

**The British Columbia Case:
Natural Resource Management and Sustainable Development**

Rod Dobell and Darcy Mitchell
University of Victoria

- A. Introduction**
- B. Natural Resources and Environmental Policy in the Canadian Federation:
The Constitutional Setting**
- C. The Structure of the British Columbia Economy**
- D. Issues and Responses: An Overview**
- E. Illustrative Examples**
 - 1. Forest Policy**
 - 2. Land Use Planning and Policy Coordination**
 - 3. Treaties with First Nations**
 - 4. Cross-Border Cooperation and International Agreements**
- F. Conclusion**

Rod Dobell is Francis G. Winspear Professor of Public Policy at the University of Victoria. Darcy Mitchell is a doctoral student in the School of Public Administration at the University of Victoria.

A. Introduction

Humanity has crossed the threshold into the congested global village (Daly, 1973; Union of Concerned Scientists, 1993; von Weizsacker, 1994) . (For a contrary reading of the evidence, see Simon (1981), the Heidelberg Declaration (1993) or Easterbrook (1995).) The scale of human population, settlement and industrial activities, and the sophistication and connectedness of the information flows and technologies that bind them together, have become so great that one can truly speak of threat to the ecological life support systems of the Earth itself, while claiming the benefits of the integrated world economy.

British Columbia is a political jurisdiction with a society and economy highly dependent on these ecological systems, and on renewable and non-renewable resources more generally. Political institutions and administrative structures are, therefore, particularly oriented toward resource management. They are particularly challenged by growing public concern about the social consequences of the transition to sustainable resource use which is increasingly seen as the essential task of public management.

This note sketches the governance structures and administrative mechanisms for resource management in British Columbia, and some policy issues and responses. It emphasizes new challenges for administration and management which must be faced in this transition to regional sustainability in the integrated global economy and the inter-connected global village. New puzzles arising for policy formulation as a result of public pressures for “democratizing knowledge” and for policy implementation in the face of more activist groupings of “trans-border citizens” will be noted. Of particular interest are the administrative problems of linking agreement negotiated at national and international levels to action undertaken in local or community settings.

B. Natural Resource and Environmental Policy in the Canadian Federation: The Constitutional Setting

When Parliament in England passed the British North America (B.N.A.) Act to

create the Dominion of Canada in 1867, most of the resource management issues now foremost on the policy agenda were unknown as matters of public or political concern. These issues were not, therefore, explicitly addressed in the nation's fundamental law. Even where the Act explicitly allocates jurisdiction over natural resources as between the central (federal) and regional (provincial) orders of government, there is considerable scope for implicit adjustments in jurisdictional authority arising from the application of other provisions of the Act; for conflicts arising in the exercise of the various powers conferred; and for jurisdictional overlaps (and indeed jurisdictional lacunae) in respect of issues and concerns which were not contemplated by the Fathers of Confederation.

Sections 91 and 92 of the Constitution Act divide governmental powers between the federal and provincial governments. In addition to the power to make laws for the "peace, order and good government of Canada", the federal Parliament has legislative authority over a number of matters – trade, shipping, taxation, fisheries, Indians – relevant to natural resource and environmental policy. The Constitution Act also provides that any residual responsibilities not assigned to the provinces are the domain of the federal government.

The provincial legislatures were assigned many responsibilities that pertain to environment and natural resources, including taxation, timber, municipalities, local works and undertakings (except those crossing provincial boundaries or works for the general advantage of Canada) and property and civil rights.

Section 92A, added in the 1982 amendments to the Constitution Act, specifically assigns provincial jurisdiction over, and ability to tax, nonrenewable resources, forest resources, and electrical energy (but not fisheries), while reserving to the federal government paramountcy in matters relating to the export of such resources from a province.

