

**Reference Guide, Feasibility Study, and
Overview of Institutions Interested in
Cumulative Effects Assessment
Volume III**

**Overview of Agencies and Institutions Interested in
Cumulative Effects Assessment and Management**

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This volume is part of a three **volume** set as follows:

VOLUME I A REFERENCE GUIDE TO CUMULATIVE EFFECTS ASSESSMENT IN CANADA

By Patricia A. Lane, Ronald R. Wallace, Richard L. Johnson and
David Bernard

VOLUME II FEASIBILITY STUDY IN CEARC CUMULATIVE EFFECTS ASSESSMENT (CEA)
WETLANDS OF THE BOREAL AGRICULTURAL FRINGE OF THE PRAIRIE
PROVINCES

By Ronald R. Wallace and Patricia A. Lane

VOLUME III OVERVIEW OF AGENCIES AND INSTITUTIONS INTERESTED IN CUMULATIVE
EFFECTS ASSESSMENT AND MANAGEMENT

By Nicholas Sonntag, Patricia A. Lane, Ronald R. Wallace, Brian M.
Marcotte and Stephen H. Janes

Please note that VOLUMES II and III are addenda to the main report (VOLUME I.)
VOLUMES II and III are available in **xerox** form upon special request to the
Canadian Environmental Assessment and Research Council (CEARC) in Hull,
Quebec.

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VOLUME III

OVERVIEW OF AGENCIES AND INSTITUTIONS INTERESTED IN
CUMULATIVE EFFECTS ASSESSMENT AND MANAGEMENT

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1.0 INTRODUCTION

This volume contains a summary of information on Cumulative Effects Assessment and Management (CEAM) gathered from the five geographical regions of Canada. Approximately eighty people in government, academia and industry across Canada participated in interviews, and the information was compiled by region. A list of these people is given in Section 4.0. Although the interviews facilitated information gathering, they were not designed to provide a statistically valid or comprehensive sample of potential contributors to, and users of, the Reference Guide. A more rigorous sampling survey was outside the Terms of Reference of the project.

The study team was constituted so that the five regions would be adequately covered. Mr. Nicholas Sonntag and Mr. David Bernard of ESSA Limited (Vancouver, British Columbia), collected information on British Columbia and the Territories. They were also responsible for preparing the text. Dr. Patricia A. Lane, P. Lane and Associates Limited (Halifax, Nova Scotia), and Dr. Ronald R. Wallace, Dominion Ecological Consulting Limited (Calgary, Alberta), served as co-project managers for preparing the summary tables and collecting information on the Atlantic and Prairie Provinces, respectively. Dr. Brian M. Marcotte and his student, Mr. Vidar Neuhof, of McGill University, conducted and reported on the Quebec interviews. Mr. Stephen H. Janes of Janes and Associates Limited (London, Ontario) was responsible for the Ontario Region.

In analyzing the interview results, we attempted to identify the overlap between organizations with an interest in cumulative effects assessment and organizations with resources to investigate this area. The information in this Addendum summarizes which organizations are most interested in working with CEARC on aspects of cumulative effects assessment. Ideally, CEARC is looking for organizations where interest, resources, and suitable issues overlap.

In most interviews, respondents indicated interest in participating with CEARC in a case study if the topic of the case study related to their mandate or particular expertise and was at an appropriate scale. Generic, national studies and small, site-specific studies were not of interest to most agencies. The organization most willing to provide support, financial and otherwise, was DFO in the Atlantic Region.

2.0 REGIONAL OVERVIEW

Atlantic Provinces

A summary of responses in the Atlantic Region is provided in Table 1. The most interest in CEA was expressed by government agencies with a specific responsibility for environmental assessment. Some people within organizations such as Environment Canada are already involved in a national committee established to deal with such issues (sub-committee of environmental assessment administrators). Two people also indicated they currently work

with CEARC on other issues. In total ten groups in the Atlantic Region are willing to proceed, with various levels of support, in the immediate and short term on CEA initiatives.

