issues under the ISO 14000 series. Because the Canadian Standards Association (CSA) is the secretariat for the ISO 14000 series, Canada will play a significant role in reaching harmonization on various environmental matters at the international level.

The environmental parallel accord to NAFTA also commits the three partners to cooperation on solving environmental problems, and specifies a set of tools for environmental management. There are other exemplary developments. The World Bank has published a three-volume set of guidelines for environmental impact assessments for various types of construction projects. These are becoming widely accepted. The European Union (EU) is trying to homogenize environmental legislation specifically dealing with environmental impact assessments. It has begun a project to determine indicators for sustainable cities development that are intended for monitoring and strategic planning. The European Community's "Europe Environment, Our Joint Future" program is working towards joint policy, action, and norms for attacking the key environmental management issues.

The ISO approach to voluntary acceptance has been widely adopted, especially in Europe. The same is expected for the ISO 14000 environmental series. In Canada, the CSA has a

well established mechanism for gaining consensus on environmental matters. That organization regularly brings together groups of stakeholders to draft and endorse information documents and guidelines. The CSA has already published documents dealing with environmental labelling, life cycle assessment, auditing, terminology, site assessment, environmental purchasing guidelines, pollution, environmental management systems, stakeholder involvement, and risk management. Mechanisms for updating are part of the CSA process, and deficiencies can be corrected. It is important to note that the CSA successfully brings together *stakeholders from different sectors and different levels of government*. However, no comparable institutional developments have occurred among the provincial and territorial jurisdictions. At this point, what we are witnessing in Canada is a free-for-all not immune from free fall.

Last, we would note that the Canadian Council of Ministers of Environment (CCME) has also started a process of harmonization on a number of matters, including impact assessment and state of environment reporting. This process seems to be progressing more slowly than the CSA process described above. There is also some concern that the CCME's current project might be a disguised effort on the part of the federal government to download responsibilities to provincial governments.

CHAPTER 6

Some Recent Initiatives in the Provinces

The environmental impact assessment-municipal planning situation is not static. To a greater or lesser extent, the six provinces and the principal municipalities we have studied have all begun to deal with environmental concerns, develop sustainable development policies, and elaborate a more effective planning-regulatory framework. This chapter will report on some of the more recent of these initiatives, as reflected in the discussion papers, policy statements and other documents forwarded to us, at our request, by the participants in our initial survey. Despite the somewhat unsystematic way in which the materials were assembled, this documentation provides useful insights into the diversity of preoccupation, and the technical flavour of initiatives in the various jurisdictions.

6.1 Canada

The Canadian Standards Association (CSA) has produced a series of workbooks aimed at standardizing the terminology and methodology in the broad field of environmental management. Most recent examples (1994, 1995) are guidelines for *Environmental Auditing*, guidelines for preparing *Environmental Policy* statements and an *Environmental Terminology for Canadian Business*. As part of the International Organization for Standardization (ISO) 14000 series of publications, the CSA is working on guidelines and specification standards for Environmental Management Systems.

6.2 British Columbia

6.2.1 Province

◆ ***Land Use Strategy, Commission on Resources and Environment (CORE, 1995).***

This report recommends adoption of a *Sustainability Act* as a supra-legal framework. It defines measures needed to achieve sustainability, and to put various environmental assessment tools into action. There are five components to the Strategy:

- provincial policy and program direction
- effective participatory planning and public participation in decision making
- coordination of government initiatives across the economic development-social-environmental spectrum
- independent oversight
- dispute resolution mechanisms

The *Sustainability Act* would establish the directive and coordinating mechanisms for the five strategy components.

Further to the proposed *Act* and *Land Use Strategy*, strategic-level policies regarding the use of environmental assessments and strategic plans would be established for all

areas and land use zones; cabinet would be empowered to approve strategic land use plans in order to give legal status to the designated zones and the related management objectives; local resource use and related operational plans will be made consistent with strategic land use plans, and local resource plans are to be approved by regional, inter-agency management committees (IMACs); and BC's land use planning system would be organized into four levels: provincial, strategic, local and operational, with planning staff assigned to regional centres.

◆ ***Environmental Assessment Act (tabled 1994).***

The Act prescribes types and sizes of projects requiring an environmental impact assessment, time periods for public comment, coordination of the environmental impact assessment with applications for other, relevant permits and licences (to be processed concurrently). Activities, developments and works to be covered include industrial, transportation, aquaculture, food processing, water, waste, tourism, energy, mining and other major projects.

The EA Act streamlines the various pieces of legislation that hitherto governed environmental assessments; but it seemingly does little to integrate impact assessment procedurally within the municipal planning process, or to address urban land subdivision and development projects.

◆ ***Growth Strategies for the 1990s and Beyond: Updating British Columbia's Planning System (September 1994).***

Commenting on some environmental issues, this document essentially observes that:

- local government planning and development approvals need to be more forceful in terms of environmental assessments
- improved coordination of provincial activities and initiatives is needed
- "environmental advisory commissions" are needed
- the watershed planning is inadequate and uncoordinated
- Municipal Act should be revised to ensure local governments require environmental impact assessments.

6.2.2 Burnaby (within the Greater Vancouver Regional District)

◆ Burnaby's Official Plan sets goals explicitly directed to a number of environmental issues. It seeks to:

- protect the quality of the air, water and natural landscapes at the municipal and regional levels
- preserve and enhance the quality and liveability of the physical environment
- protect "environmentally sensitive areas."

◆ Burnaby's *State of the Environment Report (SOER) 1993.*

This report reads more like a series of environmental or sustainable development policy goals and intentions than an operationally-committed management statement

(which is the usual intent of an SOER). The SOER seeks legal authority for the municipality to require environmental impact assessments for urban-centred developments, aims to ensure Burnaby's that environmental initiatives are integrated with other municipalities and senior levels of government, and favours cooperation with other municipalities and government agencies to establish high environmental standards.

The report also has some other notable features:

- A vision statement calls for environmental considerations to become an integral part of growth management and land use planning.
- City and regional land use strategies are to be developed with an understanding of ecological consequences; environmental considerations are to be an integral part of the planning and design process for city, public agency and private developments alike; the GVRD municipalities should adopt an environmental code of ethics, pressure provincial and federal governments for strict, consistent environmental standards for all project situations, strengthen enforcement, and increase fines, and penalties.
- The City is to integrate environmental considerations fully into planning and decision-making for all construction, maintenance, land transactions and subdivision activities; and guidelines are to be developed for environmental assessments.

Burnaby regularly prepares SOER reports, which go beyond the traditional SOER by including an "environmental action plan" in addition to the typical base-line data and record of significant environmental events.

