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INTERSECTION AND INTEGRATION OF FIRST NATIONS IN THE CANADIAN FORESTRY SECTOR

Implications for Economic Development

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INTRODUCTION

First Nations participation in Canada's forest sector has steadily increased over the past decade and has emerged at the forefront of government policy agendas. There are several underlying reasons for this trend, including the conclusion of many treaty land settlements, the increase in the number of Aboriginal-based forest management licenses, a more substantive role for First Nation people in forest management planning processes, partnerships, and the development of more wholly-owned businesses or joint ventures (Wyatt, 2008; Wilson and Graham, 2005). There

is great potential for additional expansion, as approximately 80% of Canada's 630 First Nation communities are located in forested settings (Parkins et al., 2006; NAFA, 2007).¹

Despite these trends, many First Nations bands face significant challenges to full engagement in the forest sector. In particular, many First Nations still lack the capacity for forest management and business development activities. In response, federal government programs such as the joint Indian and Northern Affairs Canada (INAC), Natural Resources Canada (NRCan), First Nations Forestry Program (FNFP), or INAC's Aboriginal Business Canada attempt to

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¹ In this paper, the focus of the survey is on First Nations. However, we do, when possible, reference an applicability to a wider Aboriginal audience.

address these long standing problems.² However, these programs were not designed to address more substantive tenure-based policy issues. In fact, despite their good intentions, they may perpetuate a status-quo of capacity impasse.

In its last year (2008–2009), the FNFP faces an uncertain future. One of the challenges of the program has been an inability to gauge the program's long term impact in the Canadian forest sector. Typically, the program's success has been measured at the project level (i.e., employment created) or through narratives highlighting "success stories" from individual projects (Natural Resources Canada, 2005). However, Parkins et al. (2006) in their study of Statistics Canada Census data found that the effects of forestry employment to Aboriginal communities between 1986 and 2001 were negligible.

In light of the program level efforts made by government agencies, very little is understood about the First Nation's policy role in Canadian forest sector. More specifically, we argue that underlying substantive issues impact First Nations policy participation and may inform program-level decisions. This paper reports the results of a survey of Canada's First Nations forestry "policy elites" (that is, both First Nations and non-First Nations individuals). This is the first survey of its kind where a wide representative constituency of those in position of influence, interest in, or knowledge of forestry. In this paper, we examine the major issues affecting First Nations forestry in Canada using comparison of means tests and multivariate analysis. This paper will be of interest for those working in the economic development field, particularly those who are on the front-line of such changes and challenges. In some cases, economic development officers participated in the survey that we conducted. The results will present a snap-shot of the larger issues affecting the current state of First Nations forestry.

BACKGROUND

The government support of Canadian First Nations forest management involves overlapping constitutional responsibilities. The federal government has jurisdiction over "Indians and lands reserved for Indians" under s. 91(24) of the Constitution Act, 1867 and is administered by INAC. Although INAC, under the Indian Act (ss. 57a, 93), has federal government responsibility for forestry on-reserve lands, over three-fourths (77%) of industrial forest management activity in Canada takes place on Provincial Crown forested lands and thus falls under Provincial government authority (s. 92A of the Constitution Act, 1867) (Natural Resources Canada, 2006). Some environmental issues relating to forestry management fall under both provincial and federal jurisdiction. This overlap in responsibility illustrates the importance of collaborative federal partnerships. Recently, the National Aboriginal Forestry Association (2007) reported that First Nations hold tenure and have access to an annual harvest allocation of some 11.7 million cubic meters of timber on Crown and private land representing 6.4% Canada's total forest harvest. They estimate there could be a doubling of the Aboriginal managed land base within twenty years as new treaties are finalized and settlement lands are identified.