Most natural resources – land and timber, oil and gas, minerals and hydroelectricity – thus fall within the jurisdiction of provincial legislatures, while the power to make laws in relation to both coastal and inland fisheries is conferred upon the federal Parliament. Over the years, various aspects of fisheries management have been assumed by provincial governments under non-constitutional administrative arrangements. Moreover, of great

importance to British Columbia, a series of court decisions both affirmed the federal power to control the extent and manner of fishing in tidal waters and clarified provincial authority to regulate property in the fishery (Parsons, 1993). Thus fish swimming in salt water are 'federal', while, once caught, fish, and trade in or processing of them, are – except in respect of aboriginal fisheries – matters for provincial regulation. The federal government, through the Fisheries Act, has power to regulate activities which might directly be deleterious to fish, while the provincial government regulates almost all human activities having an impact on coastal or freshwater habitat. Changes currently proposed to the federal Fisheries Act would expand the scope of provincial involvement in the protection of fish habitat and provide for the negotiation of legally binding management agreements with groups within the fishery.

Environmental protection, on the other hand, is not assigned as a single power exclusively to either level of government, but is dealt with as an aggregate of matters, some within federal jurisdiction and others within provincial jurisdiction (Hogg, 1995). In recent years, the Canadian Council of Ministers of the Environment (CCME) has attempted to clarify the relationship between federal and provincial governments in pollution control and other environmental issues. In 1990, the Council drafted a *Statement on Interjurisdictional Cooperation*, and has recently released a draft *Environmental Framework Agreement*. Under this plan, federal authority would be recognized in national and transboundary environmental issues, in conducting Canada's international environmental relations, in environmental matters related to federal lands, in relations with aboriginal peoples, and in working with provinces to protect nationally significant ecosystems. At the same time, provinces would exercise a more hands-on approach, with jurisdiction over development, implementation and management of environmental regulations, as well as environmental assessment processes. Full harmonization of federal and provincial procedures in environmental protection and assessment remains a distant goal, however.

Municipalities, which derive their authority from provincial legislation, have a major role in environmental management, especially through the regulation of zoning,

construction, water purification, sewage and solid waste disposal (Longo, 1996), as well as in settlement patterns, transportation planning and community development more generally.

C. The Structure of the British Columbia Economy

Compared with most western economies, the province of British Columbia is highly dependent on resource-based activity and exports to international markets. In 1994, 23% of the province's total gross domestic product of \$67 billion per year was derived from merchandise exports. Forest products accounted for 60% of 1994 international exports, while mining, energy and fishing made up a further 21% (B.C. Ministry of Finance and Corporate Relations, 1995:67). Two large markets – the United States (54%) and Japan and other Pacific Rim countries (39%) – absorb most of B.C.'s exports. Trade with the rest of Canada is small in comparison.

In recent years, however, services have assumed a greater role in the provincial economy, rising from 60% of GDP in 1961 to 72% in 1994 (B.C. Ministry of Finance and Corporate Relations, 1991 and 1995). The service sector is also the province's largest employer, accounting for about 75% of total employment. Tourism (B.C.'s second largest industry and increasingly ecologically-oriented) contributed over \$6 billion to the provincial GDP in 1994. The large share of the GDP contributed by the service sector somewhat over-represents its significance in the British Columbia economy, however, as growth in many service industries (and public services) is both directly and indirectly related to developments in the goods-producing sector (B.C. Ministry of Finance and Corporate Relations, 1991).

Although resource-based activities have declined as a percentage of the British Columbia GDP, their contribution has continued to grow in absolute terms. This growth has been based primarily on increased resource access and land use. For example, the provincial timber harvest from Crown lands (96% of forest lands in B.C. are publicly owned) rose from 20 million cubic metres in 1945 to 50 million cubic metres in 1975 and almost 76 million cubic metres in 1994 (Forest Resources Commission, 1991 and B.C. Ministry of

Finance and Corporate Relations, 1995). The economic impacts of future reductions in this annual allowable cut (AAC), either as a consequence of regulatory decisions by the provincial Chief Forester designed to move the industry toward sustainability, or simply as the inevitable ‘fall down’ encountered as the initial stock of old growth timber is used up, are likely to be severe and pose serious political problems throughout the province.

British Columbia’s traditional reliance on an export-oriented, resource-based industrial structure has resulted in considerable volatility in economic performance, employment levels, and government revenues, corresponding to international business cycles and especially to changing commodity markets (B.C. Ministry of Finance, 1991). Reducing this volatility by economic diversification has become more pressing as resource industries – particularly the forest industry – face deepening supply constraints and growing threats of international boycotts or other marketing problems arising from concerns about forest management practices sparked by the activities of international non-governmental organizations. Further, the expanding sectors of the economy – many of them ‘footloose’ or location-independent – are attracted by environmental and other amenities of British Columbia, amenities which are sensitive to aesthetic and other damage resulting from resource extraction practices.