6.2.3 Kelowna

Kelowna is developing an inventory, assessment and management strategy for significant natural features within the City. This will provide an information base for land development planning.

6.2.4 Saanich

The Saanich Municipal Council periodically requests environmental impact assessments for land development proposals. The municipality has developed a format and procedure to review the impacts of land development projects and public works proposals.

6.2.5 Vancouver (within the Greater Vancouver Regional District)

The most significant challenge and the greatest preoccupation in Vancouver are growth pressures on an already-built up municipal territory. Planning issues, therefore, revolve around *re-development* and *intensification*; but the City does not have the resources necessary to do an environmental assessment of the capacity of all services, i.e. water, sewer, waste, energy, roads, etc. Most of the City's planning capacities are dedicated to small-scale, site-by-site development projects; thus no strategic-level environmental impact assessment procedures are in place. The Planning priorities are:

- Small-Site Redevelopment -- detailed impact assessments are not considered to be warranted
 - Mid-Sized Redevelopment -- “in house” environmental impact assessments are undertaken for air pollution, and for soil contamination
 - Official Community Plans --- the City is preparing its first "Strategic Plan," with input from the Office of the Environment
- ◆ The GVRD is currently processing a regional land use option, *Creating Our Future*. This targets air quality through transportation-land use measures, strongly favours open space-recreation land conservation, recommends the introduction of ecological “development incentives” to achieve ecologically appropriate urban development, and seeks to encourage residential intensification.
 - ◆ The Task Force on *Atmospheric Change* recommends that sustainability performance criteria be applied in the municipal planning process, and that statements be developed that describe how plans and rezoning proposals will contribute to, or detract from, the City’s objectives on pollution.

6.3 Alberta

6.3.1 Province

- ◆ *Ensuring Prosperity: Implementing Sustainable Development* (Task Force Report, March 1995).

The report sets out five priorities for implementing sustainable development. Among the directions identified is the promotion of public- and private-sector reporting on sustainable development progress. The report also recommends the regular use of environmental impact assessments, environmental audits and state of the environment reports.

There is no reference to environmental assessment-specific needs, to assessment practice improvements, to procedures relative to the municipal planning system, or to urban development approvals. No new codes or statutes are suggested. It seems doubtful that this Task Force work will inspire sustainable development legislation or bring about improvements to the environmental assessment-municipal planning situation.

- ◆ Alberta has established a *Sustainable Development Co-ordinating Council* made up of deputy ministers of Municipal Affairs, Health, Environmental Protection, and Economic Development and Tourism, and so forth. The Council is mainly preoccupied with interdepartmental coordination on matters related to sustainable development and environment protection.

- ◆ There is also a *Standing Policy Committee on Natural Resources and Sustainable Development*, in which various ministers participate. They review government and private-sector activities that have, or are expected to have, environmental impacts.

It is not clear whether these three initiatives will add to or diminish the complexities and recurrent problems in Alberta's environmental assessment-municipal planning context. Nor is there indication as yet that the government is committed to act on the proposals in *Ensuring Prosperity*.

- ◆ *Alberta Vision of Sustainable Development* (Alberta Round Table on Environment and Economy, 1992).

Principles of sustainability for municipal planning are set out in this report, but no codes or statutes or revised standards and procedures for the planning system are suggested. The *Vision* was adopted by more than 100 municipalities. The extent to which these municipalities are operationalizing the sustainability vision is not known, although Calgary may be an exception. As is the case with *Ensuring Prosperity*, the extent of government commitment to *Alberta Vision* is an open question.

- ◆ The *Alberta Planning Act* -- became part of the new *Municipal Government Act* (January 1995).

The Planning Revisions refer to sustainability, but offer no operational instructions, procedural terms, standards, or performance criteria. The process of streamlining departmental approvals is being examined. Decommissioning of the Regional Planning Commissions is underway; but the effects of this on environmental as well as planning concerns and conditions are uncertain. In particular, there is a risk that it may result in inconsistent standards and procedures between larger urban entities and rural municipalities.

None of these Alberta initiatives appears to have measurably improved the environmental-planning situation, or to have effectively addressed the related regulatory-procedural issues. Compared to a number of the other provinces studied, Alberta trails in sustainability policy development, and in advancing concrete measures for environmental assessments within urban development practices.

6.3.2 Calgary

- ◆ *Sustainable Suburbs Study: Creating More Fiscally, Socially and Environmentally-Sustainable Communities* (Planning Department Round Table report and recommendations, April 1995).

This report establishes new planning rules and development standards based on sustainable development principles and goals, based on inputs from the City's senior managers, the development/home-building industry, interest groups, foreign consultants, and university experts. It was adopted as a policy-guidelines document by City Council in July 1995, and a large greenfields site demonstration project was subsequently initiated by a team of City officials and developers (August 1995).

Planning for suburban communities is expected to change significantly as a result of this study:

- a new developer-City team negotiating process in planning and design of greenfield development projects
- less costly, less “luxurious” infrastructure and subdivision/site development standards
- intensification (doubling the current land use density standard)
- ecological land planning
- provisions for effective public transportation service and user access with attendant pollution reductions
- "Community Plans" to replace the Area Structure Plan process, with better input on environment considerations, social structure, housing diversity, etc.

The proposals do not fully embrace the sustainability performance criteria and technologies known from empirical and theoretical studies, such as on-site water-conserving/recycling systems and waste management system, ecological principles applied completely and comprehensively in land/subdivision plans, energy cogeneration, energy conserving housing designs, etc. Also, there is no requirement that developers use environmental checklists or do impact studies. Nevertheless, this initiative promises to give a pace-setting impetus to the local development industry.

- ◆ *Environmental Principles and Goals for the City of Calgary* (Environmental Advisory Committee, 1994).

A citizen-municipal corporate statement, this report sets out a three-part program for Calgary:

- an environmental policy
- environmental principles and goals for the City's planning operations and development projects
- a call for departmental action plans that respect environmental conditions and issues in planning, growth, urban land developments, and in City operations; and action that will promote legislative initiatives by other levels of government.

The report also makes recommendations regarding urban development and environmental assessments that include integrating environmental planning concepts into suburban-community planning, and devising a municipal strategy for natural ecosystems, natural areas, and wildlife habitats. However, it fails to stipulate management-specific programs or procedures. The *Sustainable Suburbs Study*, cited above, remains the only publicly known follow-through on these recommendations.