Government involvement in Aboriginal forestry dates back over fifty years. One of the largest programs that assisted in the development of First Nations forestry management was the Indian Lands program under the Federal-Provincial Forest Resource Development Agreements (FRDAs) from 1984–1996. During this time, some \$42 million was allocated for the program, most of which was dedicated to updating or establishing forest inventories and management plans. This program was directly delivered by Forestry Canada (now the Canadian Forest Service, Natural Resources Canada). During the delivery of these FRDAs, there was very

² Recently in Alberta, the Economic Partnership Initiative was delivered by the Government of Alberta's International and Inter-governmental Relations/Aboriginal Relations department.

little direct involvement by First Nations except on an advisory basis.

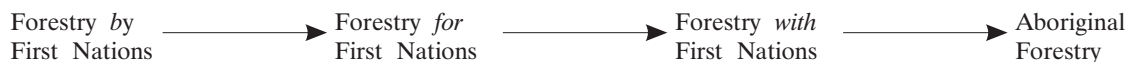
After the FRDA program expired in 1995, a five-year joint initiative was developed to respond to the changing needs of First Nations. The FNFP, between INAC and NRCan, was established in 1996. The program was renewed, after two one year extensions, for another five years in 2003. The scope of activities undertaken within the FNFP was therefore much broader than under the FRDA program. The objectives of the FNFP were to enhance First Nations capacity through the development of and participation in forest based businesses, increase the number of First Nations partnerships and joint ventures, investigate the feasibility of national trust funds, capital pools, and other funding mechanisms, and to enhance First Nation capacity to sustainability manage reserve forests (Natural Resources Canada, 2001). These included the development of management plans that included values beyond timber harvesting, training programs, the development of business plans, and increasing the access to the land base.

Over the course of the program, over \$41 million has been allocated to over 1,900 projects valued at over \$154 million (Natural Resources Canada, 2007). Several features of the program are particularly noteworthy for economic development officers. The first is the emphasis placed on regional program delivery. The program was delivered out of each of the five Canadian Forest Service regional offices.³ This decentralized approach to program delivery allowed for a greater degree of flexibility in rec-

ognizing the regional diversity of First Nations issues, needs, and capacities. For example, projects in the Prairie Provinces emphasized skills training whereas British Columbia's projects were oriented towards business development. The second feature is the provincial division of the program's implementation and governance. All major management decisions and funding allocations were made by Provincial-Territorial Management Committees (PTMC). Each PTMC is represented by First Nations, NRCan and INAC represented by their respective regional offices and in some cases members from provincial/territorial governments and the forest industry.⁴ The PTMCs developed and updated work plans, reviewed project proposals and allocated funding. Economic development officers working with First Nations communities have been integral partners the FNFP program delivery process from proposal writing assistance to ensuring that individual projects have been completed.

In spite of these efforts to increase First Nations' involvement in program level decision-making, their involvement within the larger Canadian forest management policy making system is what Stephen Wyatt refers to as "forestry by First Nations" (2008). In this system, First Nations participate within the existing management regime where they may work with the forest industry or receive financial and economic benefits. However, this represents a limited scope of involvement by First Nations' people. Three other systems are identified in Figure 1: "forestry for First Nations," "forestry with First Nations," and finally, "Aboriginal forestry." Each

FIGURE 1
Wyatt's Classification of First Nations' Forest Management Systems



³ The offices are located in Fredericton, Quebec City, Saut ste Marie, Edmonton, and Victoria.

⁴ In Québec, the members attending the provincial annual conference of the General Assembly of First Nations Administrators (NAFA) active in forestry, discuss and vote on the various recommendations submitted by the PMC for approval.