The dualism of B.C.’s resource/service economy is mirrored in the geographic distribution of economic activity. Resource extraction is concentrated in “hinterland” regions (McCann, 1982) which experience the brunt of resource-based economic and employment volatility, while processing, financial and other business services, transportation and communications (and both business and government decision making) are concentrated in the “heartland”, principally the Lower Mainland and southeastern Vancouver Island. Within this context, “sustainability” has been very differently defined in heartland and hinterland communities:

By the late 1980s, sustainability of ecosystems became the driving issue for the environmental movement in British Columbia, and sustainability of resource-dependent communities became the driving issue for workers in the resource industries (Reed, 1995:336).

More recently, concerns about sustainability of ecosystems in British Columbia have begun to focus on the environmental (and social) impacts of urban growth coupled with habits of very high material and resource consumption and waste generation in western industrial nations.

D. Issues and Responses: An Overview

The sustainability debate in British Columbia began in the woods. In the past few decades, the long-standing emphasis of provincial forest policy as the pursuit of timber-driven economic growth has become increasingly controversial. By the late 1980's – as the so-called Second Wave of environmentalism was sweeping the globe – British Columbia forest policies were under attack by both environmentalists and economists.

Environmentalists objected to the concentration of control of the timber industry in the hands of a small number of large firms pursuing technology-intensive practices emphasizing clear-cutting of large areas; to the “liquidation” of old growth forest ecosystems; to the general neglect of environmental and social values in favour of short term economic concerns; and to the absence of public participation in decision-making processes. Economists attacked the system on two grounds: first, that stumpage rates were set by the government and not the market and thus could not be relied upon to reflect the full value of the timber resource, and second, that the property rights held by timber companies did not provide incentives for long term stewardship of the forest (Hoberg, 1996). Further, a series of court decisions in the 1980's resulted in injunctions to halt several resource development projects on provincial crown land pending the negotiation of aboriginal land claims.

The British Columbia government responded to this rising wave of conflict with efforts intended in the first instance to end the “war in the woods”. In the past five years, these efforts have expanded to constitute a transformation of resource management and planning processes in British Columbia. They have stimulated a policy dialogue in the province in which the term “sustainability” (in one or another of its definitions) is probably

now a permanent element.

Natural resource policy in particular, and attempts to achieve a sustainable balance of environmental, economic and social interests more generally, have been driven in British Columbia by two principal imperatives: 1) increasing competition for a shrinking inventory of resource and environmental goods, services and amenities and 2) rising demand for broader public participation in determining the distribution of resources among competing interests.

Demands for direct stakeholder involvement reflect, in turn, a substantial loss of confidence in traditional representative decision making processes as well as declining confidence in the ability of conventional science and “experts” to provide sound and enduring solutions to complex policy problems. The response of the provincial government has been to initiate a wide range of new laws, policies, processes, organizations and structures to address environmental, economic and social aspects of land use in British Columbia and to greatly extend the involvement of “stakeholders” in this endeavour.

In the space available, it is evidently not possible even to mention the full range of resource management and sustainability issues in British Columbia. A longer working paper available directly from the authors highlights a few initiatives to illustrate the range of policy issues and provincial responses in the natural resource and environmental field. The examples of Clayoquot Sound and the Commission on Resources and Environment are representative of a number of key developments and are sketched briefly in the next section.

E. Illustrative Examples

1. Forest Policy: The Example of Clayoquot Sound

Clayoquot Sound, on the west coast of Vancouver Island, has been a focus of conflict over forest policy in British Columbia (and continues to be a lightning rod for a continuing struggle). The evolution of forest management in the Sound provides an

instructive example of the issues under debate in British Columbia and the development of policy responses to them.