6.4 Manitoba

6.4.1 Province

The Manitoba Round Table on Environment and Economy has produced various documents, including for example: *A Discussion Paper for a Sustainable Development Act* (1994), and *Sustainable Development Strategy for Manitoba* (1994). These statutory-provincial policy instruments address nine major areas. They include the adoption of sustainable development principles and decision guidelines that would:

- make sustainable development the basis of government operations and policy developments
- amend all provincial acts and regulations to embody sustainable development principles and guidelines
- formalize a sustainability strategy covering the full range of economic-social-environmental considerations at all community and business levels
- introduce "Sustainability Assessments" (SAs) that incorporate issues of the environment, economy, urban conditions, and human development in making development decisions
- ensure that all assessments of the sustainable development qualities of project proposals are done in accordance with effective screening, approval, and licensing processes.

Sustainable Development Strategy also proposes prevention through local mitigation instruments, and an integration of decision making and planning to achieve cross-sectoral (inter-departmental) efficiencies and timeliness in response to development proposals.

The *Environment Act*, *Planning Act*, *Municipal Act*, and the *City of Winnipeg Act* often overlap in their objectives and functions, creating occasional procedural or substantive conflicts, redundancies, etc. The proposed provincial *Sustainable Development Act* would provide for joint boards to assess proposals based on their sustainability performance, benefits and advantages.

6.4.2 Winnipeg

◆ *Plan Winnipeg ...Toward 2010* (1993).

An entire chapter of this *Plan*, titled "Environmental Stewardship," sets out principles for environmentally responsible decision-making. It announced that the City "seeks to promote environmentally-responsible decision-making within both the public and private sectors" It also declares that "the City shall prepare, implement, and periodically review its own environmental impact review and monitoring process." This is to apply to both short-term and long-term impacts for various specified sectors, such as water conservation, waste minimization, energy conservation, and air quality.

As determined by the Minister of The Environment, the City must obtain a licence for any projects, including major infrastructure projects, that may have significant impact. For such projects, a formal environmental impact assessment is required.

- ◆ Part of the provincial *Sustainable Development Strategy* includes policy proposals for the Capital Region (Winnipeg).

Especially important in this connection is Policy 4.1 which refers to Sustainability Assessment (SA). Sustainability Assessment is here defined as “a process to ensure that the decisions of all relevant licensing, approval and screening processes are based on established criteria for assessing the sustainability of the various categories of proposals and projects consistent with and based upon the principles and guidelines of sustainable development.” Several aspects of this policy are worth noting:

- 4.1a provides guidelines for sustainability assessments
- 4.1c stipulates reporting on the municipality’s performance in implementing sustainable development
- 4.1e requires the submission of a SA with applications for a significant development project/works
- 4.1g eliminates overlap/duplication between the provincial and the City's requirements for development reviews.
- 4.1h refers to a training program for elected officials, planners, economic development officers and administrators on the identification and review of environmental impacts

However, SAs would apply only to *significant* proposed developments.

6.5 Ontario



6.5.1 Province

- ◆ *Bill 163: to Revise the Ontario Planning Act, etc.* (November 1994), and *Ontario’s New Planning System* (explanatory document, 1994).

These documents outlined three basic changes:

- Municipalities were to be given greater authority/determinant role in land-use planning and development approvals
- the municipal planning procedures/process was to be streamlined: where authority previously, rested with the province, the province would now set policies and the Ontario Municipal Board would only adjudicate disputes
- development in areas where natural or other hazards to human health and safety may result would be restricted

Bill 163 called for the environment to be protected through a comprehensive set of provincial *Policy Statements*. Environmental Impact Statement (EIS) and E-

Monitoring requirements figure in several of the policies, and municipal planning decisions “must be consistent with” the policies.

The province would rely on *municipal official plans* to implement provincial policies regarding:

- Natural heritage and ecosystems -- Goals 1, 2 specify protection of the quality/integrity of ecosystems, including air, water, land and biota, focusing on a number of key features such as woodlands, valley corridors, water systems, habitat areas, and wetlands
- Community development and infrastructure -- Policies are to promote intensification, compact urban form, and the provision of infrastructure such as public transit
- Housing
- Energy and water conservation
- Mineral Resources
- Agricultural lands -- Policies are to protect such lands by reserving prime areas for the benefit of existing and future generations; alternative uses would be permitted only after an environmental assessment has been done

The new system, whereby the Province pronounces policies and the Municipalities plan and implement, was designed to be clearer and more predictable; developers and citizens would know up front what, specifically, the provincial rules and standards are.

◆ *Environmental Assessment Act.*

Municipalities doing infrastructure planning must address environmental issues. Municipalities may choose to follow a single process that addresses both municipal planning and environmental issues; that is, a provincial regulation will provide directives, and municipalities choosing to follow them would fulfil to satisfaction the key requirements under the Act.

Since July 1993, the Ministry of Environment and Energy has had a subcommittee looking at reforms to the *Environmental Assessment Program*. Two guidelines were drafted: *Preparing Class environmental assessments* and *Bump-ups, Designations, and Exemptions*. The first was intended to clarify the approvals process for proponents preparing or revising a Class environmental assessment by listing the required procedures and by documenting action. The latter guidelines define conditions under which a project assessment procedure can be bumped up from a Class environmental assessment to an individual Environmental Assessment that is subject to the Environmental Assessment Act. The draft further contains provisions for subjecting to an Environmental Assessment certain projects that would not normally be considered for one; and it also contains provisions for exempting projects that would normally be subjected to an Environmental Assessment. While the advantage of these provisions is that they incorporate flexibility into the planning

process, there are no provisions to actually streamline the process so as to make it easier to take up this option.

◆ *Guidelines for the Cleanup of Contaminated Sites*

Proposed by the Ministry of Environment and Energy, these guidelines were criticized on various grounds. Some charged that they would be counterproductive to intensification policy and set unrealistic standards for such things as non-potable groundwater.

6.5.2 Kitchener

The mission statement of Kitchener's strategic plan prescribes an environment that is ecologically sound and responsive to the health, safety, and well-being of the residents. The result has been the adoption of more aggressive and imaginative environmental policies.

6.5.3 Ottawa (within Ottawa-Carleton Regional Municipality)

◆ *Municipal Environmental Evaluation Process* (MEE, adopted 1992)

MEE proposes "assessing the impacts of public and private activities on the environment and determining mitigation measures to prevent, reduce or compensate for these impacts *during the planning phase* of a proposal." Features of note are:

- a screening process whereby certain activities/projects are designated for a detailed MEE study, and others exempted
- MEE to be applied to all applications -- Official Plan Amendments, Zoning By-law Amendments, Subdivisions, Site Plan Control
- a "self-assessment" system whereby managers, planners, engineers, private developers and consultants will state the extent to which the project may have negative effects on the environment, and the measures to mitigate any such effects
- applicants to provide the environmental information

The MEE process will be implemented with existing expertise in the Planning, Engineering and other departments, but training is needed. It is not to duplicate the procedures or requirements under federal and provincial acts.