is defined by the scope and extent of Aboriginal rights in tenure structures and government policy regimes, economic participation, consultation, impact and assessment and certification, traditional knowledge, co-management, and differing paradigms (Wyatt, 2008). For example, in a “forestry for First Nations” system partnerships and joint ventures are more likely and consultation takes into consideration Aboriginal views whereas in a “forestry with First Nations” system Aboriginal rights should be incorporated into the tenure system, there is extensive consultation, and traditional knowledge is as equally important as western-based science. In an “Aboriginal forestry” forestry system, Aboriginal rights are fully recognized; partnerships reflect Aboriginal goals and First Nations have the right of final approval in co-management arrangements. There has been a spate of similar literature prescribing what Aboriginal forestry should be (See Stevenson, 2006; Parsons and Prest, 2006; Kimmins, 2002). A shift from “forestry by First Nations” to any one of these three new systems would represent a significant revision of policies and would require significant financial resources and institutional change (Wyatt, 2008). However, making modest changes within “forestry by First Nations” system by making modest program-level changes can best be described as “policy drift.” Hacker (2004) defines “policy drift” as changes in the operation or effect of policies that occur without significant changes in the policy’s structure. In this paper, we examine the attitudes of those individuals, namely “policy elites” who have some influence to make decisions in the direction of First Nation forestry.

POLICY COMMUNITIES, NETWORKS AND IDEAS

To better understand the possibility of policy change within the context of Canadian First Nations forestry, this paper employs the policy community and policy network approaches. Government agencies no longer have the capacity or the resources to address issues single-handedly (Smith, 2000; Lindquist and Wellstead, 2001). They depend now on the co-operation and resources of others outside of government (e.g., NGOs, academia, communities, forestry industry). In Canada, both the policy community and policy

network frameworks carry considerable currency as research approaches (Howlett and Ramesh, 2003). According to Atkinson and Coleman (1995), these two approaches refer to the actors (organizations and individuals) within a particular sector and their relationships with one another. Coleman and Skogstad (1990) state that policy community members share a common focus and, with varying degrees of influence, shape policy outcomes over the long run. The policy community is divided into two segments: the sub-government and the attentive public. The “sub-government segment,” at the centre of any policy community, includes senior government personnel in positions of direct responsibility for a particular sector and established organizations engaged in policy formulation and implementation. Sub-government actors attempt to maintain what Baumgartner and Jones (1993) refer to as a “policy monopoly.” Policy monopolies typically have two major characteristics: a definable institutional structure that limits access to the policy process; and the supporting ideas associated with the institutions that connect to core policy values. These monopolies are successful when they are driven by a powerful idea and are able to function without need for much access to others outside the sub-government (Baumgartner and Jones, 1993). The “attentive public segment” includes those actors who are capable of influencing policy, but who do not participate in policy-making on a regular basis (e.g., interest groups, professional organizations, other government departments, international organizations). Historically, in a “Forestry by First Nations” forest management regime, First Nations policy actors have been part of the attentive public.

While policy communities define all of the actors involved in particular sector’s policy process, the policy network describes the types of relationships between governmental and non-governmental actors that evolve in a particular issue (Lindquist, 1992). A large body of literature on the policy network framework describes relationships that depend on factors such as resources (e.g., funds, number of personnel), degree of institutionalization, and rules of conduct (Coleman and Skogstad, 1990; Lindquist, 1992; van Waarden, 1992; Howlett and Rayner, 1995). Coleman and Skogstad (1990) examined Canadian policy communities, including agriculture,

forestry, wilderness, and banking.⁵ Key to our study, Canadian forest policy networks have historically been closed and highly resistant to significant policy change (Howlett and Rayner, 1995; Howlett, 2001). However, Hoberg and Morawski (1997) argue that the intersection of two policy communities can lead to significant policy changes. In their examination of forest and Aboriginal policy in Clayoquot Sound in British Columbia, the intersection of two sets of different actors, institutions, and ideas resulted in a reconfiguration of regional forest policy making.⁶ Similarly, Sabatier and Jenkins-Smith (1999) argue that policy oriented beliefs shape the direction of policy change. They argue that within a typical policy community, there may be 2–4 “advocacy coalitions” defined by strong policy core beliefs that are hard to alter. Policy change is more likely to occur on the secondary (operational) aspects of policy beliefs. In Canada, there are 12 forestry policy communities, each corresponding to a particular province or territory.⁷ Typically, Canadian First Nations’ forestry programs reflect the secondary aspects of dominant government-business nexus (Howlett and Rayner, 2001). This closely parallels with Wyatt’s “forestry by First Nations” system where policy change is at best incremental.