For example, interviewees in the Department of Fisheries and Oceans in both Moncton, N.B., and Halifax, N.S., stated they are interested in providing financial, institutional, and case study support. The types of projects they would like to work on include:

- acid rain research program (effects on fish);
- habitat evaluation and inventory techniques;
- site-specific projects related to impacts by forestry or highway construction;
- habitat enhancement; and
- aquaculture.

The School for Resource and Environmental Studies at Dalhousie University in Halifax has several projects underway that relate to cumulative effects. Environment Canada is interested in a project concerning Hibernia while Mobil is interested in a non-specific industry project such as Halifax Harbour. | ←

The organizations that indicated interest in the longer term wanted to see a more definite proposal, or have a stronger sense of a planned research program, before they would commit themselves. Types of support were varied with the emphasis on institutional and moral support. Other agencies who could be contacted to determine their interest in CEA are listed in Table 2.

Quebec

Most Quebec respondents agreed that there is a need for joint action on important CEA issues. Few, however, are able to participate directly because of problems with the mandate of their agency. For example, one respondent indicated that a "protocol d'entente" would have to be signed prior to their involvement. A summary of responses by the interviewed individuals is provided in Table 3. Some interviewees suggested other individuals/institutions that could be contacted in Quebec; these suggestions are compiled in Table 4.

During the interviews, a number of topics were mentioned that could form the basis for cooperative projects. These included surface mining for minerals, effects of acidic deposition, soil responses to pesticides and erosion, and contamination of water by pesticides or fertilizers. Two organizations seemed sufficiently interested to be willing to devote some funds to cumulative effects research/case studies. These organizations were Canada de Recherche Minerale, and Ministere de l'Engergie et des Ressources.

Table 1. Summary of Organizations With Opportunities For Conducting Research or Work in Cumulative Effects Assessment in the Atlantic Region.

Organization	Timeframe	\$	Types of Support				other	Details
			Institutional	Case Study	Educational	Technology Transfers		
Environment Canada (Administration); Dartmouth, N.S.	immediate		x				advice	Already work with CEARC on other topics
Environment Canada	immediate			x				Bras d'Or Lakes (province is lead agency)
EPS (Toxic Chemicals); Dartmouth, N.S.	immediate		x					On CEARC committee re: effects of toxics
Newfoundland Dept. of Environment; St. John's, Newfoundland	immediate		x					National group of environmental assessment administrators has a subcommittee on CEA in place
Nova Scotia Dept. of Environment; Halifax, Nova Scotia	immediate		x	x		x		Already on national committee concerned with CEA
School for Resources & Environmental Studies, Dalhousie University; Halifax, Nova Scotia	immediate to long term		x	x	x	x		Undertaking research in several areas
Department of Fisheries and Oceans; Moncton, New Brunswick	short term		x	x			technical	Already have group looking at CE
Department of Fisheries and Oceans; Halifax, Nova Scotia	short to long term		x	x	x		data	Have several potential projects

Table 1. Summary of Organizations With Opportunities For Conducting Research or Work in Cumulative Effects Assessment in the Atlantic Region (continued).

Organization	Timeframe	\$	Types of Support				Details
			Institutional	Case Study	Educational	Technology Transfers	
Environment Canada Offshore Assessment Section; Dartmouth, Nova Scotia	short term		?		x		potential for funds from Hibernia effects monitoring fund (1987-88)
Mobil (Oil Co.); Halifax, Nova Scotia	short term						Interested in non-profit industry project such as Halifax Harbour, NOT Hibernia
Environment Canada, EPS; Newfoundland	longer term					x	moral Funding is already committed for this year
Environment Canada, EPS; Dartmouth, Nova Scotia	longer term			x			Interested in using Hibernia
Environment Canada, Parks; Halifax, Nova Scotia	longer term		some				possible research side
Nova Scotia Department of Environment; Halifax, Nova Scotia	long term						

Table 2. Other Organizations, Recommended by Interviewees from the Atlantic Region, That May Be Interested in Cumulative Effects Assessment