6.5.4 Peterborough

In 1991, the City published a *Green Paper* suggesting amendments to the Official Plan that include a mandatory environmental impact statements for proposed land-use changes.

6.5.5 Toronto (within Metro Toronto municipality)

◆ *Toronto Declaration on the Environment* (adopted, 1991),

The Declaration commits Toronto to an "ecosystem" approach to resolving environmental problems. Two of its guiding principles are to incorporate preventive

environmental action within planning, and to provide the community with information to make informed choices.

◆ *The Official Plan.*

Toronto's Official Plan sets out comprehensive policies on environmental issues such as water quality and conservation, air quality, waste reduction and management. Further, Council is "to evaluate and promote protection and conservation measures..."; and inter-departmental linkage and process mechanisms are to be explored in order for the Corporation to implement new/emergent environmental issues successfully and to address them strategically. The Plan refers to such environmental management tools as Audits.

Section 2.30 states that Council shall require the completion of an environmental impact assessment study in association with any application for development or any undertaking in a Natural Area, unless the undertaking has already been the subject of a full environmental assessment and is approved by the Minister under the Environmental Assessment Act. A similar provision in Section 2.35 refers to Environmentally Significant Areas.

◆ *State of the Environment Report (1993).*

The report documents the work needed to improve the availability and accessibility of urban environmental quality, management and sustainability indicators; and it proposes a corporate program to establish an interdepartmental information network based on an easily-accessible electronic database/GIS.

6.5.6 Waterloo (within a Regional Municipality)

◆ *Think Tank on Environmental Concerns (1989) and Laurel Creek Watershed Study (the City together with Grand River Conservation Authority, Regional Municipality, Kitchener, and many other agencies, 1990).*

These two studies:

- set out an integrated resource management plan, regional scope
- make recommendations that were incorporated into the Official Plan by amendments
- draw up scenarios for a District Plan -- alternative options for land uses, densities and community, infrastructure and recreation,
- specify that environmental impact assessments be carried out for the scenarios

The Waterloo exercise is a good example of municipal planning and environmental impact assessment applied in an innovative fashion strategically, and on a bio-region basis.

◆ *Environment First (Policy Statement, adopted 1991).*

This policy statement commits Waterloo to "assessing potential environmental impacts in *all* City services and programs ... [and] take actions that are within our

legal abilities in order to optimize environmental benefit.” All development projects must meet a certain number of environmental-site planning requirements; large-scale site plans should contribute to a healthier urban ecology; and development of a Long-Range Environmental Master Plan is recommended.

Waterloo is one of the few municipalities to prepare State of the Environment Reports on a regular basis.

6.6 Quebec

6.6.1 Province

- ◆ *Un nouveau CAP environnemental* --“Conservation, Agent of Progress” (Minister of the Environment, 1987).

The Quebec government’s public promotion of solutions and action on environmental issues, this is an appeal for change of attitudes that lays stress on prevention and obviation of environmental problems. The document sets out seven principles and 17 “action areas” and describes the multitude of agencies and departments, private and public, with whom environment services/actions have to be coordinated and information shared.

No reference is made to environmental assessment-specific tools such as environmental impact assessment, statutes and procedures.

- ◆ *Les Orientations du gouvernement en matières d’aménagement* -- “Planning Directions” (Municipal Affairs, 1994).

This richly-developed, policy and information document describes a comprehensive set of policies/issues for the regional municipalities (MRCs) to address. A major section is dedicated to integrated development of resources. The document further refers to global environment responsibilities; and it expressly adopts, and promotes, sustainable development as the strategic orientation for municipalities to follow. It sets out 14 government “positions” and “expectations” that cover agricultural lands, mining, forests, energy, biological diversity, recreation areas, provincial parks, regional parks, wildlife, resort areas (*la villegiature*), tourism developments, and transportation infrastructure.

Many sustainable development criteria or normative goals and development approaches are included in this document. It is a good *enabling* instrument that allows the municipalities to take significant steps on environment and sustainable development; but there is no reference to procedural or process requirements such as environmental impact assessment or other environmental management tools.

- ◆ *Détermination des contraintes de nature anthropique* (Municipal Affairs, 1994).

The report provides guidance on utilizing certain provisions of the provincial planning statute (the LAU) to establish impact/ “constraint” zones connected to major industries, roads, etc. The focus is on health impact, and on environment-degradation

issues; and the document outlines criteria and conceptual approaches to delimiting constraint zones.

6.6.2 Montreal

- ◆ *L'Environnement à la Ville de Montréal: un premier bilan* (City Planning Service, 1991). This planning document is an inventory-type, information-data-analytical compendium of a wide range of environment and pollution factors, including water quality, air, riveraine flora and fauna, land wildlife and habitat, and soils. It discusses the current state of problems and issues, sets out norms and tolerance indicators, provides definitions of nuisance and of open spaces; and establishes planning goals for the various sectors. However, the City Plan itself fails to follow-through with the necessary policy and action plans.

- ◆ *Orientations and Strategies of the Montreal City Plan* (1992). The “major orientations” in this document focus almost exclusively on the social, cultural and liveability objectives for residential neighbourhoods, issues of density, and urban design. It also deals with reducing pressures on the city’s major natural elements (parks, river edges, private and public woodlands), maximizing open spaces, tree planting, snow removal (impact of contaminants on water quality), and controlling pollution.

No references are made to environmental assessment procedures or to the role of such assessments within the City's planning practises.

- ◆ For its *capital expenditure program*, Montreal uses a list of criteria for project evaluation that includes scrutiny in light of potential environmental impacts.

- ◆ The Planning and Coordination Department has set up an Impact Analysis Division, which has published a *guide to impact analysis* that integrates environmental concerns. This Guide gives administrators a tool to facilitate analysis of any project initiative, from its earliest stage, by identifying impacts and determining the related administrative implications.

- ◆ Montreal has also has been developing a *list of environmental indicators* within one district, with the objective of establishing a monitoring system for the state of the urban environment. This information will be used in part to establish a data bank for environmental impact analyses as and when required.

6.7 Nova Scotia

6.7.1 Province

- ◆ *Sustainable Development Strategy for Nova Scotia* (provincial Round Table, 1992).

This document states a number of goals. Among other things, it seeks to ensure that all effluents to watercourses are of a quality that will obviate adverse impacts, and to clean up existing contamination.