RESEARCH QUESTIONS

Very little is known about the interaction and intersection between Canadian First Nations and forestry policy communities. Potential areas of inquiry include attitudes toward forest management, priorities for funding; the perceived effectiveness of existing programs; and barriers to effectiveness. These may differ according to key characteristics of individual policy communities.

Following a description of the actors in the First Nations Forestry policy community, we ask how perceived barriers to First Nations involvement in the forestry sector differ according to First Nations status, attitudes about sustainable forestry, perceived threats to First Nations Forestry, awareness of the existence of various programmatic efforts, position in the policy process (sector and organizational role), and province of work. We hypothesize that there will be significant differences between First Nation and non-First Nation responses in term of their perceptions the major barriers facing First Nation forestry. A corollary to this hypothesis is that these two groups will have different forestry policy oriented belief structures.

DATA AND METHODS

The data for this study come from responses to an online survey of the Canadian First Nation forestry policy community. Data were collected in the spring of 2007 using Zoomerang® online software. The study population encompassed all those that the research team could identify that occupy a recognized position of influence or having knowledge of First Nations forestry. This sample included senior provincial and federal government personnel, First Nations (Band employees, Chief and Councilors, and economic development managers), consultants, managers and directors of forest industry organizations. Because of its relatively small size, the entire population rather than a random sample was surveyed. Participants were identified through an extensive search of organizations’ web pages and/or telephone directories (see Laumann and Knoke, 1987; Sabatier and Zafonte, 1995, for examples of similar research using this

⁵ Coleman and Skogstad (1990) classified policy networks into three types according to government and societal powers and organizational capacity:

- A pluralist policy network exists when there are many actors involved. These networks may occur when power is dispersed from either government or society (pressure pluralism), when societal actors are disorganized (clientele pluralism), or when organized interests are dominant (parentela pluralism).
- In a closed policy network, policy-making is concentrated within a government agency and one societal organization (a concentration) or a government agency and two or more societal organizations (corporatist).
- A state-directed (closed) policy network includes highly autonomous coordinated government agencies that dominate the policy-making process.

⁶ Hoberg and Morawski (1997) refer to the combination of actors, institutions, and ideas as “policy regimes.”

⁷ Nunavut does not have a significant forestry sector.

approach). Finally, a “snowball” technique was used, whereby respondents were given the opportunity to identify other individuals who should be invited to participate.

RESULTS

Describing the Respondents

A total of 876 potential participants were identified for inclusion in the study. We obtained 375 usable surveys, for an overall response rate of 42.8%. Of these, slightly under half (44%) identified themselves as being of First Nations heritage. Over half (59%) were from three provinces: British Columbia (31%), Ontario (17%), and Alberta (11%), and relatively fewer were from Atlantic Canada (12% in total), Quebec (6%), or the Territories (11%). Following previous research on policy communities (Stedman et al., 2004), we examined the structure of the policy community surrounding FNF via participating sectors. Over 60% of our respondents are employed by Canadian government agencies (39% Federal and 22% Provincial). This high percentage of government-based respondents is similar to a recent study of natural resource policy communities (Wellstead et al., 2004). Nearly one-fourth (24%) were employed in the forest industry, and another 21% were Band employees. A disproportionate number of non-First Nations respondents were employed by government agencies whereas over half of the First Nations respondents worked for their band or a First Nations organization.

