

RESEARCH PROPOSAL

Designing and implementing integrated strategies: risks and opportunities of an integrated landscape management strategy in western Canada.

A. Research Design

A1 Introduction

Integrated Landscape Management (ILM) is an example of a new kind of institutional design that is proposed as the solution to complex policy problems: the integrated strategy (IS). In addition to the substantive policy objectives that they pursue, IS designs are also attempting to create or reconstruct a policy domain with coherent policy goals and a consistent set of policy instruments that support each other in the achievement of the goals. The careful specification of goals and instruments is central to the problem of IS design.

The main challenge facing ILM and other IS designs is that they do not begin with a clean slate. In fact, most IS designs are conceived as a result of dissatisfaction with the incoherent goals and uncoordinated policy instruments that characterize an existing set of policies. This project aims to address the problem of “policy legacies” that ILM designs must face by identifying the causes and consequences of legacy constraints in three western provinces. The project will provide an assessment of the extent to which ILM policy development in Alberta, BC, and Manitoba is producing optimal ILM designs.

In terms of the SFM Network’s objectives, the project is directed to the question of the assessment of novel institutional arrangements for achieving SFM and the implications of different policy designs and instrument mixes. There is enormous interest in ILM but we know from other policy areas that it is possible for a badly designed IS “cure” to be worse than the lack of integration “disease”. Identifying the factors that can produce such an unhappy outcome and alerting policy makers to the dangers are the larger practical objectives of this proposal.

The basic principles of IS design have already been developed in contexts as diverse as health assessments, national forest programmes, integrated coastal zone management (ICZM), safety cultures, integrated water management and others (Lock 2000; Howlett and Rayner forthcoming; Campbell 2004; Ashley and Maxwell 2001). At a minimum, integrated designs should be holistic; enable intersectoral coordination; be participatory; provide mechanisms for conflict resolution; and be iterative (Glueck 2004; Post and Lundin 1996). Beyond agreement on these basic design principles, the specific goals and the appropriate mix of policy instruments will be context specific.

While a series of reports (National Landscape Management Workshop 2003; Appleby et al. 2004; Canada Policy Research Initiative; CILMC 2005; NRTEE 2005) has recommended ILM as an appropriate strategy to achieve both the larger goals of SFM and as a solution to some very specific problems of multiple demands on forested

landscapes, there has been little reference to the larger literature on IS design as it could be applied to ILM in western Canada.

A.2 A Policy Approach to IS designs

ILM attempts to provide a better solution to the problem of multiple goals and multiple users on the forested land base by considering resource development and environmental impacts as a whole rather than in a piecemeal or single industry way. An optimal design will produce a coherent set of policy goals and consistent set of policy instruments that can be expected to achieve the goals. The potential outcomes of ILM designs can be represented in the following way:

		Instrument mixes are	
		consistent	inconsistent
Multiple goals are	coherent	optimal	ineffective
	incoherent	misdirected	failed

Figure 1: Typology of Integrated Strategies according to the relationships between goals and means

Policy analysts argue that the variety of possible outcomes can be explained by the fact that new policy development is always constrained by previous policy choices which have become institutionalized. The degree to which institutionalization takes place – and hence the possibilities for policy change – is variable and depends on a number of well-understood processes such as increasing returns and other kinds of positive feedback; sunk costs; and incremental policy learning. Following Hacker (2004), we propose that efforts to create an optimal IS design that pursues multiple but internally coherent goals with multiple but consistent policy instruments can fail in three main ways: layering, drift and conversion (figure 2).

Layering is the worst possible way to try to create an IS, adding new goals and instruments without abandoning previous ones, leading to both incoherence amongst the goals and inconsistency with respect to the instruments. Many IS suffer this fate, for example, efforts at ICZM that fail when powerful interests are able to keep favourable goals, instruments and settings, such as unsustainable fishing quotas to support an industry, in the new policy (Clark 1994).

Drift allows the goals of the policy to change without changing the instruments, which become inconsistent with the original goals and most likely ineffective in achieving them. Conversion, on the other hand, is the attempt to change the instrument mix in a more tractable policy domain in order to meet new goals in a domain where change is blocked. Building ILM out of a protected areas strategy, for example, exhibits some of the features of conversion. These kinds of policies often disintegrate under stress, revealing themselves to be “component driven” rather than truly integrated (May et al. 2005).