It proposes to:

- establish a single, provincial lead agency with a strong mandate to coordinate the management of water resources in accordance with well-defined principles, goals and objectives
 - develop a comprehensive Water Resource Act
 - integrate water and land use management mechanisms
 - plan on a watershed (bio-regional) basis, with water supply/watershed management protection plans
 - improve the form and function of built environments for community liveability by incorporating “economic, environmental, health, safety, and aesthetic values,” and by including sustainable development criteria and environmental guidelines for land development projects
- ◆ *Rethinking the Planning Act* (Municipal Affairs discussion paper, 1995).
This paper seeks to make planning more in tune with principles of sustainable development. Because the present Planning Act does not provide for a strong link between land use planning decisions and environmental or sustainability considerations, it proposes to:
 - include some *mandatory* content in municipal planning that would deal with matters such as water supply protection and sustainable development
 - establish explicit harmonies with certain provincial policy *documents* (*Sustainable Development Strategy, Clean Water Task Force Report ...*)
 - provide for conditional approval of a development, subject to obtaining necessary approvals from Environment
 - impose off-site development charges

- ◆ *Environmental Assessment Regulations*

Section 8 of the Regulations attempts to avoid the duplication of hearings of other governments/authorities on a project. It gives the minister discretion to hold joint hearings, or to provide for a single hearing.

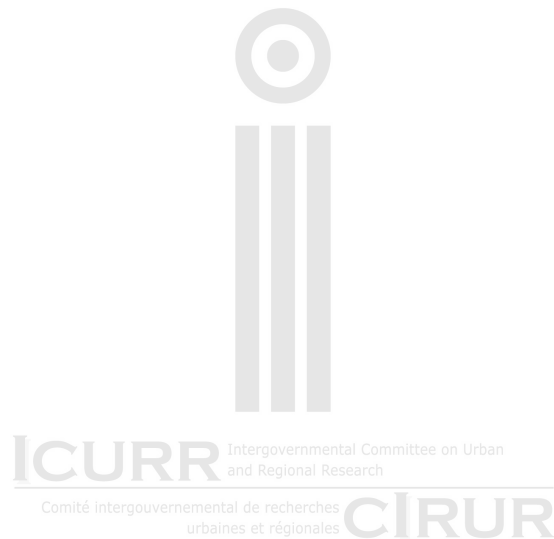
6.7.2 Halifax

Council can require that a development application include a statement of the environmental impacts of the proposed development on and off the site, and that ways and means to mitigate negative effects be spelled out by the project proponent. In practice, only large

projects are requested to prepare an environmental impact assessment; other types of projects must simply discuss environmental implications.

6.7.3 Truro, Kings County

A research project is underway in Truro to determine whether Nova Scotia's strategy of sustainable development is actually being pursued in land use planning. Truro is one of three medium-sized communities whose planning practices are under scrutiny.



CHAPTER 7

Conclusion: A Situational Analysis

In this concluding chapter we summarize our findings about the current situation in environmental assessment practice and planning; and we explore the possibilities and potentials for future improvements in the general practice of environment planning and design. The analysis first deals with Strengths and Weaknesses, and then focuses on Opportunities and Constraints.

7.1 Strengths and Weaknesses

7.1.1 Strengths and Potential for Change

◆ *Adequate Statutory Framework*

The provincial statutory framework in most provinces allows municipal planning authorities sufficient scope to engage in regular and extensive environmental assessment and related management procedures.

◆ *Adaptive Capacity of Municipal Planning*

Historically, the municipal planning system and its practitioners (the “delivery system”) have been adaptive to changing societal values and forces. The substantive purposes and methods of planning have evolved continuously. Although environmental and ecological performance have not yet attained a core position in the planning agenda, the system has the potential to assimilate more thorough and systematic impact assessment and environmental management tools, providing political will and expert capacities are forthcoming.

◆ *Improved Information and Reporting*

Municipalities are becoming increasingly conscious of the need for more and better information pertaining to the environment. Environmental audits/monitoring, data/information systems, state of the environment reports, and environmental impact assessment are key tools for information-gathering. Demand for these tools is likely to increase, in line with growing public awareness, increasing consumer demand in the property industry, and practical implementation of environmental management systems by business and government. Most of the study participants acknowledge that tools such as regular environmental audits and state of the environment reports can provide important and needed feedback information that enhances the effectiveness of the planning system.

◆ *Environmental Assessments Improve Planning Decisions*

As currently applied, impact and other assessments serve mainly to provide a “check and balance” on the municipal planning system. An impact assessment of a development project before the fact provides scrutiny and yields predictive

statements that can help ensure that decisions affecting the biophysical environment are properly addressed.

◆ ***Sustainable Development Practices and Policy Instruments on the Increase***

Most provinces are engaged in developing some type of legislation, policy or strategy concerning sustainable development. In most cases, this framework will encompass all types of issues and concerns (economic, environmental, bio-physical, etc.). In policy development and in day-to-day planning practice, the major municipalities are beginning to grapple with sustainable development and its implications for introducing new norms and practices.

◆ ***Greater Local Control***

In government and municipal restructuring interesting potentials and possibilities are evident for a devolution of responsibilities and authority for environmental assessments to the municipalities and local communities.

◆ ***Improved Education for Planners and Environmentalists***

Education programs in planning and environmental studies are gradually paying greater attention to the application of ecological principles and criteria, and environmental assessment methods in urban development contexts. In the coming decade the corps of better qualified planners and environmental scientists will have grown, thus providing professional and technical capacities that municipal administrations can more readily draw upon.

7.1.2 Weaknesses and Barriers

◆ ***Lack of Common Understanding in Environmental Assessments***

Responses in the two Surveys were not reassuring about the state of comprehension of terms and practices related to impact and other environmental assessments. There is too little common awareness and consistent understandings of what is practiced -- how effectively, how extensively.

◆ ***Under-use and Improper Use of Environmental Impact Assessments***

Too often, Environmental Impact Assessments (EIAs) are only used as an evaluation procedure; that is, they evaluate plans that already exist. The full powers of impact assessment as a predictive tool and preventive measure are not being realized in the municipal planning system. As some critics state it, the present practice of “react and cure” is inefficient, costly to all parties, and socially unproductive.

Impact assessments are generally done on a project-by-project basis. Moreover, even though environmental considerations are progressively being introduced into municipal planning projects and policies, cumulative impacts are seldom considered. Impact assessments are infrequently “strategic” and are also typically applied *too late*

in the planning stage. Back-tracking over a project and resultant delays are expensive.