Current First Nation Forestry Programming

Respondents were asked to rank the priority for funding for five sets of forestry related activities (five in each set): management, planning, business development, skills training, and professional training. Priority activities included forest health activities, silviculture management, integrated land management, forest survey training, harvesting training, silviculture training, and professional and technical training. Of the 25 activities, there were only three where the First Nations and non-First Nations differed significantly: forest health (insect and disease) management, negotiations training and traditional land use studies.

Non-First Nations respondents thought that these three activities were more important than First Nation respondents (Table 1).

Respondent Attitudes and Beliefs: Comparing First Nations and Non-First Nations

Respondents were asked a series of questions regarding their beliefs about First Nations Forestry, including perceptions of FNF effectiveness, effectiveness trends and barriers to increasing effectiveness, attitudes and beliefs about forest management, and priorities for funding. Perceived effectiveness was measured on a five point Likert scale ranging from 1 = not at all effective to 5 = very effective. Respondents averaged close to neutral (mean = 3.17), but showed wide variation (sd = 1.13): 25.5% felt the program to be not effective, 39.4% felt that it was effective, and 35.2% were neutral. These responses did not differ according to status as being First Nations or non-First Nations. This finding confirms that members of this policy community agree on the operational (secondary) aspects of First Nations forestry policy.

Respondents were asked to identify a series of barriers to First Nation involvement in the forestry sector (rated on a 5 point scale from 1 = strongly disagree that this is a barrier to 5 = strongly agree). A reliability analysis (a procedure for evaluating the internal consistency of multiple-item additive scales) revealed an alpha score of .832, suggesting that the items tapped into a common underlying domain (Table 2).

Dramatic differences emerge in perceived barriers according to First Nations status. For nearly all of the survey question items, respondents of First Nations status were significantly more likely to perceive barriers, including failure of government, access to resources and capital, and lack of participation. Interestingly, only one item: “band politics” was perceived as a barrier more often by non-First Nations people, and several items related to the technical skills among First Nations communities did not differ significantly by status. These findings suggest that differences in perceived barriers are less related to perceptions of internal capacity, but rather to external control and lack of recognition. These differences also extended to perceptions of the changing opportunity structure for First Nations

TABLE 1
Forestry Activity Priorities: First Nations versus non-First Nations

	<i>First Nations</i>	<i>Non-First Nations</i>	<i>Sig.</i>
Forest Management Activities			
Forest certification	3.41	3.28	ns
Forest health (insect and disease)	2.56	2.91	P<.05
Fire suppression	2.97	2.96	ns
Harvesting	3.00	3.00	ns
Silviculture (e.g., planting, site preparation)	2.84	2.78	ns
Forest Planning Activities			
Forest management planning	2.93	2.79	ns
Forest inventories	3.19	3.15	ns
Integrated land management planning	2.83	2.65	ns
Other forest values (e.g., fisheries, watersheds, and wildlife)	3.16	3.20	ns
Traditional land use studies	2.77	3.11	P<.05
Business Development Activities			
Bio-energy	3.24	3.27	ns
Ecotourism	2.81	3.24	ns
Non-timber forest products	2.87	3.24	ns
Milling and processing	3.16	2.89	ns
Forest services (e.g., consulting, technical services)	2.83	2.85	ns
Skills Training Activities			
Cut and skid operations training	3.33	3.58	ns
Fire suppression training	3.13	3.18	ns
Forest survey training	2.69	2.83	ns
Harvesting training	2.87	2.70	ns
Silviculture training	2.95	2.70	ns
Professional Training Activities			
Business management training	2.77	2.66	ns
GIS/GPS training	3.29	3.21	ns
Negotiations training	2.99	3.41	P<.001
Mapping training	3.38	3.41	ns
Professional and technical forestry training	2.48	2.26	ns

forestry: respondents of First Nations status were far less positive about trends in opportunities. Over one fourth (28%) said opportunities had declined, compared to only 6% of those not of First Nations status (60% of this group felt opportunities had improved, compared to 36% of First Nations people). These differences in perceived barriers, however, did not carry over to perceptions of the effectiveness of the First Nations Forestry program: respondents were

widely distributed on their views of programmatic effectiveness, and there were no differences between respondents according to First Nations status (Table 3).