In August, 1989, the provincial government appointed the Clayoquot Sound Sustainable Development Task Force as an experiment in the viability of “consensus building” to reconcile competing resource values and to produce a community-based plan for long-term sustainability of all such values in the Sound (Darling, 1991). The Task Force and its successor, the Clayoquot Sound Sustainable Development Steering Committee, both foundered, however, over the issue of what logging should take place while negotiations over long term sustainable development for the region were in process (Hoberg, 1996; Darling, 1991). Following a series of acrimonious meetings (during which the environmental representatives left the process in protest over the continuation of short term logging), the committee process disbanded in 1992 without having reached agreement on the future of logging in the region.

Meanwhile, the Provincial Government had established the Commission on Resources and the Environment (CORE) with a mandate to develop a comprehensive land use planning process for the province. CORE’s first priority was to develop a consensus-based land use plan for Vancouver Island, but the Clayoquot Sound process was explicitly excluded from its mandate. Although the decision eventually made by the provincial Cabinet on land use in Clayoquot Sound was considerably more preservationist than desired by the forest industry, environmentalists were outraged, and the decision sparked a substantial campaign of civil disobedience, culminating in the arrest of more than 800 people for blocking logging roads in the region during the summer of 1993 (Hoberg, 1996). Subsequent court action resulted in numerous convictions, and appeals have largely been unsuccessful. Nevertheless, this crusade of civil disobedience succeeded in focussing attention on some fundamental questions of government and industry obligations not only to act in a manner which does not contravene the intent of international commitments undertaken by the federal government (as for example in signing the Biodiversity Convention), but also to take positive action towards implementation of such

commitments. As a result, the legal principles on which convictions have been based until now may turn out to be substantially modified in the future, in the direction of greater obligations on the part of sub-national governments and private corporations to refrain from action which jeopardizes realization of commitments undertaken in international covenants.

While the provincial decision concerning logging in Clayoquot Sound has not been explicitly reversed, the government (at the urging of CORE Commissioner Stephen Owen) appointed a path-breaking Scientific Panel for Sustainable Forest Practices in Clayoquot Sound, with the goal of making forest practices there “the best in the world”. In April, 1995, the Panel, which included scientists with strong environmental credentials as well as elders from the Nuu-chah-nulth First Nation (seen as expert sources of ‘traditional ecological knowledge’ to be involved in a process of participatory policy analysis rather than as political representatives to engage in negotiations), recommended stringently-controlled logging practices for the Sound (Scientific Panel, 1995). All of these recommendations – many of which have the effect of substantially increasing the cost of logging in the Sound – were accepted by government. Meanwhile, the provincial government negotiated an “interim measures agreement” in March, 1994 with the Nuu-chah-nulth Central Region Tribes to increase the involvement of local aboriginal peoples in planning, management and resource development in Clayoquot Sound. This agreement, which entailed creation of a jointly-chaired Central Region Board for co-management of activities in the region, has recently been extended for a further three years. The Board consists of five First Nations appointees, five provincial appointees from local communities, and one co-chair each. With an explicit mission to manage the lands and resources in Clayoquot Sound prior to the conclusion of a treaty, and with a growing record of success in building cooperative relationships amongst all interests involved in land and resource use, the Board offers an interesting and promising model for innovative co-management institutions elsewhere in the province and in other jurisdictions.

In the aftermath of these various developments, timber harvests in Clayoquot

Sound have declined significantly, and the continued profitability of logging in the region is in question. At the 1996 conference of the International Union for the Conservation of Nature (IUCN), the provincial government joined forces with those calling for the designation of the Sound as a U.N. Biosphere Reserve. In Clayoquot Sound, the “war in the woods” may eventually terminate only with the complete cessation of industrial logging practices and transition to a selective community-based forestry.

Elsewhere, however, the CORE process and subsequent land use planning activities have resulted in considerable clarification of land use and forest management objectives across the province. In particular, the Forest Practices Code of British Columbia came into effect in June of 1995 to regulate logging practices, particularly to reduce the size of clearcuts, strengthen requirements for reforestation, reduce the environmental impacts of logging roads, and protect water quality and fish habitat. Potential penalties for Code infractions are substantial - as much as \$1 million per day, although no such penalties have as yet been imposed.