Outcomes of environmental studies are usually preordained by planning decisions taken earlier. Too often, their findings merely confirm planning decisions, project approvals, or policies that predated the start of the assessment. Because of this, critics maintain that impact assessments often simply “go through the motions.”

◆ ***Narrowness in the Environmental Assessment Practices***

In practice environmental assessments are generally not as comprehensive as they ought to be. The procedure, scope and content of an EA are often biased, especially when a single professional perspective -- legal, bio-science, engineering, management -- dominates the process.

◆ ***Lack of Municipal Capacities***

Municipalities generally do not possess the capacity to do an effective job of integrating or harmonizing assessment and planning. Conceptual and organizational-structural problems, as well as lack of sufficient expert resources, pose constraints to effective action in this area. In particular, municipal organizations lack appropriate knowledge and experience relevant to environmental impact assessments and the biophysical environment, generally. Information systems, specification of indicators, and training-professional development of staff are all underdeveloped.

There is little prospect that impact assessment and municipal planning procedures will be blended or harmonized in the near future. In part, this is because integrative methods are not well-advanced.

Another factor is that too few graduates of planning schools now practicing at senior managerial levels have the basic knowledge or skills to fully understand or manage environmental impact assessments. For the most part, planners are unqualified to comprehend the ecological planning process, and unschooled in the environmental sciences. Too few middle- and junior-level practitioners in the system have these capacities, yet most municipalities assign a low priority to upgrading and developing the capacities of their professional staff in impact assessment or ecological, knowledge areas, practices and procedures. Easily-accessible training programs are lacking.

◆ ***Shortcomings of the Municipal Corporate Culture***

Hierarchical (centralizing) management and controls characterize the municipal corporate environment; and functions are sectorally-divided. These organizational characteristics inhibit holistic approaches to environmental performance in the urban development business. They discourage creative and innovative approaches, interdisciplinary solutions to planning and environment issues, and the establishment of common goals and integrative, ecological perspectives on environmental

management. But the real difficulty stems from the fact that *municipal organizations are not yet learning organizations*.

7.2 Opportunities and Constraints

7.2.1 Opportunities and Favourable Conditions

◆ *Favourable Trends for Change*

Governments and municipalities are preoccupied with fiscal stabilization and retrenchment. Restructuring and learning how to do more with less present opportunities for municipalities and provincial environment authorities to transform planning and environmental impact assessment practices into a more unified and synthetic, normatively-grounded, system.

◆ *Influence of the Sustainable Development Movement*

The sustainable development movement, together with government initiatives in this area, are bringing environmental considerations and ecology into sharper focus. As governments progressively align their legislation, regulations, and development policies with sustainable development principles and sustainable development performance criteria, the application of tools such as environmental impact assessment and audits will be more in demand. Moreover, the system of planning and development is moving toward a family of practices -- Planning, Environment and Sustainability; the opportunity exists for municipal corporations to re-unite and re-invent the family.

◆ *Changes in Consumer Preferences for the Housing Market*

As consumers increasingly demand qualitatively better, less-costly, residential communities, the property development industry is beginning to recognize the value of paying attention to the environment, ecology, conservation and sustainability in the design and marketing of projects. Conditions are becoming more favourable for municipalities and senior governments to devise incentives and partnerships that will inform and assist consumers and the industry alike, and will result in more satisfying environmental-ecological residential community forms and development practices.

◆ *Legal-liability Pressures*

An expanding activation of liability is forcing municipalities to “clean up their backyard” and to take greater precautions in planning projects. In anticipation of due diligence defence, municipalities (like business and industry) will increasingly have to show that environmental health concerns have been adequately addressed.

◆ *Educational Reforms*

School systems and universities are increasingly offering environmental studies. Environment and sustainability courses are now common in engineering,

management and other professional programs. As a result, consumer and professional awareness, and demand will expand and become more instrumental in advancing environmental considerations. Fresh perspectives and environmentally-knowledgeable professionals will be entering the public/municipal system.

7.2.2 Constraints, Contradictions and Conflicts

◆ *Limited Impact of Provincial Legal and Strategic Reform Proposals*

In the provinces where sustainable development strategies or acts are being introduced or discussed, the survey participants are not of a mind on whether these reforms would indeed “streamline,” “de-complexify,” or raise the expectations and standards of practice in the municipal planning-environmental assessment regulatory systems. Further, a significant proportion of participants in provinces where revision of the Planning Act is currently being contemplated were not optimistic that the changes proposed would strengthen the position of environmental impact assessment within the planning system.

◆ *Changes in the Relationship between Provinces and Municipalities*

The debt preoccupation of governments is producing a downloading of responsibilities from the federal government to provincial governments, and from provincial governments to municipalities. Downloading to the municipalities typically fails to be accompanied by an equivalent devolution of enabling powers or funding. Downloading may not be as dramatic in the environment sector as it has been in the areas of social services or health; nevertheless, the trend puts cross-pressures on municipal corporations, who will be hard-pressed to meet rising expectations in environmental management.

◆ *Leadership by Municipal Councils*

Municipal councils generally do not lead -- or are not seen to lead -- on environmental issues. There are substantial differences of perspective and value judgments about environmental priorities between elected provincial and municipal officials, and among the public officials who serve them.

In general, municipal councils are seen to be overly-responsive to local property development interests.

They are also under pressure from local taxpayers who often give insufficient, or narrowly-banded, support where environmental priorities are involved. This failure to give due weight to environmental concerns can be especially pronounced in small and rural communities where the tax burden falls most heavily on residents, rather than business and industry.

◆ ***Legislative and Regulatory Contradictions***

It is said that the provincial Planning Act can contradict or rival the Environmental Act with respect to procedures, requirements, or standards/criteria of performance or expectation. It was often stated to us that there generally is no formal mechanism to determine which "side" of the system will take precedence. Similarly, where more than one planning authority is engaged in a single territory (e.g., GVRD, Metro Toronto), the constituent authorities often generate confusing or contradictory policies, administrative procedures, and standards.

Yet participants in the study generally were not convinced that more legislation or a greater number of regulatory instruments would mean fewer contradictions, inconveniences or governmental inefficiencies.

◆ ***Inadequate Support for Sustainability Among Senior Officials***

Among the survey participants, the planners and the senior administrators do not appear to be enthusiastic about a future scenario centred on sustainability as the core, normative goal of a reformed municipal planning system and practice. This position may be due, in part, to the concern felt by senior managers that the financial resources available to them are stable at best, or even shrinking.

Unless the provinces offer expert or funding assistance, and/or expand their mandatory requirements, it is unlikely that municipal environmental impact assessment requirements and ecological design at the level of municipal planning and large-scale land development projects will become general practices.