		Instrument mixes are	
		Consistent	inconsistent

Multiple goals are	coherent	integration	drift
	incoherent	conversion	layering

Figure 2: Typology of Integrated Strategies according to relationships with existing policies

A.3 Main elements and working hypotheses

This project has two main elements:

1. To assess the current state of ILM in Alberta, BC and Manitoba, paying particular attention to the relationship amongst and between goals and instruments.
2. Our working hypothesis (using Figure 2) is that the chief threat to achieving integration – whether layering, conversion or drift – will be related to the historical development of the policy domains that the respective governments seek to integrate. Our second aim, therefore, is to determine how best to meet the specific challenges of moving ILM into the “virtuous” upper left hand quadrant of figures one and two. This element of the project requires lesson drawing from other jurisdictions and other sectors where IS are being attempted. Our working hypothesis is that the different historical trajectories observed in our assessment will create distinctive challenges based on the extent to which ILM is effectively a new policy design or the integration of existing policy elements. There will be complex issues of network management and varying room for different actors to assume leadership roles (McGuire 2002; deBruijn 2005).

A.4 The ILM literature

In the case of ILM, a new design is often proposed as the solution to a number of related problems of natural resource management. There is general agreement that the current system of policy and management for natural resources is based on the regulation of single industries (MacKendrick 2002; NTREE 2005). Even where policies call for “multiple use” or “integrated resource management”, the regime in place is almost always one designed to allow a dominant use constrained in various ways more or less complex ways by secondary uses (Rayner 1998; Davidson and MacKendrick 2004). There is less agreement about the drawbacks of the present system but the problems that are mentioned usually include:

- A focus on the impacts of single industries, even taken together, has failed to account for the problem of cumulative impacts, leading to unplanned change
- The “footprint” of resource extraction is unnecessarily large because conflict between users has traditionally been addressed by spatial segregation
- When policies are developed to address the problem of integration by institutional structures that were designed for single industries, the results are gaps, overlaps, and ambiguities that are inefficient and fail to resolve conflicts among users and between users and other stakeholders

Taken together this means that most jurisdictions begin with policy designs that have at least some features of incoherent goals and inconsistent instruments threatening layering, conversion or drift.

A.4.1 Opportunities for ILM

There is some agreement that ILM presents significant opportunities for the major users and other stakeholders in resource management:

Cumulative effects management is needed to meet various commitments that governments have entered into with respect to environmental impacts, e.g. adaptation to/mitigation of climate change and the conservation of biodiversity. Cumulative effects management may also reduce conflict

- Reduction of resource users' footprint is advantageous to government for the same reasons and may reduce industry costs
- A more holistic approach to resource policy may provide greater predictability for access to the land base. Predictability is more valuable to renewable resource industries that plan over longer time scales than to those engaged in non-renewable resource extraction tied more closely to short-term market considerations
- All resource users could benefit from a streamlined regulatory process, beginning with "one stop shopping" for project approvals but also including the elimination of ambiguous and self-defeating regulations. Other stakeholders, particularly those who currently benefit from a complex approval process with many opportunities for veto or delay, may be less enthusiastic
- ILM is an opportunity to put into effect some contemporary ideas about "governance" or "government at a distance", in which policy goals are to be achieved neither by direct regulation nor by markets but by steering loose networks of stakeholder towards policy goals. Instrument choice will be pluralistic but focus on procedural instruments and performance standards

Taken together these elements might render goals more coherent and instruments more consistent, meaning movement of ILM towards the 'integrated' dimension. However getting to this virtuous quadrant is neither automatic nor simple as it raises several important political problems with policy re-design and institutional change:

- It is very clear from the opportunity structure that different users have different interests in pursuing ILM. This suggests that it will be difficult or impossible to develop ILM using information and incentive policy instruments by themselves. Both standard-setting and the development or clarification of new kinds of property rights will have to be significant components of ILM in spite of the fact that some of the interest in ILM from industry and government appears to be motivated by a desire to see other approaches
- While it may be possible to find some "win-win" solutions to problems of multiple use that leave everyone better off, ILM may result in more efficient use of the landbase in the aggregate by requiring some users to internalize costs that they currently pass on to others

- Unraveling the policy legacies of several decades of single-industry policy regimes is a complex task. In particular, the goals of the different regimes are likely to be quite different and simply putting them altogether under a single authority is a recipe for incoherence

That is, moving towards integration means avoiding drift and conversion.