The Code represents a “get tough” approach to dealing with unacceptable logging practices which has been welcomed by environmentalists, but criticized by the forest industry on the grounds that the Code is complex, unwieldy and imposes excessive costs of compliance. The Provincial Government is currently examining ways of “streamlining” the Code to reduce the burden of compliance for both industry and government inspection staff.

The 1995 Forest Land Reserve (FLR) Act is modelled on the Agricultural Land Reserve Act introduced by an earlier NDP administration in the 1970’s to protect agricultural lands from development pressures. The FLR consists of designated Crown Forest Lands and all “privately managed forest lands”, the latter being a category of land designation which permits landowners to receive property tax benefits in exchange for commitments to forest management. The Act enables B.C.’s Forest Practices Code to apply to private lands within the Reserve, held almost exclusively by major forest companies (CORE, 1996).

2. Land Use Planning Processes and Coordinating Bodies: The

Commission on Resources and the Environment

As noted above, CORE was established by the provincial government in early 1992 to establish a more comprehensive approach to land use planning in B.C. and to end the “valley by valley” battles characterized by unending conflict, as illustrated by the battle over Clayoquot Sound. CORE’s mandate included the development of strategic land use plans in four of the province’s most controversial regions. Concurrently, the Commission developed an overall provincial sustainability strategy, the principles of which have been consolidated in a Land Use Charter, which has been largely adopted as a framework for provincial policy. Many of these principles have been directly incorporated into policy and legislation such as the Growth Strategies Act (CORE, 1996).

Although none of the regional land use planning processes initiated by CORE reached consensus at the table, the recommendations made by the Commissioner were extremely influential in the final regional land allocations decided by Cabinet. In particular, the regional designations of protected areas closely matched the target set by the provincial Protected Area Strategy, that of doubling the province’s protected wilderness areas from 6% to 12% (a figure consistent with interim goals suggested by the report of UN Commission on Environment and Development, the Brundtland Commission).

CORE was disbanded by the Provincial Government in early 1996 having, in the view of the government “fulfill(ed) its mandate to help resolve land use issues across British Columbia” (Office of the Premier, March, 1996). (Evaluation of the Commission’s success, and of its impact on governance in the province more generally, is a topic of continuing interest. See Duffy et al, 1996; Wilson et al, 1996.) Its tasks were to be assumed by the Land and Resource Management Planning processes and the Land Use Coordination Office.

Land and Resource Management Planning (LRMP) evolved from the implementation of public advisory processes for social and economic impact assessment in forest land management in the province. LRMP’s, described as “sub-regional” plans, to distinguish them from CORE regional plans, are intended to divide the planning areas

under consideration into a number of zones, with each zone emphasizing particular resource and environmental values (CORE, 1996). The Land Use Coordination Office (LUCO) was established in 1994 to improve direction and coordination of all inter-ministry land use planning initiatives. The Office serves as a central agency for government land-use planning under the direction of Cabinet, setting strategic directions, coordinating ministry workplans, and monitoring and reporting on ministry programs. LUCO also provides direction to regional and sub-regional land-use activities and processes, and coordinates work of Inter-agency Management Committees and Community Resource Boards.

3. First Nations Initiatives

In 1990, the federal and B.C. governments and leaders of First Nations jointly constituted a task force to recommend a process for negotiating treaty settlements in British Columbia where, unlike most of Canada, very few treaties were signed with aboriginal peoples during the colonial period and the early years of Confederation. For the British Columbia government, agreement to negotiate settlements constituted a reversal of a century-old policy that denied the existence of aboriginal rights or title to land and resources in the province.

The current management and disposition of lands and resources that may eventually become part of treaty settlements is a major issue in the treaty negotiation process. Some First Nations have criticized the provincial government for failing to protect such land and resources through the implementation of Interim Measures Agreements, and many First Nations have refrained from actively engaging in regional and sub-regional planning processes (as well as the CORE processes described above) on the grounds that such processes may prejudice eventual treaty settlements.

In addition to First Nations concerns about the treaty-making process, there is considerable ongoing debate in the non-aboriginal population, which has been sharpened by the proposed settlement terms of a recent Agreement in Principle on a Nisga'a treaty, terms which would involve very large transfers from other British Columbia and Canadian

taxpayers if extended across the full range of potential settlements (Scarfe, 1996:15). Achieving treaties that alleviate, rather than exacerbate, conflict and inequity as between aboriginal and non-aboriginal populations in B.C. will continue to be controversial and the process may still take decades.