◆ ***Inadequate Communication Between Provinces and Municipalities***

The municipalities have a potentially large role to play in the design of such sustainability-conservation measures as energy efficiency and water conservation. At present, however, not enough is being done to involve them at the provincial level, when plans and strategies are being formulated.

◆ ***Provincial Differences***

From province to province, there appears to be variability in the exertion by which environmental policy is administered. Nor, it seems, do the provinces all exert to the extent they might their authority to encourage the fusion of performance expectations between environmental assessment and municipal planning.

7.3 Looking to the Future: The "Family of Practices" and New Directions

As we have seen from the Sometime wide variation of responses to our surveys, Canadian public officials are far from agreeing among themselves about the current situation. We have also noted that this has as much, or more, to do with conceptual and terminological ambiguities related to environmental assessment, as it does with the distinctive geographic, cultural, socio-demographic, and economic features of the regions.

Nor is there a firm and persuasive consensus on any one scenario for the future. Although the “integration” scenario was the most favoured, it did not attract a majority of the survey participants; quite a number of them envisage a future in which the integration and sustainable development options are blended over time. Significantly, the status quo was accepted as a “solution” by only a handful of the municipal officials surveyed in the study; and it appealed to *none* of the provincial officials.

Our review of the literature also showed there are numerous, persuasive models and arguments for integration. We would see some types of municipality favouring the proposals of Diesch and, particularly, of Richardson, while others would likely prefer the “cooperative-coordinative capacity” principle enunciated by Keith and Mulvihill.

Despite the complexity of the subject, and the marked divergences of opinion revealed by our research, we would offer this conclusion: **that the practice of municipal planning must itself become more effectively “environmental” and “ecological,” both procedurally and in its normative content.**

We believe that municipal planning must be transformed into a process of experimentation and design, and that municipal planning must operate more in partnership with the property industry and other private-sector agents. As a renewed and transformed municipal delivery system emerges, we would expect the distinctions between “planning” and “assessment” (the latter defined primarily as an instrument of regulation and control) to recede. At the same time, the impact, threat, and risk procedures of conventional assessment practices will have to be defined more accurately by the foundational and applied sciences, and enriched and strengthened with an R&D ethos.

It is not possible, at present, to specify exactly how all this might be worked out within the various jurisdictions. But we believe that the leadership will have to come from local communities and municipal administrations. Municipalities must transform themselves into “developmental-learning organizations.” As senior governments restructure, divest and retreat from many programs, it seems likely that resources will have to be directed to the municipalities, to increase their *capacity to move in new directions*.

We further believe that a *united family of Planning, Environment and Sustainability* will eventually emerge. The core practices of this “family” will be predicated on ecological-systems thinking and ecologically-minded design values. We are persuaded that today’s essentially mechanistic, land-use practice of planning will be gradually transformed into a proactive and more thoroughly experimental, planning-design process, which has sustainable development as its goal. In this process, *environmental assessment practices and fully-developed environmental management systems* (EMS) at the municipal level will play strong empirical and ideational roles. The need for EIA, EA and other environmental science and ecological expertise should expand, not decline.

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APPENDIX ONE

List of Survey Participants

Numeric Code Key For Province And Municipality

British Columbia=BC=10 Burnaby=11 Vancouver=12

Alberta=AB=20 Calgary=21 Red Deer=22

Manitoba=MB=30 Brandon=31 Winnipeg=32

Ontario=ON=40 Ottawa=41 Toronto=42 Waterloo=43

Quebec=QC=50 Montreal=51 *Quebec City*=52 Sherbrooke=53

Nova Scotia=NS=60 Sydney/Cape Breton=61 Halifax=62

Code For Participants

Municipal:

M1: CAO or City Manager or Chief Commissioner

M2: Principal or Chief Environmental Officer

M3: Director or Head of Planning

Provincial:

P1: a senior official in Municipal Affairs conversant with Planning and related statutes, and municipal operations

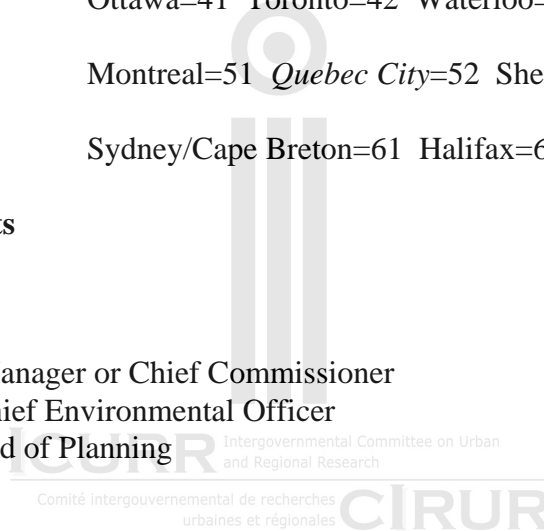
P2: a senior official with responsibilities related to environmental assessment, someone conversant with provincial policies and procedures

[Owing to the statutory division between Winnipeg and the rest of Manitoba, two officials were selected for each]

Environmental Consultants:

EC: referred by municipal and provincial officials in initial survey

ECb: referred by other sources.



Provincial and Municipal Officials Participating in the “Initial Survey”

10-P1	Paget, Gary. Director, Planning and Corporate Relations
10-P2	Crook, Ray. Senior Policy Advisor
11-M1	Parr, Anthony. City Manager
11-M2	Shum, Tim. Chief Environmental Health Officer
11-M3	Luksun, Basil. Planning Department
12-M1	Dobell, Ken. City Manager
12-M2	Losito, Dominic. Director, Environmental Health Division
12-M3	Fletcher, Tom. Senior Planner, Alberta Municipal Affairs
20-P1	Jackson, Wayne. Senior Planner, Alberta Municipal Affairs
20-P2	Lapp, Dave. Planner, Land Use Branch, Environmental Assessment
21-M1	Dawson, Paul. Chief Commissioner
21-M2	Reynolds, Dave. Environmental Services Coordinator
21-M3	Parker, Richard. Director of Planning
22-M2	Batchelor, Don. Parks Manager
30-P1.1	Macknight, Heather. Director, Urban Planning and Development
30-P1.2	Boreskie, Mark. Senior Analyst, Corporate Planning & Business
30-P2.1	Singleton, Robin. City Manager
31-M2	Snure, Ted. City Engineer
31-M3	Nicholas, Richard. Director of Planning
32-M2	MacBride, Barry. Manager of Engineering
32-M3	Loreth, Larry. Planning Department
40-P2	Brownlee, Barbara. Supervisor, Municipal Unit, EA Branch
41-M1	O'Brien, Dave. CAO
42-M1	Stevenson, Arthur. Executive Director, Management Services
42-M2	Warren, John. Deputy Commissioner, Environmental Services Division
43-M1	Byron, Robert. CAO
43-M2	Magee Turner, Barbara. Landscape Manager, Works Division
43-M3	Romanick, Greg. Director of Planning
50-P1	Bouffard, Donald. Ministère des affaires municipales•
50-P2	Joly, Robert. Chef, Division des analyses d'impact et d'environnement
52-M1	de Bellevale, Denis. Directeur Général
53-M1	Boucher, Jean Claude. Directeur Général
53-M2	Edmond, George. Chef des services en environnement
53-M3	Dubor, Lise. Directeur de l'urbanisme
60-P1	Moir, Katrina. Planner, Department of Municipal Affairs
60-P2	Coulter, William. EA Administrator
61-M2	MacDonald, Kevin. City Engineer
61-M3	Foster, Doug. Director of Planning
62-M2	Tomar, Naipal. Environmental Health Engineer
62-M3	Matthews, Richard. Director, Development & Planning