A.5 Research Plan

The research is designed as *comparative case study* of the development of ILM in BC, Alberta, and Manitoba. In BC, ILM develops out of a comprehensive and participatory land use planning exercise that was originally driven by a protected area strategy rather than the larger goals of SFM. Policy instrument choice is further constrained by the decision to create an innovative but experimental outcomes-based Forest Practices Code to deliver SFM itself. We thus expect to find ILM with features of both layering and conversion in BC. In Alberta, ILM is being built on private voluntary initiatives and negotiated regulations in the absence of comprehensive land use planning (Alberta 2005; Alberta SRD 2005), so we would expect to find an effective IS with challenges posed by conversion and drift. Thus both jurisdictions face significant institutional obstacles to choosing an appropriate mix of policy instruments to reach the objectives of their ILM policies. In Manitoba, ILM policy is currently in development in stakeholder projects such as the East Side Planning Initiative and we would expect to find challenges of both layering and conversion.

The Alberta case study will focus on the development of voluntary agreements in the FMA held by Alberta Pacific in north-eastern Alberta, the implications of extending these kinds of agreements to other FMAs held by Weyerhaeuser and DMI, and the development of ILM policy on this basis by the Alberta government. While the use of voluntary agreements to achieve resource and environmental policy objectives is common in Europe and not unknown in Canada, the agreements are usually between government and industry, not industry and industry (Jordan et al. 2005; Maged 2004). Although the Alberta Pacific approach has already attracted the attention of researchers (Farr et al. 2004), this will be the first attempt to assess it from the point of view of policy design and to determine the appropriate role for government in such arrangements.

The BC case will study the impact of the Mountain Pine Beetle infestation on the Cariboo Chilcotin Land Use Plan, one of the first regional land use plans to be adopted in BC, and will have the BC Forest Practices Board as initial partner. Overall, the BC project will examine the effectiveness of ILM implementation through a hierarchy of plans and objectives and will specifically examine the 100 Mile House SFMP and planning in the Nadina District using data provided by the FPB. The case study will focus on the opportunities for creative ILM planning as well as the risks posed by the MPB outbreak, for example, providing an atmosphere in which tenures that include more interests and values are developed, including stewardship or restoration tenures, and different commercial recreation tenures (BCFPB 2004). The Manitoba case will study the Southern Hardwood Development Project, which involves a partnership between First

Nations, industry and all levels of government in an area with existing forestry activities and significant wildlife management and community sustainability issues.

In assessing the appropriateness of the policy mix, we will use the analytical framework described in section. A.6 to be refined in preliminary discussions with stakeholders.

A.5.2 Methods:

The primary research method for this analysis of appropriate instrument mixes and goal formation will be a series of interviews with policy makers, analysts, and managers. A preliminary interview list will be drawn up in consultation with our partners and is expected to include key informants at all levels of government, managers from the most important resource industries, and representatives of civil society. The aim is to interview as broad a range of interested parties as possible and the original list will be expanded by the snowball technique. Interviewees will be sent an abbreviated version of the project description with a series of questions intended to structure the discussion. Interviews will be conducted both in person and, where appropriate, by telephone.

The interviews will include questions on the historical development of ILM and related issues in the relevant jurisdiction and on the current proposals in order to enable the assessment of the current state of IS in each jurisdiction and the dominant change mode/mechanism/style.

For all three case studies, the judgments of the research team need to be debated and corrected by the stakeholder community. We therefore propose workshops for presentation of preliminary findings as part of the research methodology as well as part of the KETE strategy. In light of the very tight timelines faced by the Alberta government, with policy development to be completed by March 2007, we have agreed to carry out the case studies sequentially rather than concurrently (with an important exception for aboriginal involvement, see A.5.3 below).