Our next suite of questions addressed more general forest policy related cognitions and attitudes. Responses averaged fairly close to “neutral” (3.0) for most items, although the distribution varied reasonably widely. The pooled sample of respondents was fairly pro community,

TABLE 2
Perceived Barriers, by First Nations status

	<i>First Nations</i>		<i>Non First Nations</i>		<i>t</i>	<i>df</i>	<i>Sig</i>
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>			
Lack of financial, technical, or business skills within First Nations communities	162	4.22	201	4.15	.65	361	ns
Lack of capital available to First Nations people	162	4.41	200	3.74	5.93	360	P<.001
Lack of infrastructure owned by First Nations people	162	4.14	200	3.93	1.99	360	P<.05
Lack of workforce skills in First Nation communities	159	3.90	202	4.07	-1.59	359	ns
Lack of clear forest management mandate by Indian and Northern Affairs Canada (INAC)	160	4.04	194	3.53	3.93	352	P<.001
Band politics	159	3.61	199	3.85	-1.97	317	P<.050
Lack of access to resources on Provincial Crown lands	161	4.12	200	3.40	5.42	359	P<.001
Failure of provincial and federal governments to recognize First Nation authority	161	4.36	200	3.18	9.10	359	P<.001
Failure of provincial management regulations to address First Nations issues	160	4.27	197	3.25	8.16	355	P<.001
Lack of community participation in planning and decision-making	161	3.89	201	3.40	3.54	360	P<.001
Current market conditions	160	3.69	201	3.56	1.14	359	ns
Confusion over federal-provincial jurisdictions	161	3.75	202	3.10	4.87	361	P<.001
Lack of access to resources on reserve lands	159	3.50	194	2.90	4.48	351	P<.001
Summed Scale: All Barriers	146	3.99	170	3.54	6.24	314	P<.001
Reliability = .832							

pro-First Nations, and anti corporate in its orientation: respondents were most likely to agree that communities should have more power in making decisions in the forest sector (mean = 3.84, 36% strongly agree) and that First Nations should be given a wider range of property rights on Provincial Crown forested lands (mean = 3.70, 39% strongly agree). They were least likely to

agree that forest companies should be given a wider range of property rights on Provincial forested Crown lands (mean = 1.91, 5% strongly agree). We also conducted a principal components factor analysis (varimax rotation) to explore underlying commonalities across the suite of items. This analysis revealed three underlying dimensions among these forest policy related

TABLE 3
Perceived Opportunities for First Nations Forestry

	<i>Not First Nations</i>	<i>First Nations</i>	<i>Total</i>
Greatly Declined	2.0% 4	10.9% 17	5.9% 21
Declined	4.0% 8	16.7% 26	9.5% 34
Stayed the same	34.7% 70	35.9% 56	35.2% 126
Improved	31.7% 64	28.2% 44	30.2% 108
Greatly Improved	27.7% 56	8.3% 13	19.3% 69
Total	202	156	358
	<i>Value</i>	<i>df</i>	<i>Asymp. Sig. (2-sided)</i>
Pearson Chi-Square	44.457	4	.000
Likelihood Ratio	46.928	4	.000

beliefs: the first we term “business as usual,” suggesting that existing forest management practices are seen as sustainable; the second suggests that First Nations groups already have sufficient input/control over forest management; a single item third factor emphasizes community control over forest resources (Table 4). From another set of items, we explored a number of potential threats to First Nations forestry (e.g., forest fires, insect damage, pesticide and herbicide use). The impacts of long-term climate change and unsustainable harvesting were seen as most important by the respondents. These threats tap a common domain of meaning — “threats” — and a summed scale is created for use in the multivariate analysis (Table 5).