Recommended Organization	Source of Recommendation
<u>Other Federal Government Departments</u>	
Canadian Wildlife Service, Fredericton, N.B.	DFO, Moncton
DFO, Science Sector and Assistant Minister, Ottawa	DFO, Ottawa
Department of National Defence	EPS, Newfoundland
Department of Transport, Highways	Mobil, Halifax
Public Works Canada	EPS, Newfoundland
<u>Provincial and Regional Government Departments</u>	
Cape Breton Development Corporation	N.S. Department of Environment
New Brunswick Dept. of Natural Resources and Energy - Fish and Wildlife Branch	N.B. Department of Environment
<u>Other Regional and Local Groups</u>	
Regional planning organizations i.e., Metropolitan Area Planning Commission	SRES, Dalhousie University, Halifax
Local interest groups i.e., Wilderness Society	Nfld. Department of Environment
<u>Industry Groups</u>	
Canada Newfoundland Offshore Petroleum Board	Environment Canada, Dartmouth
Canadian Electrical Association	DFO, Moncton
Canadian Mining Association	
Chemical Producers Association	
Pulp and Paper Association	
PACE	Mobil, Halifax
<u>Power Utilities</u>	
Newfoundland and Labrador Hydro	Nova Scotia Power Corporation
Quebec Hydro	DFO, Moncton
<u>Other</u>	
Centre for Water Resource Studies (TUNS)	N.S. Department of Environment
World Toxicology Fund	EPS, Toxic Chemicals, Dartmouth
World Wildlife Fund	EPS, Edmonton

Table 3. Summary of Organizations With Opportunities For Conducting Research or Work in Cumulative Effects Assessment in Quebec.

Organization	Timeframe	\$	Types of Support				Details
			Institutional	Case Study	Educational	Technology Transfers	
Bureau d'audiences publiques sur l'Environnement	short				x		
Centre de recherche minérale	longer	x	x	x			
Direction de la recherche Ministère de l'Énergie et des Ressources	longer	x	x	x			Especially interested in joint projects on acidification
Direction de Protection du Territoire Agricole, Ministère de l'agriculture, des pêches et de l'alimentation	longer						Could possibly provide case studies
Service de protection de l'environnement agricole, Min. de l'agriculture, des pêches et de l'alimentation	short			x	x	x	
Ministère du Loisir, de la Chasse et de la Pêche							

Table 4. Other **Organizations** Recommended by Interviewees From Quebec,
That May Be Interested in Cumulative Effects Assessment.

Organization	Service/Contact
Direction de Evaluations Environnementales , Ministère de L'Environnement , Quebec	Dir. Bureau d' Audiences Publiques sur L'Environnement , Min. de L'Environnement du Quebec
Centre de Recherche Noranda , Pointe Claire	Chef du Service de la technique minière, Centre de recherche minérale
Service de Recherche en Sol, Min. Agriculture des Pêcheries et de l'Alimentation , Quebec	Direction de/Protection du Territoire Agricole , Min. Agriculture etc., Quebec
Direction de l'assainissement agricole, Min. de l'environnement, Quebec	Service de protection de l'environnement agricole

Ontario

The summary of responses to the questionnaire did not contain specific agency names, therefore only general conclusions can be made. (See Table 5 for responses.) Overall, most groups expressed interest in immediate to short-term involvement in a CEA project. There is pressure to improve techniques and methods because new legislation in Ontario is creating a need for more extensive environmental impact assessments (EIAs). Utility companies showed the most interest and were already trying to do something in this area.

Prairie Provinces

The respondents to the questionnaire were largely from provincial agencies or research organizations. As indicated in Table 6, in the short term it is research organizations that are most interested in working on CEA issues. These groups can provide primarily educational or technology transfer support. Nova, An Alberta Corporation (a private company), would like to participate in a case study, as would the Natural Resources Institute at the University of Manitoba.

The remainder of the responses were less positive and did not give a clear indication as to what type of support could be provided. An underlying response was that for a case study to be supported in the Prairies, it had to be relevant to the needs and perspectives of people in that region, particularly in Alberta. Other organizations, suggested by respondents, who could be approached are listed in Table 7.

British Columbia, Yukon and the Northwest Territories

In this region of Canada there are no short-term or immediate prospects for support in a CEA project (Table 8). Most support in the long term would only be for case studies, and these case studies would have to be closely related to the mandate of the organization. Organizations with the most interest in this topic are the School of Community and Regional Planning at the University of British Columbia and British Columbia Hydro. EPS in North Vancouver was the only organization to offer some office facilities for a project. Potential contacts with other groups are listed in Table 9.