A.5.3 First Nations' and Metis Involvement: The case study areas contain several First Nations and Metis communities. Many people take the view that, as holders of constitutionally protected rights and, in some cases, title to the resources at issue here, they should be consulted at an early stage in the development of a research project of this kind in order to be involved in research design and implementation (Hickey and Nelson, 2005). While we will attempt to reach affected First Nations and Metis communities in the Alberta study areas, we have been unable to engage in the appropriate consultative processes that would allow us to have Metis or First Nations as *partners* in this part of the project. However, one advantage of treating the case studies sequentially is that there will be time to engage in appropriate consultation with potential First Nations partners in the BC and Manitoba case studies. In spite of the concerns of many First Nations about ILM and the treaty process in BC, some members of the Cariboo Chilcotin Tribal Council participated in the Land Use Plan. First Nations and Metis are key stakeholders in the Southern Hardwood Development Project. Development of relationships with First Nations and Metis in BC and Manitoba are scheduled for the first year of the study so that protocols can be developed in time for the conduct of research in the second year of

the project. Dr Mitchell has a travel budget for these consultations in BC and Dr. Wellstead will undertake this work in Manitoba as part of the CFS in-kind contribution.

A.5.4 Comparative Studies

Policy analysts stresses the importance of policy learning as a tool for overcoming many of the historical constraints on policy development which might lead to sub-optimal IS designs in the Canadian jurisdictions examined (Bennett and Howlett 1992). In addition to facilitating learning between the three case study jurisdictions, the research will scan for appropriate jurisdictions, domestic and foreign, that are engaged in ILM policy development from which lessons may be drawn. These will include Quebec, selected US states and, in the case of the federal government role noted in A.6.3 below, the European Union (Quebec 2004; USDI 2003; Jordan et al. 2002).

A 6 Assessment Framework

A.6.1 Coherent Goals

There is some agreement that what differentiates ILM from multiple use management or even IRM is that it is based on agreement on values, objectives and principles – i.e. goal coherence (CILMC, 2005). Nonetheless, the literature is full of conflicting examples of values, objectives and principles or goals that are so vague as to be virtually meaningless, “sustainability” or “healthy ecosystems”, for example. In part, this is a problem of process: the goals of any particular ILM policy cannot be stipulated in advance of the participatory processes that are designed to allow the stakeholders to articulate the goals and set objectives. However, better specification of the goals of ILM is needed in order to ensure that a virtuous integrated strategy actually emerges.

A key test of policy coherence is whether ILM plans can survive exogenous shocks without disintegrating into their component parts and becoming plans for a dominant use again. While these shocks may be political and economic as well as biological, we have chosen to study the resilience of the Cariboo Chilcotin Land Use Plan in BC and its embedded lower level plans in the face of the Mountain Pine Beetle infestation. To what extent do the plans allow their goals to be pursued in the face such a dramatic change in the assumptions about future forest conditions and what lessons can be learned for ILM generally?

A.6.2 Consistent Instruments

ILM is an example of the intensive effort that has taken place over the last fifteen years to rethink regulation. The deregulatory impulse of the 1980s rapidly came up against the limits of the effective use of incentive and information instruments, especially in resource and environmental policy. At the same time, domestic pressures on government budgets and international competitive pressures from low tax, low regulation regimes prevented any large scale return to direct regulation. The result has been a “regulatory reconfiguration” that has seen governments search for new sources of capacity and direction for resource and environmental policies. As Gunningham and Sinclair (2002), and especially Grabosky (1995) concluded, ‘*smart*’ *instrument mixes* are those that avoid

the use of counter-productive instruments and instead utilize complementary mixes of substantive and procedural instruments.

Reflexive regulation is a response to the idea that the increasing complexity of the goals that governments are aiming at has rendered the old kind of prescriptive “rule following” regulation obsolete. Even if we knew enough to prescribe rules—and scientific uncertainty often means that we do not—we want to encourage the subjects of regulation to engage in strategic thinking rather than rule-following behaviour. Integrated strategies that focus on managing risk through the use of process standards like EMS are an example of this approach to regulation, as are reporting requirements that aim to generate information to which the subjects of regulation can respond. Regulatory pluralists believe that, in most circumstances, a mix of complementary policy instruments and a broad array of government and non-government “regulators” will produce better outcomes than the old single instrument, government-industry regulatory relationship (Orts 2001). The focus here is often on using informal mechanisms of social control, such as “social license” from affected communities, certification by international standards organizations, oversight by commercial third-parties like financial institutions, and self-regulation (Gunningham et al. 2003). Where more traditional forms of regulation are deemed necessary, they often involve “backstopping” the informal mechanisms with performance and process standards that are less prescriptive than those used in the past but still function to prevent the laggards falling below minimum levels of sustainable management (Bemelmans-Vedec et al. 1998).