Environmental Consultants Participating in the “Consultants Survey”

10-EC1	Rheim, Derek. Rescan Environmental Consulting Ltd., Vancouver
10-EC2	Stewart, Glenn. Norecol Dames & Moore, Richmond, BC
10-EC4	Finnbogason, Thomas. Envirochem, North Vancouver, BC
20-EC2	Johnston, Paul. UMA Engineering Ltd., Edmonton, AB
20-EC4	Hutchinson, Harley. O’Connor Associates, Environmental Inc.
30-EC3	Hicks, Dave. D.S. Lea Consultants, Winnipeg, MB
40-EC1	Sutherns, John. McCormack Rankin Ltd., Mississauga, ON
40-EC2	Story, Val. Senes Consultants, Richmond Hill, ON
40-EC5	Pinkerton, Bill. Marshall Macklin Monaghan, Thornhill, ON
40-EC7	Longland, Mike. MacViro Consulting Inc., Markham, ON
40-EC10	Le Patourel, Guy. Paragon Engineering, Kitchener, ON
40-ECb1	Dorfman, Mark. Mark Dorfman Planner Inc., Waterloo, ON
50-EC1	Kodsi, Elie. Urgel Delisle et Associes Inc., St. Charles-sur-Richelieu, QC
50-EC2	Lamoureux, J. Jean Pierre Lamoureux, <i>Quebec</i> , QC
50-EC3	Binet, Georges. Nove Inc., Trois-Rivières, QC
60-EC1	Gridley, Norm. Vaughan Environmental Consultants Ltd., Halifax, NS
60-EC2	Muecke, Anne. Griffiths Muecke Associates, Halifax, NS
60-EC3	MacDougall, Scott. Porter Dillon Ltd., Halifax, NS

APPENDIX TWO

Scenarios

Scenario 1 – Status Quo

premises:

The present rank position of “Environment” among the political, economic and social issues on the minds of voters in your province does not change appreciably and from what it is today. And federal, provincial and local politicians remain primarily occupied by fiscal concerns and cutting back or eliminating services and public goods.

the future:

- i) There are no changes to the present municipal planning system and environmental assessment (EA) requirements or legislation or by-laws. Proposed changes toward “integration” are seen as either unnecessary or not effective in the context of organizational resource allocations.
- ii) While certain policies or procedures may be adopted by the municipal corporation independent of provincial statutes or administrative climate -- eg. State of the Environment Reporting, Environmental Policy Statements -- the status of EA and its relationship or integration with the planning system effectively remains what it is today.

Scenario 2 – The provincial-municipal planning system adapts for integrating Environmental Assessments and Planning

premises:

The interconnectedness of global economic and environmental matters are increasingly seen and felt more clearly by people in your province. Most institutions in Canadian society have adopted “environmental responsibility” policies and operations; these increasingly influence industry practices and positionings regarding environment concerns. Restructuring of government and municipal roles goes on, and fiscal concerns are somewhat eased.

the future:

- i) municipal and provincial politicians and industry devise partnerships and protocols that produce a more cost-effective planning and development-regulation system. Environmental assessment (EA) and resource conservation issues become an integral part of a municipality’s strategic development planning.

- ii) private and public developers are engaged in greater self-policing as various external pressures on them build up - such as public regulations and keener enforcement, lending policies of financial institutions, terms of insurance, etc.
- iii) state of the Environment reporting now produces easily-available trend information and data base for municipal planners.
- iv) organization and management of the municipal corporation is gradually transformed. As needed, EA and resource conservation expertise and resources are explicitly introduced into the planning process, whatever the scope of the project or stage of plan-making.
- v) improved environmental planning has the effect of reducing demands for public participation. Gradually the formal EA system is done away with except for projects or events overlooked or not anticipated in the planning process and brought to attention by persons or agencies outside the planning system.

Scenario 3 – Getting EAs done, but outside the municipal corporate system

premises:

Retrenchment of services and restructuring of government and municipal roles goes on. Today's fiscal concerns are only somewhat eased. Privatization, contracting out, partnerships occur more and more. At the same time, "Environment" takes on more importance in the minds of voters in your province.

the future:

- i) certain key planning and environmental services currently provided by the municipal corporation are contracted out. Or they are made the responsibility of the private sector developer, construction agent, property owner, or proponent of a works project. Among these are EAs and (possibly) E environmental audits.
- ii) the current provisions or requirements for EA remain more or less as they are now; as does the statutory planning system -- no significant changes.
- iii) however, only professionally-certified persons are entitled to carry out EA.

Scenario 4 – Consumers and municipal politicians both move in the direction of Sustainability (Sustainable Development)

premises:

The interconnectedness of global economic and environmental matters are increasingly seen and felt more clearly by people in your province. There is progressive change in awareness and understanding, and greater acceptance of Sustainable Development (Sustainability). Politicians become more committed to "thinking globally... acting locally." Consumer choices are changing, people are looking for environmentally-friendly, affordable and sustainable residential communities.

the future:

- i) municipal corporations establish planning-specific by-laws, operations policies and procedures that set Sustainable Development criteria and standards for *all* land use plans and development agreements/permits.
- ii) restructuring in the municipal organization occurs. Resources are marshalled or allocated in new ways so as to operate with sustainability standards and performance characteristics in land use and community design.
- iii) the federal and provincial EA requirements remain more or less what they are now; as does the MP system. But the establishment of sustainability policies and standards achieve many or most of the objectives and regulation associated with EA.

[From the Initial and Second Surveys (May-November, 1994). See Appendix 1 for Questionnaire design]