3.0 SUGGESTED APPROACHES FOR DEVELOPING AN INITIATIVE

Atlantic Provinces

One common element to the suggestions for how to approach such a venture was to involve all parties from the beginning of a project to ensure its success. From that point, the suggested approaches varied greatly. DFO in Moncton identified several possible structures: unsolicited proposals, joint studies with CEARC, support of individuals or programs at universities, or sponsorship of joint projects between Environment Canada and provincial agencies. Other people suggested approaching existing government groups such as the Canadian

Table 5. Summary of Interest in Cumulative Effects Assessment in Ontario.

Organization ¹	Timeframe ²	\$	Institutional	Case Study	Types of Support			Details
					Educational	Technology Transfers	Other	
EA review agencies	short term	shared	x					Concentrate research on:
Utility companies	short term	shared					most interested and already involved	* framework, * methods, * social system and biophysical processes, * institutional.
University research institutes: i.e., U. of T., Waterloo	short term	no						

¹ Information supplied for analysis did not include names of individual organizations.

² These groups are interested in CEA within the next year or two because of the expected rash of EA submissions coming before Ontario Boards.

Table 6. Summary of Organizations With Opportunities For Conducting Research or Work in Cumulative Effects Assessment in the Prairies.

Organization	Timeframe	\$	Types of Support				Other	Details
			Institutional	Case Study	Educational	Technology Transfers		
Banff Centre School of Management; Banff, Alberta	short term				x			
Environment Canada, Northern Forestry Centre; Edmonton, Alberta	short term	shared				x		
NOVA, Environmental Affairs; Calgary, Alberta	short term		x	x				
University of Manitoba, Natural Resources Institute; Winnipeg, Manitoba	short term		x	x			Only lacking mathematical expertise	
DFO, Freshwater Institute; Winnipeg, Manitoba	?					x	Advice Timeframe dependent on problem undertaken	
Alberta Environment, Environmental Assessment Division; Edmonton, Alberta	?						Only work with CEARC if they are ready to accommodate Alberta needs & perspectives	
Alberta Environment; Edmonton, Alberta (Sr. Research Manager)	longer term						Currently affected by budget cuts	
Dome Petroleum Ltd., Environmental Services; Calgary, Alberta	longer term	shared		x			Willing to undertake impact assessment of particular project. Government already has data but isn't doing anything with it.	

Table 7. Other Organizations, Recommended by Interviewees from the Prairies, That May Be Interested in Cumulative Effects Assessment

Recommended Organization	Source of Recommendation
<u>Provincial Organizations</u>	
Alberta Environment, Public Consultation Branch	Banff Centre School of Management
Energy Resources Conservation Board (Alberta)	Alberta Environment, Environmental Assessment Division
Manitoba Planning Branch	Manitoba Environment and Workplace Safety and Health
<u>Interest Groups and Research Organizations</u>	
Alberta Environmental Centre	Alberta Environment
Alberta Environmental Research Trust	
Alberta Wilderness Associations	Alberta Fish and Wildlife Division Habitat
Boreal Institute (Edmonton)	Environmental Council of Alberta
Environmental Law Centre (Edmonton)	
<u>Industry Groups</u>	
Canadian Petroleum Association	Alberta Environment
Oil Sands Groups (or Petro-Can)	Dome Petroleum, Environmental Services
<u>Power Utilities</u>	
Calgary Power	Alberta Environment Planning Div., Environmental Assessment
TransAlta Utilities	
Manitoba Hydro	Manitoba Environment and Workplace Safety and Health

Table 8. Summary of Organizations With Opportunities For Conducting Research or Work in Cumulative Effects Assessment in British Columbia and the Territories.