Finally, regulatory reconfiguration often involves *partnerships*. Again, these partnerships usually embrace more than just government and industry and sometimes do not involve governments at all, such as “green alliances” with NGOs and communities or supply chain partnerships between businesses (Lenschow and Zito 1998; Cashore et al. 2004). In the latter case, governments may still play critical roles in facilitating, supporting and rewarding partners. Voluntary agreements between governments and businesses are widely used in many European countries, especially as a way of encouraging companies to do more than regulations may require.

A.6.3 Appropriate Institutions

If ILM is going to be an example of “governing at a distance” or “governance” then it must also address the question of how to steer a loose network of partners. Metcalfe (1994) argues that the key is to choose an appropriate level of coordination and then ask what capacities are required of governments at each level and whether and how they can be delivered. The twelve point “Metcalfe scale” with which he elaborates this idea, ranging from independent decision making to joint strategies has very direct implications for the governance challenges faced by all levels of government in a network management situation.

Metcalfe makes two important comments about this scale. First, that coordination problems at higher levels on the scale can only be addressed if lower level coordination is in place already. Consensus is unlikely to be reached, for example, if network members routinely withhold information from each other and habitually engage in unilateral policy

development. Secondly, and most important for our purposes, integrated strategies occupy the highest level on this scale. In Metcalfe's view, governments too often assume that coordination can begin by the creation of an integrated strategy and everything else will fall into place afterwards. This might have been true when governments could govern hierarchically (if there ever was such a time) but in the era of network governance such a presumption is a recipe for future coordination problems and policy failure.

Of particular interest here is the role of the federal government, especially in areas of environmental management in federal jurisdiction but also in the strategic coordination of provincial policies that have implications for international commitments such as biodiversity conservation and climate change. Intergovernmental coordination is a key challenge for ILM (May et al. 1996). Here, the role of the federal government has important analogies with that of the European Commission in respect to the forest policies of its member states. We aim to explore the development of the Open Mode of Coordination (OMC) in European forestry (Lazdinis et al. 2005; Zingerli et al. 2004) for its lessons for federal involvement in ILM on forested lands in Canada.

B. Relevance

A focus of the SFM network's Phase 2 research is the evaluation of strategies and alternatives that promote SFM. In the context of policy and institutional analysis, two areas of interest are the search for novel institutional arrangements, and the evaluation of policy options and the implications of alternative institutions and policy instruments. The CFP specifically asks for research that addresses policy and institutional design for integrated landscape and cumulative effects management.

The case studies are designed to balance two objectives. The first is to provide relevant and timely deliverables to partners who are directly engaged in ILM planning and implementation. The second is to answer some of the larger questions of policy and institutional design raised by ILM. These include three key components of the CFP: the roles of the players, including all levels of governments, industries working on the forested landscape, communities and civil society; a special focus on the implications for existing arrangements of implementing ILM (and the concomitant implications for ILM of existing arrangements); and case studies that tackle a variety of different challenges to the success of ILM.

The proposal has been interactively developed with the partners. The team leader had meetings with Environment Canada and made contact with other Alberta and BC partners in Edmonton on November 17. He met again with representatives of Alberta SRD, Al-Pac, Weyerhaeuser and CFS in Edmonton on December 2. Co-investigators have met with or otherwise been in contact with other partners during this period. The process of proposal development has been a fully collaborative one to ensure that the specific deliverables requested by the partners can be incorporated in a valid research design that meets the standard of interdisciplinary research in the policy sciences.

The team leader has consulted with Dr. George Hoberg to determine the proposal's fit with overall SFM priorities and the specific requirements of the CFP in the policy and institutional design research area. As already noted, the proposal builds on research already conducted in the network on challenges to ILM in Alberta (Mackendrick et al. 2001) and with a variety of other initiatives by governments and NGOs. These linkages will continue to be developed during the life of the research. By confining the research to two years, we intend to contribute to this ongoing discussion about ILM in Canada in a timely way.