4. Cross-Border Cooperation and International Agreements

Until recently, the dominant relationship between Canadian and American governments in the Pacific Northwest has been one of economic competition, particularly in the forestry sector. In the late 1980's, however, the development of cross-border agreements and institutions began to gain momentum. While the notion of formally constituted joint planning and management structures for a "Cascadia" bio-region (roughly the Puget Sound/Georgia Basin area) or larger regional groupings such as the Pacific North West Economic Region remains far from realization, Washington State and the Province of British Columbia have jointly undertaken several steps to achieve better cooperation on environmental issues, including an Environmental Cooperation Agreement signed in May 1992 which established an Environmental Cooperation Council consisting of the most senior appointed officials of the B.C. Ministry of Environment Lands and Parks, and the State of Washington Department of Ecology. One of the first actions taken by the Council was to create a Marine Science Panel to recommend management priorities and a detailed action plan for the Puget Sound/Georgia Basin area. The two governments have also signed a Transportation Cooperation Agreement and Growth Management Agreement, both of which created legal frameworks for cross-border activities already underway (Hodge and West, 1996; Blatter, 1996).

More general issues of government organization and administrative practice arise as a result of increasing international linkages, both in economic management (Dobell and Steenkamp, 1994) and in the growing influence of social organizations, epistemic communities and 'trans-border citizens' (Dobell and Neufeld, 1993).

In the area of environment and sustainable resource use, however, perhaps the most compelling current question relates to the implementation of international commitments.

The question is in part a constitutional issue, but more fundamentally one of the emergence of international customary law (Sands, 1995) and the growing appeal internationally to value-based covenants which impose an obligation on signatories to see the implementation process through to completion in sub-national units and communities, whether through traditional inter-governmental structures or, more likely, through new mechanisms and inter-institutional alliances (Dobell and Bernier, 1996). As the example of the North American Free Trade Agreement and its environmental accord illustrate, however, tensions and conflicts in implementation by sub-national units of international accords are far from finished.

F. Conclusion

Overall, one might argue that British Columbia, with its focus on shared decision and a broad sustainability agenda, as well as increasing concern with both participation and compliance on the ground, in communities, has staked out a clear path to building a framework of community values around the existing global market mechanisms on which it is so reliant – and to which it is so vulnerable – in resource management policy. But it would be too optimistic to claim that policy and practice are in fact currently following that path. In development of new institutions and clearer values to guide resource management and sustainable development, British Columbia probably can claim to be one of the leading jurisdictions in the world. In political commitment and policy implementation, sadly, there is a very long way yet to go. Indeed, some falling away from principles earlier embraced is only too evident. There is real question whether with present orientations the destination can be reached, even from a starting point so favoured in resource wealth and pristine environment as the West Coast of Canada.

The policy discourse has shifted, however. There is growing awareness of the need for a number of fundamental social changes which are, together, essential for an eventual transformation of an economic structure based on liquidating natural capital to one that relies on sustainable returns on investment.

On the policy side:

- Resource management is increasingly debated within the broader context of conservation concerns and policy for sustainability. Criteria for management are pushed towards a requirement to manage for ecosystem integrity rather than product flow. With this orientation, precautionary approaches to assuring that human interventions do not jeopardize ecosystem health become increasingly central.
- In place of a centralized strategic planning approach, more flexible adaptive environmental management or ‘learning’ approaches are being urged.
- With increasing concern for ecosystem integrity there is growing recognition of the increasing value of natural capital, and corresponding concern for ownership claims and clarification of property rights. Management of open access resources and ‘common pool resources’ is more widely recognized as a crucial policy responsibility, as is the reform of tenure provisions, the redefinition of property rights and the creation of self-governing institutions to encourage more responsible and sustainable management. With this shift will come increasing interest in ecological tax reform or ‘green taxes’.

x On the administrative side:

- With the ecosystem approach comes also a necessary shift to a watershed or ecosystem basis for management, in place of, and across, existing jurisdictional lines and political boundaries. The need to deal with horizontal policy problems and cross-agency, cross-jurisdiction coordination poses major challenges for specialized, vertically-organized ministries and administrative units.
- More deeply, the shift to a consultative mode centered on participatory processes and multi-stakeholder negotiations forces policy analysts and administrators into unprecedented challenges of involvement in open, public, politicized procedures. The orderly, analytic formulation of policy within an

agency has been replaced to a considerable extent by organic, unpredictable and often highly conflictual public multi-stakeholder processes for formation of policy not only through executive or legislative stages of policy adoption, but through multi-agency and private-sector partnerships for implementation and co-management.

- Emphasis in the rhetoric around regulation is moving toward concerns with regulatory 'efficiency' and compliance questions. Attention increasingly focuses on economic instruments as a preferred choice from the (narrowing?) spectrum of available governing instruments.
- A community basis for resource management emerges increasingly as the preferred option in the design of alternative structures for management and service delivery. Community quotas or construction of self-governing institutions for collective management of resource utilization become options increasingly exploited in discussion of resource management and environmental protection for ecosystem health. Finding an operational meaning for principles of subsidiarity therefore becomes a major administrative task.
- Most generally, policy formation and administrative practice throughout the government has to find its appropriate role in an overall sustainability agenda in which appropriate mechanisms for supporting community transition and smoothing economic adjustment are developed (probably on the basis of increasing revenues flowing to the public owner of increasingly scarce and increasingly valuable natural capital). It cannot, however, be claimed that either the public or the present administration has yet committed itself to, or even recognized, this basic program.

Sustainability, subsidiarity and self-government are all profound and difficult ideas. They are driving an unprecedented degree of turbulence and turmoil in the formation, implementation and continuing administration of policy with respect to resources and the environment in British Columbia. The institutions and principles of public administration

are changing irreversibly, in all spheres and throughout the province, in the attempt to digest the consequences. A revolution in belief systems and spreading processes of social learning thus are the most striking features of public administration and resource management as British Columbia confronts the end of the 'open-access' frontier and the reality of life in the congested global village.

References

- Auditor General of British Columbia and Deputy Ministers' Council (1995). *Enhancing Accountability for Performance in the British Columbia Public Sector*.
- Blatter, Joachim (1996) "Cross-border Cooperation and Sustainable Development in Europe and North America". Unpublished MS. University of Victoria, School of Public Administration
- British Columbia Commission on Resources and Environment, 1996. *On the Road to Sustainability: A Synopsis of Provincial Sustainability Issues*.
- British Columbia Forest Resources Commission (1991). *The Future of Our Forests*. B.C. Ministry of Finance and Corporate Relations, Planning and Statistics Branch (1991).
- British Columbia Ministry of Finance and Corporate Relations, Planning and Statistics Division (1991). *The Structure of the British Columbia Economy: A Land Use Perspective*. Victoria: British Columbia Round Table on the Environment and the Economy.
- British Columbia Ministry of Finance and Corporate Relations (1995). *1995 British Columbia Financial and Economic Review*.
- British Columbia Ministry of Municipal Affairs (1995). *An Explanatory Guide to B.C.'s Growth Strategies Act*.
- British Columbia Office of the Premier (1996). News Release, March 7, 1996 "Commission on Resources and Environment Winds Down".
- British Columbia Round Table on the Environment and the Economy (1993). *The Georgia Basin Initiative: Creating a Sustainable Future*. Victoria: BCRTEE.
- Daly, Herman E.. 1973. *Toward a Steady-State Economy*. San Francisco: W.H.Freeman and Co.
- Darling, Craig (1991). *In Search of Consensus: An Evaluation of the Clayoquot Sound Sustainable Development Task Force Process*. University of Victoria Institute for Dispute Resolution.