Organization	Timeframe	\$	Types of Support				Other	Details
			Institutional	Case Study	Educational	Technology Transfers		
B.C. Hydro; Vancouver, B.C.	long term		x	x	x	x		
B.C. Ministry of Environment, Coastal and Estuary Management; Victoria, B.C.	?			x			Either coastal zone study or interior wetlands project	
B.C. Ministry of Environment, Assessment and Planning; Victoria, B.C.	long term			x				
EPS, Referral and Impact Analysis; North Vancouver, B.C.	?		x				office facilities Interested in case study relating to institutional processes & regulations	
Greater Vancouver Regional District, Technical Services; Burnaby, B.C.	long term		x	x			Could sit on committee	
NWT Land Use Planning Commission; Yellowknife, NWT	long term						Most interested in regional planning perspective rather than project assessment level	
NWT Renewable Resources, Policy and Planning	long term			x			Interested in framework & methods	
School of Community and Regional Planning, UBC; Vancouver, B.C.	?			x		x	Primarily interested in institutional and procedural aspects	

Table 8. Summary of Organizations With Opportunities For Conducting Research or Work in Cumulative Effects Assessment in British Columbia and the Territories (continued).

Organization	Timeframe	\$	Types of Support				Other	Details
			Institutional	Case Study	Educational	Technology Transfers		
Westcoast Transmission; Vancouver, B.C.	?			x			data	The company would only support a case study directly related to their activities
Westwater Research Centre, UBC; Vancouver, B.C.	long term			x	x			Suggest CEARC could facilitate funding a case study
Yukon Renewable Resources, Policy Analysis and Development	long term			x				Would like assistance in incorporating CEA techniques in their Development Assessment Process

Table 9. **Organizations**, Recommended by Interviewees From British Columbia and the Territories, That May Be Interested in Cumulative Effects Assessment.

Organization	Source
<u>Federal Government</u>	
DIAND, NWT Region, Northern Affairs Program (Director of Renewable Resources)	NWT Land Use Planning Commission
<u>Provincial/Territorial</u>	
Fraser River Estuary Management Plan	Fraser River Harbour Commission
<u>Industry Groups</u>	
Alcan	B.C. Hydro, Environmental Services
Coal Companies: Quintet, Dennison	
Gulf Oil Company	

Council of Resource and Environment Ministers; the National Committee of Environmental Assessment Administrators; Department of Municipal Affairs and Environment in New Brunswick; and Newfoundland Panel of Energy, Resources and Development. The approach selected must be sensitive to the planning structure of the organizations involved.

Quebec

Quebec respondents were generally in agreement that a multi-sectorial or joint approach should be taken in initiating CBA projects. Case studies, using the interests of various government departments, could be used as the basis of project initiation. There was a suggestion that funding should be on an ongoing basis and in keeping with the nature of cumulative effects problems (long-term). Other respondents indicated that for agencies whose mandates do not correlate with assessment of cumulative effects, they would be willing to share information and data bases.

Ontario

The major conclusion from groups in Ontario was the CEARC should take the lead in initiating a project with various agencies. The possibility of a workshop was raised, at which the results of current research project could be presented and proposal for further action considered.

Prairie Provinces

Respondents within Alberta Environment also suggested the Canadian Council of Resource and Environment Ministers be approached to establish contacts and priorities. This group (CCREM) has a demonstrated capability to produce valuable work. Alternatively, if acid deposition was chosen as the focus of an initiative, CEARC could take available funds and endow institutions to work on particular aspects of the problem (from the Natural Resources Institute and the University of Manitoba). Other respondents felt a cooperative program was necessary to carry out an initiative.

British Columbia and the Northwest Territories

In this group of surveys, opinions favoured an individual agency rather than cooperative approach. Cooperative approaches can be counterproductive and use up valuable time (Westwater Research Centre, UBC). In addition, if a project is particularly relevant to an organization's needs, the project has a greater probability of receiving support (EPS, North Vancouver; Westcoast Transmission, Vancouver). The respondent from the Yukon and the NWT Land Use Planning Commission suggested CEARC approach their respective departments at a more senior level.

4.0 LIST OF PEOPLE INTERVIEWED

Approximately eighty interviews were conducted across Canada to determine the present level of interest, knowledge and philosophy on cumulative effects assessment. Respondents included representatives from the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, British Columbia, Yukon, and the Northwest Territories. Academic, industrial and governmental personnel responded to the questionnaire.

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