C. Expertise and Research Management

The research team contains broad interdisciplinary expertise in political science, policy studies and law. Four out of five co-investigators have specifically researched and published in the area of forest policy at all levels and in many jurisdictions, including books, edited collections, theses, refereed articles and research papers. The fifth has specific policy expertise in the area of oil and gas in Alberta.

Three of the team – Rayner, Howlett and Tollefson—previously collaborated in a one-year law and policy review project for the AquaNet NCE involving the shellfish aquaculture industry together with government, First Nations, and community partners (Howlett and Rayner 2004). We expect that the division of labour, employment of graduate students and relationships with partners will be very similar to that involved in this project and we will be able to build on the results of our previous collaboration.

Partners are involved at all stages in the research, from the statement of the problem to the specification of deliverables. While the budget includes substantial funding for travel to allow the BC researchers to be in the field and to meet with the Alberta and Manitoba partners, we will also have members of the team in Edmonton and Calgary. In addition, we hope to use collaborators from our partner organizations directly in the research and we have in kind contributions of time and travel from our partner the CFS allowing expanded access to the Manitoba case study.

D. Knowledge Exchange and Technology Extension

The KETE program has been developed in collaboration with our partners. Discussions in Edmonton with the Alberta Ministry of Sustainable Resource Development and FMA holders Alberta Pacific, Weyerhaeuser and DMI suggested that the Alberta case study should be structured to provide an assessment of Alberta's ILM policy. The assessment will compare the choice of policy instruments, particularly the facilitation of voluntary agreements between forestry and oil and gas companies, with the stated goals of the ILM policy and suggest ways in which key policy goals, such as encouraging industry to go beyond compliance with backstopping regulations, can be further developed.

We will build both of these components directly into the interview strategies of the case studies. To meet the Alberta government's request we will conduct intensive interviewing with at least two law students and two members of the research team in the field in the

first summer, leading to a workshop in Edmonton in December 2006. We will deliver our policy assessment in the form of presentations in Edmonton (location and format to be decided by SRD) by late winter of 2007.

For BC and Manitoba, we plan to spend the first year developing our Metis and First Nation contacts in a way that is respectful of the communities concerned and not rushed by unrealistic deadlines. Once the Alberta study has been completed, we aim to begin the interview fieldwork in April 2007 with preliminary results presented at a workshop in Vancouver in winter 2008. Again, we will incorporate feedback into our reports on the case studies, and offer to present our response to the workshop and our draft reports to partners in regional locations to be decided by them.

As we have argued in our research plan, the new generation of ILM plans are examples of “government at a distance” that are heavily dependent on the creation and steering of policy networks. Both the political science and the sociological literature have noted that there are many innovative experiments on the ground that fail to add up to a coherent and integrated approach to land management because of a general inability to steer these local resources in the direction of policy goals without heavy-handed interventions that disrupt or destroy them. The key question here is the appropriate roles for different network actors – governments, including local government and First Nations, companies, civil society, and research scientists – and the resources that are needed to allow these roles to be performed effectively. Thus, a key component of the KETE plan is to use our research and our interaction with our partners to help build the policy networks themselves. Thus, in the practice of our research, we aim to involve partners and other network components in a process designed to exchange information about successful, on the ground, integrative practices. We shall elicit information about the barriers to adopting these practices and the kinds of resources that other network actors can provide to overcome them, whether in the form of policy instruments such as regulation and incentives or procedural innovations designed to speed the flow of information in the network.

E. HQP

The project will involve an interdisciplinary team of graduate students at every level in the research and influence dissertation writing. In the first year, the Alberta case study will be conducted by two law students under the direction of Tollefson. The students will split up to review the policy and regulation in BC and Manitoba respectively for the second year of the project. The lesson-drawing from comparable jurisdictions will involve PhD students in political science with appropriate language skills working for two years co-directed by Rayner and Howlett. The BC and Manitoba case studies will both attempt to make use of research collaboration with partners and other stakeholders, but both will involve additional Masters students. The students will be chosen to create an interdisciplinary team; the students we have tentatively assembled for this project have backgrounds in law, political science, geography, and planning. They will be expected to spend time in the field in the locations where policy is being developed. In particular, the law students will be expected to meet and work closely with our Alberta partners and be

aware of the differences between the Alberta and BC contexts. Our budget includes travel and accommodation for this purpose.