Prior to conducting our multivariate analysis, we compare First Nations and non First Nations respondents on their forest-related beliefs as described above (Table 4) and the summed scale of perceived threats (Table 5). We found sub-

stantial differences between the groups for each of these dimensions. First Nations respondents were less likely to agree that current forest management is effective (business as usual), and that First Nations involvement was already sufficient. They were more likely to emphasize the need for stronger community control, and perceived more threats to forest management (Table 6).

Multivariate Analysis

We conducted an Ordinary Least Squares regression to examine the simultaneous effects on perceived barriers (dependent variable) to First Nations involvement of First Nations status, region of work, position in the policy process (coded as government versus non-government), and attitudinal factors such as perceived threats to forestry, perceived effectiveness of the FNFP, and more general forest-related attitudes (independent variables). This analysis has relatively

TABLE 4
Forest-related beliefs

	<i>Factor 1 Business as Usual (alpha = .642)</i>	<i>Factor 2 First Nations Involvement Sufficient (alpha = .636)</i>	<i>Factor 3 Community Control</i>	<i>Mean</i>	<i>SD</i>	<i>% Strongly Agree</i>
Communities should have more power in making decisions in the forest sector			.601	3.84	1.16	35.5%
Current provincial/territorial forest legislation and policies promote sustainable management	.588			2.85	1.16	6.8%
Environmental groups and the media tend to exaggerate the environmental damage caused by forest management practices	.562			3.07	1.30	18.6%
Forests are managed successfully for a wide range of uses and values, not just timber	.532			3.03	1.24	12.7%
Forest companies should be given a wider range of property rights on Provincial forested Crown lands		.614		1.91	1.12	4.8%
First Nations should be given a wider range of property rights on Provincial Crown forested lands		-.614		3.70	1.35	39.1%
First Nations concerns are adequately represented on forest related decisions		.519		2.25	1.19	5.1%
My province has enough protected areas such as provincial and national parks or wilderness areas	.479			2.91	1.36	16.9%
Species biodiversity is being threatened by current forest management practices	-.484			3.41	1.24	23.5%
The expansion of the forest industry will improve my province/s/territory's economy	.558			2.99	1.20	11.9%

TABLE 5
Forest Threats

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>% Strongly Agree</i>
Impacts of long-term climate change	364	4.05	1.06	42.9%
Unsustainable harvesting	366	3.90	1.25	43.7%
Greater frequency/severity of insect damage in forested areas	363	3.85	1.20	39.1%
Greater frequency/severity of forest fires	365	3.78	1.19	37.0%
Increased forest certification efforts on First Nations lands (e.g., Canadian Standards Association, Forest Stewardship Council)	365	3.62	1.16	26.0%
Use of pesticides and herbicides	362	3.47	1.30	28.5%

Alpha = .751

TABLE 6
Forest Beliefs and Threats, by First Nations Status

	<i>First Nations</i>		<i>Non First Nations</i>		<i>t</i>	<i>df</i>	<i>Sig</i>
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>			
Business as Usual	150	2.78	184	3.01	-2.59	332	p<.01
First Nations Involvement Sufficient	153	1.89	190	2.35	-4.75	341	p<.001
Community Control	154	4.06	197	3.65	3.34	349	p<.001
All threats	151	4.04	199	3.57	5.65	348	p<.001

strong predictive ability, explaining 36.5% of the variation in perceived barriers (Table 7).