- Dobell, Rodney and Luc Bernier. (1996) *Citizen-Centered Governance: Inter-governmental and Inter-institutional Implications of Alternative Service Delivery*. Toronto: Institute of Public Administration and KPMG Centre for Government.
- Dobell, Rodney and Michael Neufeld. (1993) *Trans-Border Citizens: Networks and New Institutions in North America*. Lantzville: Oolichan Books for the North American Institute.
- Dobell, Rodney and Philip Steenkamp. (1994) *Public Management in a Borderless Economy*. Toronto: Institute of Public Administration of Canada.
- Duffy, Dorli M., Mark Roseland and Thomas I. Gunton. (1996) "A Preliminary Assessment of Shared Decision-Making in Land Use and Natural Resource Planning". *Environments* 23 (2), pp. 1-15
- Easterbrook, Gregg. (1995). *A Moment on the Earth: The Coming Age of Environmental Optimism*. New York: Viking.
- Haley, David and Martin Luckert (1996). "Policy Instruments for Sustainable Development in the British Columbia Forestry Sector" in A. Scott, J. Robinson and D. Cohen, Eds. *Managing Natural Resources in British Columbia: Markets, Regulations, and Sustainable Development*. Vancouver: UBC Press.
- Hoberg, George (1996). "The Politics of Sustainability: Forest Policy in British Columbia" in R.K. Carty, Ed. *Politics, Policy and Government in British Columbia*. Vancouver: UBC Press
- Hodge, R. A. (1996) and Paul R. West. "Achieving Progress in the Great Lakes Basin Ecosystem and the Georgia Basin-Puget Sound Bioregion", in Richard Kiy and John D. Wirth (eds) *Case Studies in Environmental Management on the Borders in North America*. Forthcoming, 1997.
- Hogg, Peter W. (1985) *Constitutional Law of Canada, Second Edition*. Toronto: Carswell.
- Howlett, Michael and Jeremy Rayner (1995). "Do Ideas Matter? Policy Network Configurations and Resistance to Policy Change in the Canadian Forest Sector".

Canadian Public Administration. 38:3

- Longo, Justin (1996) . "The Multi-Jurisdictional Nature of Environmental and Natural Resource Issues" Unpublished MS. University of Victoria, School of Public Administration.
- McCann, L.D. (1982). "Heartland and Hinterland: A Framework for Regional Analysis" In L.D. McCann, Ed. *Geography of Canada: Heartland and Hinterland*. Scarborough: Prentice-Hall Canada.
- Parsons, L. S.. (1993). *Management of Marine Fisheries in Canada*. Canadian Bulletin of Fisheries and Aquatic Sciences 225: 763 pp.
- Reed, Maureen (1995). "Implementing Sustainable Development in Hinterland Regions" in Bruce Mitchell, Ed. *Resource and Environmental Management in Canada*. Don Mills: Oxford University Press.
- Ruff, Norman (1996). "Provincial Governance and the Public Service: Bureaucratic Transitions and Change" in R.K. Carty, Ed. *Politics, Policy and Government in British Columbia*. Vancouver: UBC Press.
- Sands, Phillippe. (1995). *Principles of International Environmental Law*. Manchester: Manchester University Press.
- Scarfe, Brian L. (1996). "How Aboriginal Title Settlements to be Financed" Draft unpublished MS, Victoria: BriMar Consultants Ltd. (October, 1996).
- Scientific Panel for Sustainable Forest Practices in Clayoquot Sound (1995) *Report 5 - Sustainable Ecosystem Management in Clayoquot Sound: Planning and Practices*.
- Simon, Julian. (1981). *The Ultimate Resource*. Princeton: Princeton University Press.
- Union of Concerned Scientists. 1993. *World Scientist's Warning to Humanity*. April, 1993.
- Von Weizsacker, Ernst. 1994. *Earth Politics*. London: Zed Books.
- Wackernagel, Mathis and William Rees (1996). *Our Ecological Footprint: Reducing Human Impact on the Earth*. Gabriola Island: New Society Publishers.

Wilson, Anne, Mark Roseland and J. C. Day. "Shared Decision-Masking and Public Land Planning: An Evaluation of the Vancouver Island Regional CORE Process". *Environments* 23, 2, pp. 69-86.

Wilson, Jeremy (1990). "Wilderness Politics in B.C.: The Business Dominated State and the Containment of Environmentalism" in WD Coleman and G. Skogstad, Editors. *Policy Communities and Public Policy in Canada: A Structural Approach*. Mississauga: Copp Clark Pitman.