The project will also build community research capacity by supporting one or more community associates in the B.C. case study. The opportunity for graduate students to work closely with community research associates will benefit both and will assist in ensuring the practical relevance of project results.

References

- Alberta. 2005. *MOSS [Mineable Oil Sands Strategy]*. Draft Discussion Paper.
- Alberta. SRD [Sustainable Resource Development]. 2005. *Fort McMurray Mineable Oil Sands Integrated Resource Management Plan*. Draft Discussion Paper, October 2005.
- Appleby, Alan, Anne Bell, Kristin Bingeman, Brian Churchill, and Rachel Plotkin. 2004. *Integrated Land Use Planning and Canada's new National Forest Strategy*. Ottawa: Sierra Club of Canada
- Ashley, Caroline and Simon Maxwell. "Rethinking Rural Development" *Development Policy Review* 19 (4) 2001: 395-425
- Bemelmans-Videc, Marie-Louise and Evert Vedung. 1998. "Policy Instrument Types, Packages, Choices, and Evaluations." In Marie Louise Bemelmans-Videc, Ray Rist and Evert Vedung (eds.) *Carrots, Sticks and Sermons: Policy Instruments and their Evaluation*. London: Transaction: 249-273
- Bennett, Colin and Michael Howlett, "The Lessons of Learning: Reconciling Theories of Policy Learning and Policy Change." *Policy Sciences* 25(3): 275-294.
- BCFPB [British Columbia, Forest Practices Board]. 2004. *Evaluating Mountain Pine Beetle Management in British Columbia: Special Report*. FPB/SR/20. Victoria.
- Campbell, Ian. 2004. "Towards Integrated Freshwater Policies for Canada's Future". *Horizons* 6(4): 3-7.
- Canada. Policy Research Initiative. n.d. *Integrated Landscape Management Models for Sustainable Development Policy Making*. Online
- CILMC [Canadian Integrated Landscape Management Coalition] 2005. *Integrated Landscape Management: Applying Sustainable Development to Land Use*. Online
- Cashore, B, G. Auld, D. Newsom. 2004. *Governing Through Markets: Regulating Forestry through Non-State Environmental Governance*. New Haven, Yale University Press.
- Clark, John R. 1994. *Integrated Management of Coastal Zones*. FAO Fisheries Technical Paper 327. Rome: Food and Agriculture Organization of the United Nations.
- Davidson, Debra J. and Norah A. MacKendrick. 2004. "All Dressed Up with Nowhere to Go: The Discourse of Ecological Modernization in Alberta, Canada." *Canadian Review of Sociology and Anthropology* 41(1): 49-65

- de Bruijn, Hans. 2005 "Roles for Unilateral Action in Networks". *International Journal of Public Sector Management*. 18, no. 4: 318-329
- Farr, Daniel, Steve Kennet, Monique Ross, Brad Stelfox and Marian Weber 2004. *Al-Pac Case Study Report – Part 2, Regulatory Barriers and Options*. Prepared for the NRTEE. Calgary: Canadian Institute for Resource Law
- Glueck, Peter. 2004. "Conceptual Framework of COST Action E19 'National forest Programmes in a European Context.'" In Glueck, P. and Voitleithner, A. (eds.) *NFP Research: Its Retrospect and Outlook*. Publication Series of the Institute of Forest Sector Policy and Economics, vol. 52. Vienna
- Grabosky P. 1995. "Counterproductive Regulation". *International Journal of the Sociology of Law* 23: 347–69
- Gunningham, Neil, and Darren Sinclair. 2002. *Leaders and Laggards: Next-Generation Environmental Regulation*. Sheffield: Greenleaf.
- Gunningham N, R Kagan and D Thornton. 2003. *Shades of Green, Business, Regulation and Environment*. Stanford: Stanford University Press
- Hacker, Jacob S. 2004. Privatizing Risk without Privatizing the Welfare State: The Hidden Politics of Social Policy Retrenchment in the United States. *American Political Science Review* 98 (2): 243-260.
- Howlett, Michael and Jeremy Rayner. 2004. "(Not so) 'Smart regulation'? Canadian shellfish aquaculture policy and the evolution of instrument choice for industrial development" *Marine Policy* 28: 171-184
- Howlett, Michael and Jeremy Rayner. Forthcoming. "Globalization and Governance Capacity: Explaining Divergence in National Forest Programmes as Instances of 'Next-Generation' Regulation in Canada and Europe" *Governance*, forthcoming April 2006.
- Jordan, Andrew, Rüdiger K W Wurzel, Anthony Zito and Lars Brückner, 2002. *The innovation and policy transfer of 'new' environmental policy instruments (NEPIs) in the European Union and its member States*. ESRC Future Governance Paper 11. London: ESRC
- Jordan, Andrew, Rüdiger K.W. Wurzel, and Anthony Zito. 2005. "The Rise of 'New' Policy Instruments in Comparative Perspective: Has Governance Eclipsed Government?" *Political Studies* 53 (3): 477-496.
- Lenschow A. and Zito, A. 1998. "Blurring or Shifting of Policy Frames?: Institutionalization of the Economic-Environmental Policy Linkage in the European Community". *Governance*, 11(4): 415-441
- Lock, Karen. 2000. "Health Impact Assessment" *British Medical Journal* 320: 1395-1398
- Mackendrick, Norah, Colette Fluet, Debra J. Davidson, Naomi Krogman and Monique Ross. 2002. *Integrated Resource Management in Alberta's Boreal Forest: Opportunities and Constraints*. Interim Project Report. Edmonton: Sustainable Forest Management Network