This model reveals that the strong differences in perceived barriers between First Nations and Non-First Nations respondents are greatly reduced when controlling for other factors. Greater perceived barriers to FN involvement in the forest sector are largely explained by region and attitudes. Respondents from all regions perceived greater barriers: interestingly, these differences were strongest in the regions traditionally considered the power centre of Canada: Quebec and Ontario, but the effect was strong in the Prairie region as well. Clearly, there is something

happening vis-à-vis program delivery or function, as these regional effects are strong and not reducible to other factors in the model. There are strong attitudinal effects as well: quite reasonably, respondents that perceive more potential issues that may threaten FN forestry also perceive greater barriers to FN involvement. Although this finding may strike the reader as nearly tautological, it is not: the barriers are rooted in the policy process (politics, authority, recognition, access, etc.) and the threats are in the biophysical environment: e.g., fire, climate change, and insect damage. Perceived effectiveness of the FNFP was expected to attenuate per-

TABLE 7
Predicting Perceived Barriers (summed scale)

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>		
1	.629	.395	.365	.54517		

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	46.624	12	3.885	13.073	.000
	Residual	71.329	240	.297		
	Total	117.954	252			

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	2.072	.283		7.312	.000
	First Nations Status	.129	.080	.094	1.616	.107
	Atlantic	.277	.144	.137	1.924	.055
	Quebec	.709	.194	.253	3.651	.000
	Ontario	.463	.142	.240	3.262	.001
	Prairie	.372	.128	.234	2.905	.004
	BC	.250	.124	.169	2.014	.045
	Government	-.148	.087	-.098	-1.705	.089
	FNFP Effectiveness	-.055	.032	-.091	-1.712	.088
	All threats	.327	.048	.390	6.777	.000
	Business as usual	.017	.049	.021	.349	.728
	Enough First Nations					
	Involvement	-.107	.044	-.144	-2.441	.015
	Communities should have more power	.125	.037	.209	3.402	.001

ceived barriers, but this was not the case. Two of the three general forest attitudes scales were also significant: respondents who agreed that communities should have more power in decision making and disagreed that First Nations involvement is sufficient perceived more barriers, suggesting frustration in these specific areas.

DISCUSSION AND CONCLUSION

The FNFP program is scheduled to end in March of 2009. Over its course, economic development officers have played a significant implementation role. This paper considers a larger policy question that needs to be addressed, namely will new programming include provisions that will result in a

shift to the more integrative modes of forest management, introduced above by Wyatt (2008), such as “forestry for First Nations” or “Aboriginal forestry”? This paper explored the possibilities for such change by analyzing the Canadian First Nations forestry policy community. From our elite based survey, attitudes towards forest programming and policy, and the barriers facing First Nations were measured.

When existing activities under the current management regime were examined, there was very little divergence between First Nation and non-First Nation respondents in the relative importance placed on each. This supports Sabatier and Jenkins-Smith’s (1999) assertion that there is often agreement on the secondary

(operational) aspects of policy. However, the comparison of means test clearly indicates there was a notable polarization between First Nation and non First Nation respondents when policy-oriented beliefs, attitudes about barriers and natural threats are examined. This confirms the existence of two distinct advocacy coalitions (or two distinct sets of ideas about forest management). An interpretation of the policy theory would infer that barring any significant external events impacting the Canadian forestry sector significant policy revisions are unlikely. Instead, policy change under such a scenario is likely to drift and the status quo will continue.

Such an interpretation may be premature. The multivariate analysis indicated that although policy oriented beliefs are important in explaining the major structural barriers to First Nation involvement in Canada's forest sector, they are regionally diffuse. Thus, regional variation is an important consideration as well as biophysical threats. At present, we do not know why the regional differences we obtained are so prevalent. This modeling exercise suggests the First Nation and forestry policy communities more than intersect but the shared attitudes toward First Nations barriers indicates that they are in fact regionally integrated. If so, more robust policy revisions that are regionally specific may be required. Moreover, the growing complexity of 12 policy communities, each with a unique constellation of actors, issues, and institutions makes such an approach desirable. This finding is particularly important for those directly involved in the economic development field and often engaged in routine business of providing professional support and technical advice to First Nation communities and organizations. There may be a need for greater collaboration and networking with a wider audience dealing with regionally specific and more substantive issues related issues that continue to pose barriers to the advancement of First Nation led forestry in Canada.

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