- Lazdinis, Marius, Willi Zimmermann, and Joost van de Velde. "Participation in EU forest governance: Present institutional framework and a path for improvement." Draft ms.
- McGuire, Michael.. 2002. "Managing Networks: Propositions on What Managers Do and Why They Do It". *Public Administration Review*. 65(5): 599-609.
- Maged, Fatma. 2004 "Voluntary Approaches in Environmental Policy". *Horizons* 6(4): 13-17.
- May, Peter, Raymond J. Burby, Neil Ericksen, John Handmer, Jennifer Dixon, Sarah Michaels, and D. Ingle Smith. 1996. *Environmental Management and Governance: Intergovernmental Approaches to Hazards and Sustainability*. London: Routledge,
- May, Peter, Bryan D. Jones, Betsi E. Beem, Emily A. Neff-Sharum and Melissa K. Poague. 2005 "Policy Coherence and Component Driven Policy Making: Arctic Policy in Canada and the United States" *Policy Studies Journal* 33 (1): 37-63
- Metcalf, Les. 1994. "International Policy Co-ordination and Public Management Reform". *International Review of Administrative Sciences* 60, 271-290.
- National Landscape Management Workshop. 2003. *Report on the National Landscape Management Workshop held at the Chateau Cartier, Aylmer, Quebec, April 23-25, 2003*. Online
- NRTEE [National Round Table on the Environment and the Economy] 2005. *Boreal Futures: Governance, Conservation and Development in Canada's Boreal*. Ottawa. Renouf.
- Orts, Eric and Kurt Dektelaere. 2001 *Environmental Contracts: Comparative Approaches to Regulatory Innovation in the United States and Europe*. The Hague: Kluwer Law International
- Post, Jan C. and Carl G. Lundin, (eds.).1996. *Guidelines for Integrated Coastal Zone Management*. Environmentally Sustainable Development Studies and Monographs Series No.9. Washington DC: World Bank, 1996
- Quebec. Commission for the Study of Public Forest Management in Quebec. 2004 . *Final Report Summary*. Online
- Rayner, Jeremy. 1998. Priority Use Zoning: Sustainable Solution or Symbolic Politics. In Chris Tollefson (ed.) *The Wealth of Forests: Markets, Regulation, and Sustainable Forestry*. Vancouver: UBC Press: 232-254.
- USDI (United States, Department of the Interior).2003. *Northwest National Petroleum Reserve - Alaska. Final Integrated Activity Plan*. Anchorage: Bureau of Land Management.
- Zingerli, Claudia, Kurt Bisang, Willi Zimmermann. 2004. *Towards Policy Integration: Experiences with intersectoral coordination in international and national forest policy*. Paper delivered at the Berlin Conference on the Human Dimension of Global Environmental Change: "Greening of Policies – Interlinkages and Policy Integration"

